COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

Live Well San Diego

Community Health Assessment

2019-2021

All materials in this document are in the public domain and may be reproduced and copied without permission. However, citation to source is appreciated. Suggested citation:

County of San Diego, Health and Human Services Agency. FY 2019-21 *Live Well San Diego Community Health Assessment*. December 2020.

This publication of the *Live Well San Diego Community Health Assessment* utilizes estimated data that is current up through 2016 or the most current year available at the time this publication was in development.

This document was developed under the General Management System of the County of San Diego, and is in support of *Live Well San Diego*.

Inquiries regarding this document may be directed to:

Performance Improvement Manager
County of San Diego
Health and Human Services Agency
Public Health Services
Health Services Complex
3851 Rosecrans Street, MS: P-578
San Diego, CA 92110-3652
(619) 542-4183

HEALTH
CITIES & GOVERNMENTS
BUSINESSES & MEDIA
SOCIAL
KNOWLEDGE
LIVE WELL
SAN DIEGO
COMMUNITY & FAITH-BASED
SCHOOLS & EDUCATION
COMMUNITY
STANDARD OF LIVING

LIVE WELL
SAN DIEGO

SAN DIEGO COUNTY BOARD OF SUPERVISORS

Greg Cox
District 1
Chair

Dianne Jacob
District 2

Kristin Gaspar
District 3

Nathan Fletcher
District 4

Jim Desmond
District 5
Vice Chair

Helen N. Robbins-Meyer
Chief Administrative Officer

Nick Macchione, M.S., M.P.H., F.A.C.H.E.
Director, Health and Human Services Agency

Wilma J. Wooten, M.D., M.P.H.
Public Health Officer and Director, Public Health Services

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

LIVE WELL
SAN DIEGO

HHSA LETTER

To San Diego County Residents and Community Partners

From the Health and Human Services Agency Director

Dear San Diegans:

On behalf of the County of San Diego, Health and Human Services Agency (HHSA), we are pleased to publish the *Live Well San Diego* Community Health Assessment (2019-21). This report captures a rich array of local data that reflect the ability of county residents to be healthy, safe, and thrive.

This Community Health Assessment is part of our efforts as a county government to be data-driven when deciding what priorities should be the focus of our collective efforts. The *Live Well San Diego* Community Leadership Teams use this information to determine data-informed approaches for collective impact, and to guide action toward positive change throughout the region. Similarly, almost 500 recognized partners across every sector benefit from easy access to this community assessment data, along with many other data resources provided by the County of San Diego team.

It is important that the Community Health Assessment is reflective of all San Diegans. This is why the assessment looks at data by age, race and ethnicity, gender, socioeconomic status, and geography wherever possible. This is consistent with the vision of *Live Well San Diego* which means that all residents, regardless of who they are and where they live, have the opportunity to "live well."

The County of San Diego and the region is currently actively engaged in the response to the COVID-19 pandemic—probably the most significant public health threat that we have seen in a lifetime. Publication of this report was delayed, in part due to the COVID-19 pandemic. Our data picture for this region, as in other parts of the country and the world, is changing as a result of COVID-19. We continuously update our data and make it available to the public through our website, press events and numerous community engagement activities including the Community Sector calls.

I want to thank everyone who supported in making this Community Health Assessment possible. This data informs our collective efforts to advance the vision of *Live Well San Diego and* make a difference in the lives of all San Diegans.

Live Well,

NICK MACCHIONE, FACHE
Director, Health and Human Services Agency

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PUBLIC HEALTH ACCREDITATION BOARD
PHAB
Advancing
public health
performance

FORWARD

Dear San Diego County Residents:

The County of San Diego is pleased to publish the *Live Well San Diego* 2019-21 Community Health Assessment. This is the second CHA published by Public Health Services (PHS) and captures a rich array of health and other data that reflect the health and well-being of County residents.

The CHA is a component of the Mobilizing for Action through Planning and Partnership (MAPP), a community planning model that is widely used by public health departments across the country. This assessment serves a very practical purpose in that it helps to inform Community Leadership Teams in the HHSA Regions as they develop and implement community plans, which is also part of the MAPP model.

This 2019-21 CHA is structured to communicate the importance of the social determinants of health. It is organized by the *Live Well San Diego* Areas of Influence, reflecting the many factors that contribute to the health and wellbeing of residents—Health, Knowledge, Standard of Living, Community, Social. Survey data from leaders in the community is included, along with highlights of assessments conducted by County departments or agencies. Whenever possible, assessment data is shown by different lenses—race and ethnicity, gender, age, socioeconomic status, and geography—because it is important to identify disparities in order to inform action.

A lot has happened since the 2014-18 CHA was published, including the County earning accreditation by the Public Health Accreditation Board in 2016. The COVID-19 pandemic and response has been the primary public health focus since early 2020. The demands of COVID-19 contributed to delays in issuance of this CHA, and some of the data presented here may have changed as a result of the pandemic's impact on the health of residents and other social determinants of health. However, these data are continuously refreshed on our various County websites and available to the public to view and to download for analysis. Be sure to visit Live Well San Diego Home (livewellsd.org) as well as Community Health Statistics (sandiegocounty.gov), where detailed data can be found.

I am very proud of our efforts to put data first before action and helping communities make data-driven decisions to improve health and advance the vision of *Live Well San Diego.*

Sincerely,

Wilma J. Wooten, M.D.

WILMA J. WOOTEN, M.D., M.P.H.
Public Health Officer & Director
Public Health Services

"The Community Health Assessment captures a rich array of health and other data that reflect the health and well-being of County residents."

From the Director and Public Health Officer, Public Health Services

LIVE WELL
SAN DIEGO

TABLE OF CONTENTS

HHSA LETTER vii
FORWARD ix
EXECUTIVE SUMMARY xiii
INTRODUCTION 3
METHODOLOGY 17
RESULTS OF FOUR MAPP ASSESSMENTS 21
- COMMUNITY HEALTH STATUS ASSESSMENT 21
  - RESULTS 23
  - DEMOGRAPHIC PROFILE 25
  - MORBIDITY AND MORTALITY 31
  - AREAS OF INFLUENCE 48
    - HEALTH 49
    - KNOWLEDGE 67
    - STANDARD OF LIVING 71
    - COMMUNITY 78
    - SOCIAL 86
- FORCES OF CHANGE ASSESSMENT 92
- COMMUNITY THEMES AND STRENGTHS ASSESSMENT 96
- LOCAL PUBLIC HEALTH SYSTEMS ASSESSMENT 114

SUMMARY 119
APPENDIX 125
REGIONAL COMMUNITY HEALTH ASSESSMENTS 136
- CENTRAL REGION COMMUNITY HEALTH ASSESSMENT 137
- EAST REGION COMMUNITY HEALTH ASSESSMENT 175
- NORTH CENTRAL COMMUNITY HEALTH ASSESSMENT 215
- NORTH COUNTY REGIONS COMMUNITY HEALTH ASSESSMENT 256
- SOUTH REGION COMMUNITY HEALTH ASSESSMENT 311

LIVE WELL
SAN DIEGO

EXECUTIVE SUMMARY

The Community Health Assessment (CHA) is a systematic examination of the health status indicators for the population of San Diego County, and is used to identify key assets, trends, and challenges in a community. The purpose is to provide data and information to inform community health planning efforts. This Community Health Assessment is a product of the County of San Diego's second Community Health Improvement Plan process to guide community planning and action for the next 3 years.

A Second Cycle for Community Planning

The *Live Well San Diego* Community Health Assessment for 2019-21 represents the product of the second planning cycle for the County of San Diego. It offers key information and trends which inform the community health improvement activities of the Health and Human Services (HHSA) Regions and their Community Leadership Teams. Completion of a second full planning cycle, adhering to the Mobilizing for Action through Planning and Partnerships (MAPP) model as did the first cycle, represents a systematic approach to community planning. This cycle has been shortened from five to three years given the increasingly dynamic environment. Closer coordination with the Hospital Association of San Diego & Imperial County, particularly in coordinating the collection of community survey data, contributed to increased information collected from the community, and reduces duplication of effort on both the part of the hospitals and the County.

Unique Regional Structure and Collective Vision of Live Well San Diego

San Diego County has a unique regional structure that facilitates the engagement of community members and agencies. In 2010, the County launched *Live Well San Diego*, a vision that is now widely recognizes as a model for collective impact effort. Among the many different organizations and sectors that participate in *Live Well San Diego,* Community Leadership Teams in the Regions identify priority needs and design goals for positive change. Over the last eight years, *Live Well San Diego* continued to expand, with over 400 recognized partners, encompassing all things that contribute to living well. Public Health Services achieved national public health accreditation in May 2016, and HHSA received the Silver Eureka CAPE Award (California Award for Performance Excellence) in 2018, representing a major step along the journey to achieve national Malcolm Baldridge recognition.

This CHA is organized by the *Live Well San Diego* Areas of Influence: Health, Knowledge, Standard of Living, Community, and Social—comprising all of what it means to "live well." This structure better fits the broader, more holistic approach to health that *Live Well San Diego* represents. It is now widely recognized that the social determinants of health (SDOH), referring to the economic and social conditions of health—and how these conditions vary throughout the population—influence individual and group differences in health status.

A Comprehensive Community Health Status Assessment

This CHA is very comprehensive. It includes a description of approach, methodology and structure. Demographic data, disease data, and data by areas of influence are incorporated. Data by HHSA Region are provided where available with the intent of supporting decision-making among the Community Leadership Teams. In addition to data compiled and analyzed by the public health department, this CHA includes other assessments prepared by other County programs, agencies and by community-based organizations.

EXECUTIVE SUMMARY

A Rich Compilation of Data

The CHA incorporates a vast amount of assessment data. A few highlights appear here but it is important to review the full report to get a complete picture of the diversity of issues and trends impacting the health and well-being of San Diego County residents.

Demographic, Morbidity and Mortality Data:

The demographics of San Diego County reflect a diverse population, with considerable variation in profiles between the different Regions. Of a total population of 3.3 million residents, a third (33%) were Hispanic. Approximately one in ten residents was a veteran. The fastest growing age group was 85+.

As to morbidity and mortality, there was positive news about trends in chronic disease-related deaths as these appear to be decreasing, however, more work is still needed to reduce risk behaviors that contribute to these diseases. There was also other good news about the performance of San Diego County compared to other jurisdictions in terms of preventable hospitalizations, even though improvement is needed to reduce the rate of hospitalizations for certain chronic conditions like asthma and diabetes.

Cancer and heart disease were the leading causes of death in San Diego County, no different than the nation as a whole. However, Alzheimer's disease deaths were more common in California, the County, and the HHSA Regions than in the country overall. San Diego County does relatively well compared to other jurisdictions in infant mortality rates. While this is positive, San Diego County's black infants were 2.5 times as likely to die within their first year compared to white infants, reflecting a major health disparity concern.

Areas of influence

Health: Some positive news for San Diego County was that the life expectancy of a baby born today was higher in San Diego County overall (82.0 years), and all HHSA Regions, than the United States as a whole. However, when compared by race and ethnicity, not all residents had the same life expectancy. Black residents had the lowest life expectancy at 77.6 years. San Diego County also jumped up in the County Rankings for Health Outcomes. The County climbed from 16th in 2011 to 10th in 2018. However, the County's rankings for Physical Environment (which includes air pollution, drinking water violations, severe housing problems, driving alone to work, and long commutes) had dropped to 49th, which is among the worst. Behavioral health, including substance disorders, and oral health are among the health issues that were identified in assessments as priority concerns.

Knowledge: There were mixed results in the assessment data related to knowledge and access to education. While high school graduation rates in San Diego County (85.5%) were better than California, these rates were less than for the United States (86.7%). There was considerable variation among Regions and by race and ethnicity, which is problematic given the importance of education to health and life success. Hispanics had the lowest percentage of adults 25 years and older with a high school diploma (only 65.6%). School enrollment and overall educational attainment in San Diego County, as well as assessments that look at school attendance, were incorporated.

Standard of Living: San Diego County enjoys a relatively low unemployment rate, although there was considerable variation among Regions, with South, East and Central experiencing an unemployment rate of 7

to 7.5% compared to North Central Region with only a 5.1% unemployment rate. There was also variation between Regional median household income, with the lowest median income in Central Region and the highest in North Central Region. Even though employment looked strong, one in seven San Diego County residents lived below the poverty level; and nearly one in three people lived below 200% of the poverty level. The high cost of housing impacted residents' standard of living, with many residents spending a significant portion of their income on housing. Homelessness was also a major concern in the County. There were 8,576 homeless counted in the 2018 WeAllCount exercise, and a quarter of them identified as chronically homeless.

Community: Air quality and water quality indicators are included here, reflecting overall compliance in San Diego County with some variation by Region. However, the use of public transportation was significantly lower in San Diego County compared to California and the United States as a whole. A 2017 Climate Change Assessment reflects the major concerns for San Diego County as wildfire, heat, and vector-borne disease, and the importance of taking action to protect and prepare residents. A very comprehensive report from the American Lung Association State of Tobacco Control gave San Diego County low marks in a national report—grades ranging from B to F—with the exception of a few cities receiving higher grades specifically for their actions to create smoke-free outdoor air in public places.

Social: Many residents—nearly one in three—volunteered, reflecting a strong spirit of community across the County. Voter participation also appeared to be increasing. Areas of concern in terms of the social strength of the community and the welfare of vulnerable populations include food insecurity, linguistic isolation and lack of health insurance.

Additional Elements of the CHA

A Forces of Change Assessment and a Community Themes & Strengths Assessments are additional assessments of the MAPP process. Community Leadership Team members, and other partners active in local community improvement efforts, were surveyed to gather their input. While there is always some variation by Region, all Regions saw economic stability as a force of change within their Region, along with other health and social forces, and rated mental health issues, along with alcohol and drug use, among the top five health problems for which there are the least amount of resources to address. Other health issues were also identified, such as obesity, asthma, diabetes, cancer and heart disease.

A Local Public Health System Assessment (LPHSA) was conducted in September 2016. Over 200 participants from every sector provided input on the strength of the public health system, including all public, private, and voluntary entities that contribute to the delivery of Essential Public Health Services. The good news is that scores increased for all but one Essential Service compared to the previous LPHSA conducted in 2012, with half of the ten services scoring at the highest category—Optimal Activity. The 2016 LPHSA also identified many opportunities for improvement and these are detailed in the final report (https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/documents/Local_Public_Health_System_Assessment.pdf).

"The good news is that scores increased for all but one Essential Service compared to the previous LPHSA conducted in 2012."

In Summary

The results of this document were used to inform the Community Health Improvement Plan (CHIP) for San Diego County and the Community Enrichment Plans (CEPs) for each of its six Regions. This comprehensive assessment should prove a useful tool to all local agencies and *Live Well San Diego* partners as we plan for action to create an even stronger community where all residents have opportunity to "live well."

Live Well San Diego

Community Health Assessment

2019-2021

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

INTRODUCTION

The Community Health Assessment (CHA) is a systematic examination of the health status indicators for a given population, and is used to identify key assets, trends, and challenges in a community. The purpose is to provide data and information to inform community planning.

Mobilizing for Action through Planning and Partnerships (MAPP) is a community planning model (Figure 1). The MAPP model, developed by the National Association of County and City Health Officials (NACCHO) was selected for the development of this *Live Well San Diego* CHA. This tool helps communities improve health and overall quality of life through strategic planning and community-wide involvement. MAPP offers a systematic method for residents to identify community health needs, as well as its resources, and to form strategies for action. This CHA captures data for fiscal years 18/19-20/21 of the MAPP process.

The assessment of community needs is the third phase in the MAPP process. The Community Health Assessment (CHA) produced by the County of San Diego includes the four MAPP assessments:

- Community Themes and Strengths Assessment,
- Local Public Health System Assessment,
- Community Health Status Assessment, and
- Forces of Change Assessment.

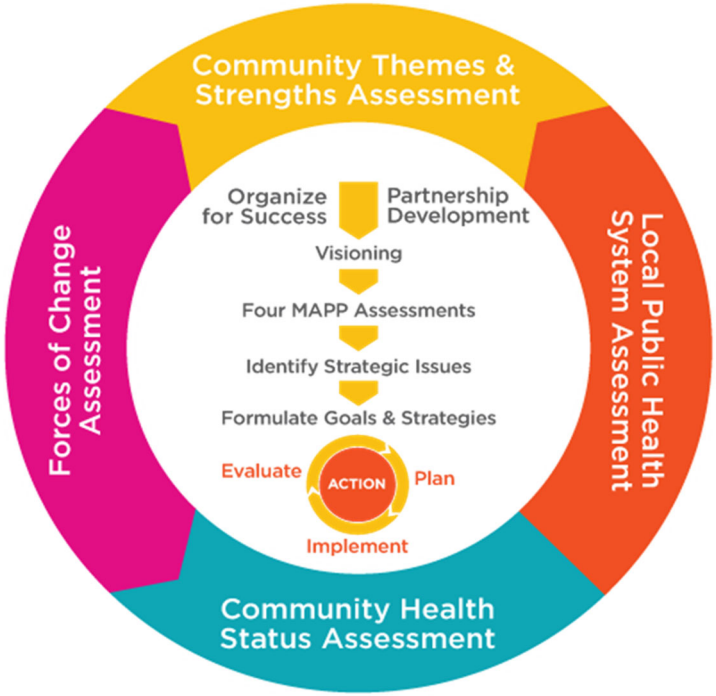
Performing and detailing the results of these assessments ultimately allows communities to better plan for their health needs. Knowing the status of the community and addressing the disparities that may exist is consistent with the components of the *Live Well San Diego* vision – Building Better Health, Living Safely and Thriving.

CHA History and Transition

In 2019, the *Live Well San Diego* vision is entering its eighth year. This collective effort has matured and expanded. There are many more community partners – the number of recognized *Live Well* partners has grown exponentially since the inception *of Live Well San Diego*. In 2012, there were just six *Live Well* partners; by July 2019, there were 451 recognized partners.

In the years since the first CHA, the Community Leadership Teams , formerly known as Regional Leadership Teams, have also flourished. The name change to

Figure 1. MAPP Diagram.



Source: National Association of County & City Health Officials (NACCHO). Mobilizing for Action through Planning and Partnerships (MAPP). https://www.naccho.org/programs/public-health-infrastructure/performance-improvement/community-health-assessment/mapp. Accessed May 30, 2018.

"community" reflects partners and community members embracing the *Live Well* vision and coming together to better serve their respective communities. The Leadership Teams have also embraced the Safety and Thriving components of *Live Well San Diego*, in addition to the Building Better Health component, reflecting a recognition of the importance of addressing the social determinants of health.

As in the first CHA cycle, the Community Health Statistics Unit delivered data presentations to each Region. Data presented included demographics, data on chronic disease, communicable disease, maternal and child health, behavioral health and Alzheimer's disease both countywide, and at the Regional level. New data presented reflected the social determinants of health, such as age, gender, race/

ethnicity, socioeconomic status, and geography, and Regional progress towards goals established in the initial 2014-2018 Community Health Improvement Plans (CHIP).

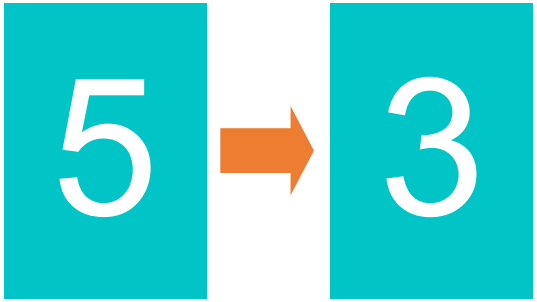
For the Community Themes and Strengths, and Forces of Change assessments, additional questions were asked about the social determinants of health. Some examples of new questions included:

- Is the community a safe place to raise children?
- Is the community a good place for older adults?
- Is there economic opportunity?
- What are the offerings of culture and the arts?
- What are the ways to volunteer or get involved?
- What are the most important actions that should be taken to strengthen the community?

A Local Public Health System Assessment (LPHSA), conducted on September 23, 2016, provided an opportunity for over 200 participants across all sectors to offer feedback and score how well the entire system (not limited to the County's public health department) is functioning in terms of each of the 10 Essential Public Health Services. Compared to the LPHSA conducted in 2012, the system received higher scores in 2016 for all but one Essential Service, with five Essential Services ranked in the "Optimal" range. This reflects the system's continuing improvement in areas such as monitoring health status; diagnosing and investigating health problems; developing policies and plans; enforcing laws, and mobilizing community partnerships. "Mobilizing community partnerships," referring to Essential Service 4, showed the greatest improvement, perhaps reflecting greater cohesion among community members and the County under the shared vision of *Live Well San Diego.*

One significant difference from the last MAPP cycle is the change from a five-year cycle to a three-year cycle (Figure 2). This change was driven by the need to stay relevant. Community needs are changing rapidly, and in order to stay current, planning and prioritizing action should occur more frequently. Under the Community Benefits Program section of the Affordable Care Act, hospitals are required to perform their own community health status assessments every three years. Also, the County collaborated with the Hospital Association of San Diego and Imperial Counties (HASDIC) during this past MAPP Cycle. The results of the assessments are meant to guide the hospitals in providing for communities of need.

Figure 2. MAPP Cycle Change.



The purpose of aligning the County's CHA cycle with the HASDIC cycle was to better coordinate data sharing, and collaborate in conducting the community health status assessments, so as to reduce duplication. HASDIC had input on the questions asked in the most recent Forces of Change assessment (results included in this report). The results of this assessment were shared with HASDIC, and were incorporated into their own report.

The County of San Diego Health and Human Services Agency (HHSA)

Introduction

This section details the formation of the HHSA, and its continuing evolution to better serve the residents of San Diego County. This section describes the merger of six individual departments into one agency, the emergence of the *Live Well San Diego* vision, the organizational changes in order to better address whole person wellness, and the Agency's continuing emphasis on operational excellence.

The Formation of HHSA and the Regional Approach to Engaging with the Community

Prior to the formation of the HHSA, health and human services in the County of San Diego were provided by six individual departments:

INTRODUCTION

- Area Agency on Aging,
- Commission on Children, Youth, and Families,
- Health Services,
- Public Administrator/Public Guardian,
- Social Services, and
- Veteran's Service Office.

Previously, departments sometimes operated in silos, even when serving the same clients. Navigating the service delivery system was difficult for clients, community organizations, and County employees alike. This functional structure was a barrier to coordinated and integrated care and services.

In 1996, interagency collaboration to improve service delivery became a reality when the Board of Supervisors approved the merger of individual County departments into a single Health and Human Services Agency. The business model was intended to achieve the potential benefits of merging these departments and programs so that they would work together synergistically. This marked a transition from a programmatic organizational structure to an integrated, Regional model. The Board's goals for redesigning HHSA included:

- Reduce bureaucracy, freeing up funds to re-invest in direct services,
- Emphasize community-based prevention and early intervention,
- Strengthen accountability to taxpayers,
- Improve customer service, and
- Promote service integration through a seamless network of agency, community, and contract providers.

The catalyst for redesigning health and human services resulted from three events that were occurring during the 1990s:

1) The passage of national welfare reform, which emphasized self sufficiency and service integration,
2) A focus on business practices and performance outcomes led by the County of San Diego Board of Supervisors instituting a General Management System (GMS), in 1997, to reinforce management discipline in the County,
3) An emerging reliance on local governments to deliver health and human services.

In 1998, due to the size and diversity of the County, a new Regional delivery system was created, enabling Regional general managers to better acquaint themselves with their individual communities, and develop partnerships to meet the unique needs of each one. In six HHSA Regions (Figure 3), staff provide services in an integrated fashion, close to families and communities, in collaboration with other public and private sector providers.

The HHSA is one of four business groups of the County of San Diego (COSD) government. HHSA provides a broad range of health and social services through a unified service-delivery system. This system is family-focused and community-based. In order to deliver cost-effective and outcome-driven services, HHSA uses the COSD General Management System (GMS). This framework allows the County to achieve operational excellence, and to be accountable to the public. The first element of the GMS is the COSD Strategic Plan.

The plan has four strategic initiatives: Building Better Health, Living Safely, Sustainable Environments/Thriving, and Operational Excellence. The values and guiding principles are integrity, stewardship and commitment to excellence. HHSA vision, mission and guiding principles flow from, or align to, the County's.

At the same time, the HHSA support departments (Agency Contract Support, Financial Support Services, Group Human Resources, Information Technology Services, and Office of Strategy & Innovation) play an important role. They provide essential financial, administrative, planning, program, and policy support to HHSA's operational departments, and contribute to the operational excellence essential to advancing the *Live Well San Diego* vision.

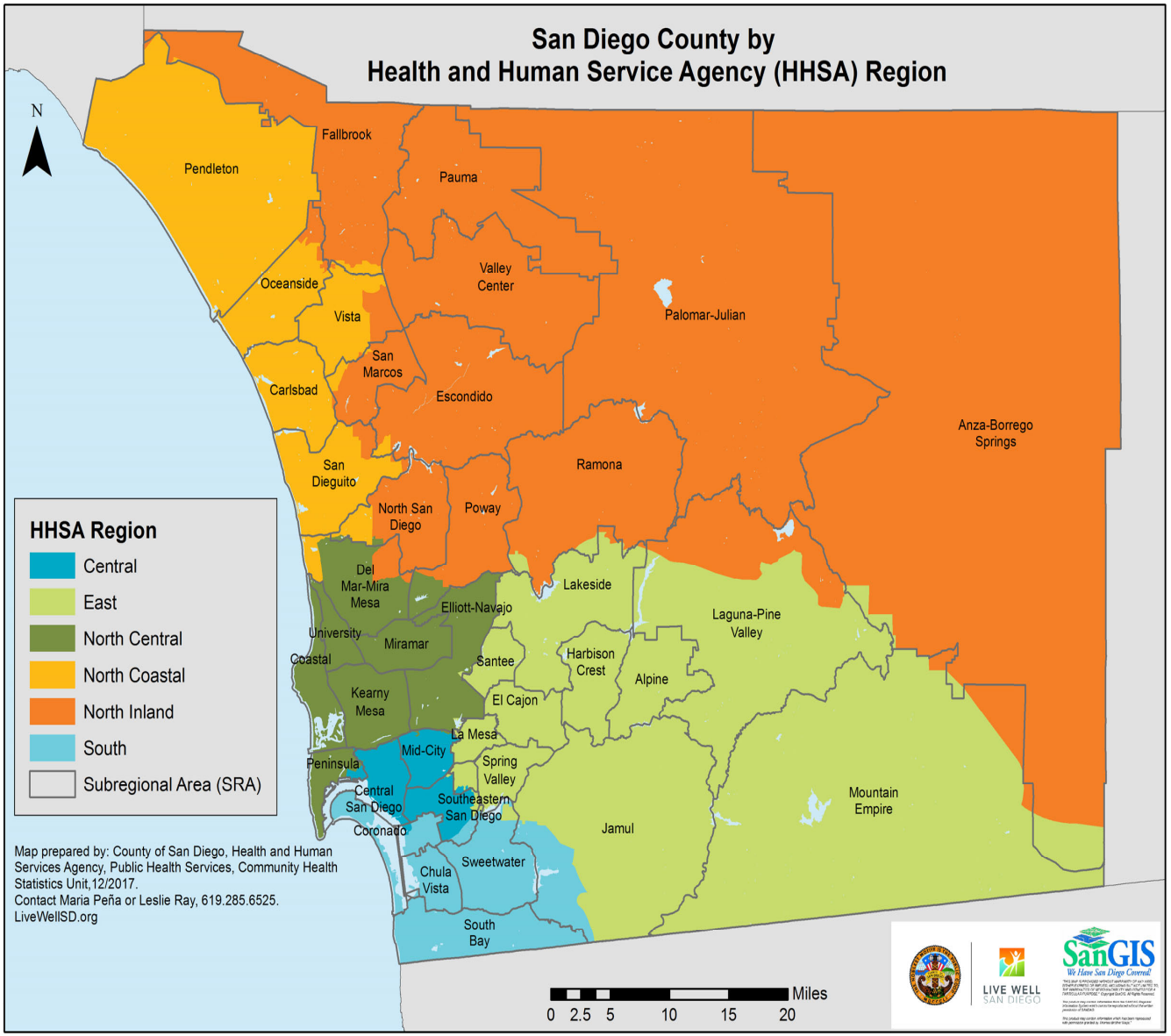
Live Well San Diego is a Regional vision adopted by the San Diego County Board of Supervisors in 2010 that aligns the efforts of County government, community partners and individuals to help all San Diego County residents be healthy, safe, and thriving (Figure 4, page 7). The vision includes three components. Building Better Health, adopted on July 13, 2010, focuses on improving the health of residents and supporting healthy choices; Living Safely, adopted on October 9, 2012, focuses on protecting residents from crime and abuse, making neighborhoods safe, and supporting resilient communities; and Thriving, adopted on October 21, 2014, focuses on cultivating opportunities for all people to grow, connect and enjoy the highest quality of life.

The HHSA organizational structure changes to reflect new demands. In July 2017, the Integrative Services Division and the Medical Care Services Division were added. The Integrative Services Division includes Housing & Community Development Services (HCDS). HCDS, previously part of a different County business group (Community

(continued on Page 7)

INTRODUCTION

Figure 3. Regional Map of San Diego County.



The hallmark of HHSA is its commitment to a service delivery system that is regionalized and accessible, community-based, and customer oriented. Organized into six geographic service Regions, HHSA's service delivery system reflects a community-based approach, using public-private partnerships to meet the needs of families in San Diego County.

Customers are served in a variety of settings, including County facilities, hospitals, community clinics, agencies, or community-based organizations under contract with HHSA to provide key services, such as alcohol and drug treatment services, or medical care to the indigent. Throughout HHSA, the focus is on a "no wrong door" approach – a system that is easy to access, treats families as a whole, integrates resources and services, harnesses the power of technology, and takes advantage of economies of scale. In addition to providing direct services, HHSA also serves the general population of 3.3 million residents of San Diego County.

The Agency's six Regions, Public Health Services, Aging and Independence Services, Self-Sufficiency Services, Behavioral Health Services, Child Welfare Services, and Housing & Community Development Services all carry out the important work of this Agency at the operational level (Figure 3).

Services Group, which was since dissolved and departments dispersed), was transferred to HHSA to further integrate homeless and housing efforts into its service programs. This change strengthens efforts to address social determinants of health since the focus of HCDS is to provide safe and affordable housing for low-income families and special needs populations. Within HHSA, a new division, Medical Care Services Division (MCSD), was created, with the official transition to occur effective July 1, 2017. This division focuses on the many facets of clinical operations across HHSA and interfacing with health care organizations. This division is responsible for clinical quality assurance, health care policy, health information exchange, emergency medicine, public health nursing administration, and dental health across the Agency.

Figure 4. HHSA Vision, Mission, and Guiding Principles.

Overview of HHSA Vision, Mission, and Guiding Principles

Vision: A Region that is **Building Better Health**, **Living Safely** and **Thriving**

Mission: To make people's lives healthier, safer, and self-sufficient by delivering essential services.

To accomplish this, HHSA utilizes the following **Guiding Principles**:

- Ensure all activities are outcome driven.
- Assist employees to reach their full potential.
- Foster continuous improvement in order to maximize efficiency and effectiveness of services.
- Assure fiscal integrity.
- Provide customer-focused and culturally competent services.
- Support courageous creativity.
- Leverage opportunity with the community.

The County of San Diego Health and Human Services Agency achieved national accreditation for public health services from the Public Health Accreditation Board (PHAB) on May 17, 2016. This accreditation signifies that the County has demonstrated conformity with national standards to provide essential public health services. These include investigating public health problems such as foodborne illness, active tuberculosis and communicable disease; educating the public about public health issues like Alzheimer's disease, chronic disease and maternal and child health issues; and enforcing public health laws and regulations related to beach closures, hazardous materials and restaurant inspections. They also include preparing for and responding to public health threats, emergencies and disasters such as wildfires, Ebola and Zika virus. Accreditation encompasses all dimensions of public health, including fostering partnerships through *Live Well San Diego*, the County's vision of a Region that is building better health, living safely and thriving. *Live Well San Diego* has established over 400 recognized partners that have made a commitment to advance collective impact in San Diego County.

In continued pursuit of operational excellence, HHSA applied for and was awarded the California Awards for Performance Excellence (CAPE) Eureka Award for Performance Excellence—Silver Level, in December 2017. The annual awards are given out by the California Council for Excellence, and are based on the Baldridge Framework for Performance Excellence (Figure 5, next page). Performance in each of the seven areas defined by the Baldridge Framework was evaluated as part of this award. PHS contributed to the pursuit drawing upon its experience through accreditation.

Summary

In summary, the HHSA was formed due to a need for better service delivery, and driven by national objectives focusing on making residents more self-sufficient. Once service delivery was transformed with the creation of six service delivery Regions covering several departments, the County rolled out its vision for a health, safe and thriving region, *Live Well San Diego.* The addition of Housing and Medical care services divisions to the HHSA streamlined service delivery with a focus on whole-person wellness. Lastly, HHSA has continued to emphasize operational excellence by becoming accredited, applying for and being awarded the CAPE Silver award, a major progress step toward the Baldridge award.

INTRODUCTION

Live Well San Diego: The Vision

Introduction

Chronic disease is a major cause of premature death and disability, and it is responsible for rising health care costs and increased demand on health care delivery systems. A surge in chronic disease and its impact on the local health care system prompted the County of San Diego to take action.

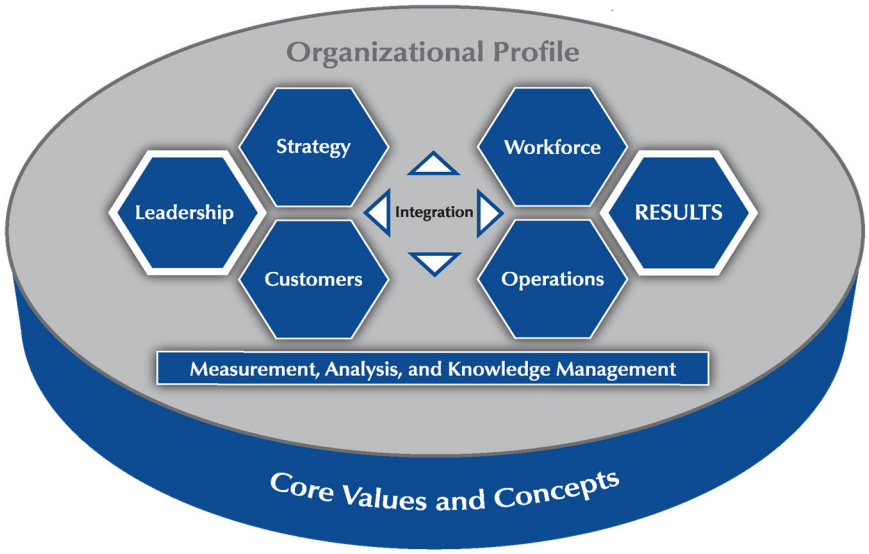
A simple message, the 3-4-50 approach, guides individuals, organizations, and communities to take action to address chronic disease. Three behaviors contribute to four diseases – cancer, heart disease and stroke, type 2 diabetes, and respiratory conditions – which result in more than 50 percent of all deaths in San Diego. These three behaviors are unhealthy eating, sedentary lifestyle, and tobacco use (Figure 6; Figure 7, next page).

The 3-4-50 concept provided the foundation for the development of the first of three components of *Live Well San Diego*, titled Building Better Health, approved by the County of San Diego Board of Supervisors in July 2010. Building Better Health was just the beginning. For residents to achieve optimum health, they must live in communities that are safe, economically vital, and provide for a high quality of life. Living Safely was the second component developed and was adopted by the Board of Supervisors on October 9, 2012. It focuses on achieving three outcomes—ensuring residents are protected from crime and abuse, creating neighborhoods that are safe, and ensuring communities are resilient to disasters and emergencies. Thriving, adopted October 21, 2014, is the third component, which is about promoting a Region in which residents can enjoy the highest quality of life. These three components make up *Live Well San Diego* and serve as a roadmap to achieve the unified vision of a County that is healthy, safe, and thriving.

Building Better Health

The Building Better Health component was developed through a two-year collaborative process, engaging HHSA staff at all levels, community advisory committees, other County departments, and many community partners. An HHSA Executive Workshop finalized the outline of what became the Building Better Health component, which was ultimately approved by the Board of Supervisors on July 13, 2010.

Figure 5. Criteria for Performance Excellence.



Source: 2017–2018 Baldrige Excellence Framework: A Systems Approach to Improving Your Organization's Performance. Gaithersburg, MD: U.S. Department of Commerce, National Institute of Standards and Technology. https://www.nist.gov/baldrige.

The Building Better Health component calls for:

- Building a better service delivery system through partnerships with hospitals, clinics, and other health care providers,
- Supporting positive choices, so that residents take action and responsibility for their own health,
- Pursuing policy changes for a healthy environment, by creating environments that support health, so that the healthy choice is the easy choice, and
- Changing the culture from within, encouraging County employees to become role models.

Living Safely

The second component of *Live Well San Diego*, Living Safely, focuses on making San Diego one of the safest communities in the nation. This part of the vision focuses

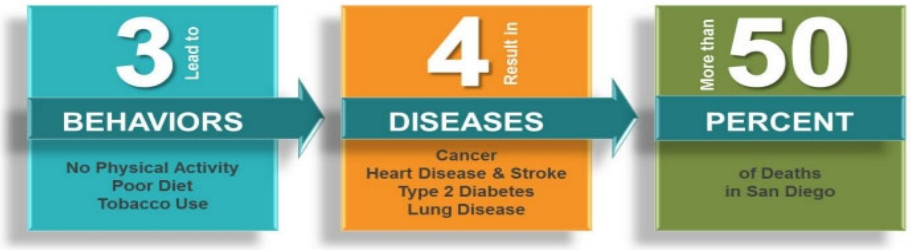
on achieving three outcomes over time, ensuring San Diego is a region where:

- Residents are protected from crime or abuse;
- Neighborhoods are safe to live, work and play; and
- Communities are resilient to disasters and emergencies.

The Living Safely plan addresses both the community's perception of overall safety in San Diego, as well as the actual incidence of crime, injury and abuse. It communicates a shared policy approach to make our communities safer, to ensure that we are proactively working together to achieve a shared vision of a protected, safe and resilient San Diego County.

In 2011, Child Welfare Services adopted a trauma-informed initiative to improve services for the children and families they serve. In 2014, HHSA committed to

Figure 6. 3-4-50 Model.

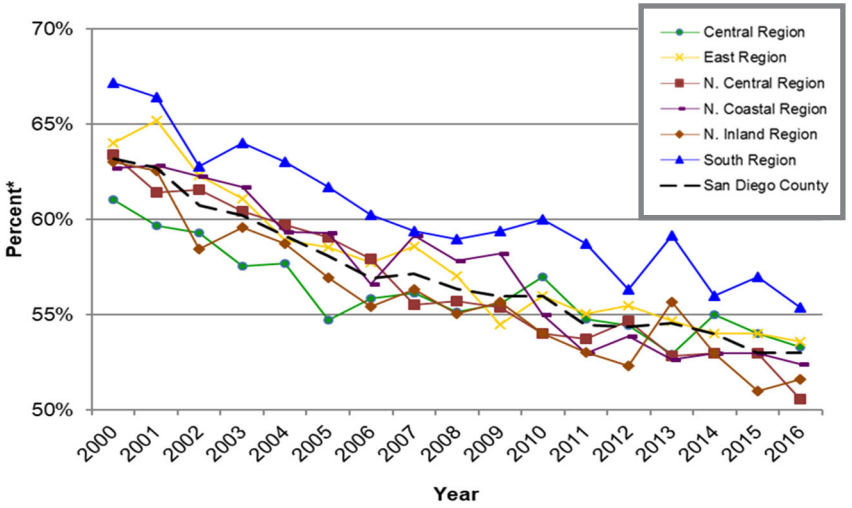


Source: Chronic disease and health promotion. World Health Organization. http://www.who.int/chp/en/. Accessed February 7, 2013. 3Four50, www.3four50.com. Accessed February 7, 2013.

becoming a trauma-informed system as part of its effort to build a better service delivery system.

This approach recognizes that trauma and chronic stress influence coping strategies and behavior. Trauma-informed services minimize the risk of re-traumatizing individuals and/or families. Services are characterized by being recovery- and resiliency-oriented, and understanding that recovery is possible for everyone, regardless of how vulnerable they may appear. Services are also integrated, meaning there is a stronger coordination of care and services to promote wellness. Principles of this system include understanding trauma and how it impacts individuals, staff and the community, as well as promoting safety and ensuring cultural competence and responsiveness within the informed workforce.

Figure 7. 3-4-50 Death† Percentages* Among San Diego County



†3-4-50 deaths include stroke, coronary heart disease, diabetes, COPD, asthma, and cancer.

**3-4-50 deaths as a percentage of all deaths.*

Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received March 2017.

Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Thriving

The Thriving component of the *Live Well San Diego* vision is about cultivating opportunities for all people and communities to grow, connect, and enjoy the highest quality of life. Our Region is Thriving when our residents are:

- Engaging – Building community awareness and cohesion;
- Connecting – Filling gaps and ensuring equal access to basic needs; and
- Flourishing – Exceeding our basic needs.

The Thriving plan consists of a multi-year strategy focusing on Built and Natural Environment, Enrichment and Prosperity, as well as Economy and Education. The ultimate goal of this component is for all communities to grow, connect, and enjoy the highest quality of life.

INTRODUCTION

HEALTH

Enjoying good health and expecting to live a full life

KNOWLEDGE

Learning throughout the lifespan

STANDARD OF LIVING

Having enough resources for a quality life

COMMUNITY

Living in a clean and safe neighborhood

SOCIAL

Helping each other to live well

Live Well San Diego Pyramid, Areas of Influence and Indicators

Pyramid

The *Live Well San Diego* Pyramid is a visual representation of the overall structure of this collective impact effort and also illustrates how impact is to be measured. Three components of Building Better Health, Living Safely and Thriving are at the top of the Pyramid. Four strategic approaches reflect the core ways or methods adopted that span across all components.

Areas of Influence

In order to assess success or failure, progress must be measured. *Live Well San Diego* is a shared vision in which a shared measurement system allows all partners to focus their collective efforts and track their collective progress. The *Live Well San Diego* Pyramid or Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Figure 8).

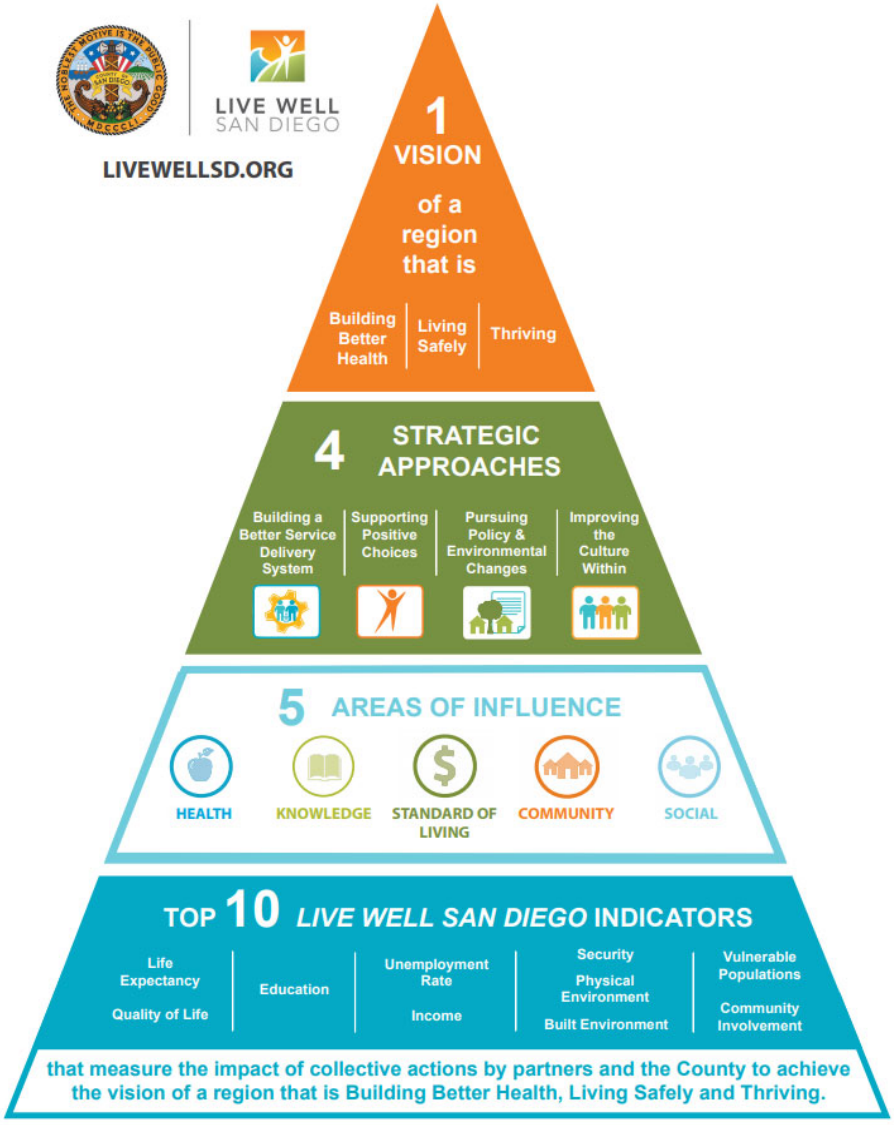
Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being. Living well means attaining high levels in each of the following areas:

- Health—Enjoying good health and expecting to live a full life,
- Knowledge—Learning throughout the lifespan,
- Standard of Living—Having enough resources for a quality life,
- Community—Living in a clean and safe neighborhood, and
- Social—Helping each other to live well.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to live well. Table 1 (next page) describes how the Top 10 indicators map to the areas of influence.

Figure 8. *Live Well San Diego* Pyramid.



INTRODUCTION

The Top Ten Indicators were developed by HHSA staff with input from Local, State, and National experts. Community leaders also participated in discussions regarding the selection of the Top Ten Indicators that fit into five Areas of Influence, which best capture San Diego County's progress towards Living Well. The Top Ten Indicators were identified because they are easy to understand, and because data are available to compare progress in San Diego County to other communities, the State, and/or the Nation. Another factor considered for their selection was how well they capture well-being across the life span of an individual—since Living Well should be achieved throughout one's lifetime.

The Top Ten Indicators are part of a larger indicator framework, connecting a wide array of programs and activities to measurable improvements in the lives of residents. Behind every Indicator, a host of measures are identified within the *Live Well San Diego* CHIP and HHSA programs. These measures consist of both community-level indicators and programmatic performance measures, aligned within the *Live Well San Diego* Indicator Framework. The Indicator framework enables County government to work with community partners to identify the most effective strategies to improve the health of all. The measures are maintained in an electronic data portal where indicators are monitored and shared internally and externally to inform community planning and public health program implementation, and to describe the collective impact on the well-being of San Diego communities

Health Equity and Disproportionality

Public Health Services looks at data through health equity lenses to address disproportionality. If a health outcome is seen in a greater or lesser extent between populations, there is disproportionality. This section describes the social determinants of health, which influence the lenses through which data is described.

Social Determinants of Health

Health in San Diego County is viewed through the five lenses of age, gender, geography, race/ethnicity and socioeconomic status. This is done in recognition that these socio-demographic and economic factors may have an impact on an individual's health, wellness and quality of life. Looking at health in this way helps inform health care providers as well as community leaders regarding the challenges facing their community; and how demographics such as gender, age, geography, socioeconomic status (SES), and other "lenses" influence disparities in health between groups in the community. Social determinants help to inform policy making, program planning and community engagement within Public Health Services and across the County enterprise.

Table 1. Indicators by Area of Influence.

Areas of Influence	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community Involvement

History of the Collective Effort, Live Well San Diego

Altogether, *Live Well San Diego* represents a framework for an ambitious, collaborative effort with nearly 10 years of accomplishments, as detailed in Table 2 (next page). *Live Well San Diego* has engaged individuals, families, and communities and every sector in taking action to improve health and quality of life. Many annual events have become what are referred to as "signature" events because they bring individuals, families and organizations together. These include the *Live Well* Advance, The Love Your Heart event to promote cardiovascular health, the Check Your Mood to encourage San Diegans to monitor and assess their emotional well-being, and the *Live Well* San Diego 5K.

Table 2. History of *Live Well San Diego*.

Year	Date	Accomplishment
2010	July 13	The County's Health Strategy Agenda, Building Better Health, is adopted.
	October 8	3-4-50: Chronic Disease in San Diego County report is released. Economic Burden of Chronic Disease report is released.
2011	February 14	First four Resident Leadership Academies established.
	June 29	First Lady Michelle Obama's "Let's Move" initiative recognizes *Live Well San Diego* Healthy Works™ school nutrition program.
	November 8	*Live Well San Diego* Building Better Health: Highlights and Accomplishments *report published.*
2012	2012	*Live Well San Diego* Community Leadership Teams are formed in 2012 to help guide planning for health, safety and thriving priorities in each of the HHSA service regions to foster information sharing and connectivity between Recognized Partners, individuals and organizations from the community and County of San Diego staff.
	February 14	Inaugural Love Your Heart blood pressure screening event takes place.
	May 2	The City of Oceanside designated as the first partner to official "adopt" *Live Well San Diego.*
	October 9	Living Safely component adopted by Board of Supervisors.
	October 30	*Live Well, San Diego!* Building Better Health: A Report on Year Two of a Ten-Year Initiative; Highlights and Accomplishments published.
2013	2013	Developed in 2013, the BMI Toolkit includes measurement tools and worksheets to help create healthier school environments.
	April 15	Northgate Gonzalez Markets named as the first *Live Well San Diego* Business & Media partner.
	April 17	Chula Vista Elementary School District named as the first *Live Well San Diego* Schools & Education partner.
	September 22	Meridian Baptist Church named as the first *Live Well San Diego* Community & Faith-based partner.
	October	Launch of Live Well @ Work Program.
	October 1-7	Inaugural Check Your Mood depression screening becomes *Live Well San Diego* Signature Event during San Diego Depression Screening Week.
	October 22	The *Live Well San Diego* vision framework (pyramid) and Top 10 Indicators identified, LiveWellSD.org website launched, and the Third Annual Report published.

Table 2. History of *Live Well San Diego*. (Continued)

Year	Date	Accomplishment
2014	May	*Live Well San Diego* Food System Working Group formed, and Chief Administrative Officer directed to develop a Food System Initiative.
	May 31	Inagural *Live Well San Diego* 5K run becomes *Live Well San Diego* Signature Event.
	August 15	First Youth Resident Leadership Academy hosted.
	October 21	Thriving component adopted by Board of Supervisors; *Live Well San Diego* Year 4 Annual Report published.
	October 22	*Live Well San Diego* Expo held to celebrate a successful year of living well.
2015	October 27	*Live Well San Diego* Partners Report: 5 Years of Healthy, Safe and Thriving Communities published.
	November 5	*Live Well San Diego* Open Performance Data Access Portal launched. Later integrated into the San Diego County Data Portal.
2016	April	The County of San Diego joined the Age Friendly Network of Age-Friendly Communities.
	May 31	First *Live Well* Center opens in National City.
	September 6	U.S.-Mexico Border Health Commission – Mexico Section, becomes first international *Live Well San Diego* recognized partner.
	October 25	*Live Well San Diego* Partners Report: 6 years of Healthy, Safe and Thriving Communities published.
	November	*Live Well* Community Market Program officially approved.
	November 8	First Annual *Live Well Advance* held.
2017	May 2	County of San Diego HHSA South Region began Communities of Excellence journey.
	June 30	*Live Well San Diego* Partners Report: Seven Years of Healthy, Safe, and Thriving Communities published.
	Summer	"Strong Families, Thriving Communities" coalition formed, led by the Clinton Health Matters Initiative, to improve the health and well-being of children and families that interact with San Diego's child welfare and juvenile justice systems.
	November 8	Second Annual *Live Well Advance:* Living Well Across the Ages
2018	March 9	Conversations about Southeast *Live Well* Center begin at the Central Region Leadership team meeting.
	May 15	Age Well San Diego Action Plan approved by the Board of Supervisors.
	August 29	*Live Well San Diego* Data Summit Planning4Health is held.
	October 2	Third Annual *Live Well* Advance: Connecting the Unconnected to Live Well.
	October 2	2018 Live Well San Diego Annual Report released.
	December 4	Third *Live Well* Center opens in Oceanside.

Table 2. History of *Live Well San Diego*. (Continued)

Year	Date	Accomplishment
2019	May 3	*Live Well San Diego* Communications Summit brought organizations together to learn how to collaborate for improved communications and how to use communications to create behavior change.
	October 21	*Live Well San Diego* Annual Impact Report released.

INTRODUCTION

Live Well Communities (health equity & disproportionality)

In elevating the framework, it became clear that some communities and populations are not living well. They have significant health issues, are more affected by crime, and are less engaged in civic activities, including voting.

To address these disparities, Live Well Communities was launched in 2016 focusing on historically underserved areas of the County - beginning in the communities of Southeastern San Diego, Lemon Grove, Spring Valley, and National City.

The goal of *Live Well* Communities is to address long-standing inequities, disparities, and disproportionality in these areas, by focusing on key interventions that will engage the community and strengthen existing services for improved results.

During the planning stages of *Live Well* Communities, a nation-wide challenge was announced by the Aetna Foundation, the American Public Health Association and the National Association of Counties. This Challenge offered the opportunity to communicate our efforts on a national platform and to learn from other counties striving for improved wellness. (See http://www.livewellsd.org/content/livewell/home/community/live-well communities.html for more information).

Summary

Overall, the *Live Well San Diego* vision was created to address chronic disease in San Diego County. With the realization that "living well" encompasses more than just health, two more components were added to Building Better Health – Living Safely and Thriving. Progress is measured by the top 10 indicators, which are organized by the five Areas of Influence. The indicators are simple, actionable, and applicable at the Subregional level. Health equity is a focus not only within Public Health Services, but within all HHSA departments, because disparities need to be considered in strategies to help every resident "live well."

METHODOLOGY

Overview

PHS continues to adhere to the Mobilizing for Action through Planning and Partnerships (MAPP) model, as during the first cycle. This second cycle includes a broader set of data in order to better capture social determinants of health. It also includes the distribution of a survey to stakeholders and community members to assess forces of change and community themes and strengths and collect community voice; and coordination with the hospital association.

This CHA includes the results of each of the four MAPP assessments for the County overall, including profiles by Region. It is a reference for community members, stakeholders, and community organizations when they are looking to information to support designing and implementing programs or interventions within the community. It is meant to paint a picture countywide of the health and well-being of the 3.3 million people who live in San Diego County, and by Health and Human Services Agency (HHSA) service delivery Region.

MAPP Process

The selected community planning model for the development of the *Live Well San Diego* Community Health Assessment (CHA) *and Live Well San Diego* CHIP was the MAPP model. MAPP is a community-driven strategic planning process for improving community health. This tool assists communities in selecting and prioritizing public health issues while identifying resources to address them. It is an interactive process that can improve the efficiency, effectiveness, and ultimately, the performance of local public health systems. MAPP is one of the community planning process models suggested by Public Health Accreditation Board (PHAB) measure 1.1.1.

The MAPP planning process is composed of four different community assessments:

- Community Themes and Strengths Assessment,
- Local Public Health System Assessment,
- Community Health Status Assessment, and
- Forces of Change Assessment.

By following the MAPP process, the County adheres to PHAB standards for the development of a comprehensive CHA. Table 3 displays core MAPP assessments by PHAB standards.

As part of the Community Health Status Assessment, the HHSA Community Health Statistics staff presented countywide and Regional health data to all five Community Leadership Teams in late 2015. The data presented are located in the Regional sections of this document. To keep the assessment fresh, leadership teams received yearly updates of the data as part of their regular meetings.

To collect the local perspective on forces of change and community themes and strengths, a survey of the Community Leadership Teams and other partners in each Region was conducted to gather perspectives on challenges and priorities for "living well" that covered all dimensions—building better health, living safely, and thriving. The survey contained questions relating to both forces of change applicable to the community, and community themes and strengths.

The Local Public Health System Assessment (LPHSA), was conducted countywide in order to gather input from all sectors, including health providers, regarding the strengths of the local public health system. The LPHSA is part of the National Public Health Performance Standards Program, which provides a framework to assess capacity and performance of public health systems and public health governing bodies. This framework is used to identify areas for system improvement, strengthen State and Local partnerships, and ensure that a strong system is in place for addressing public health issues. Conducted on September 23, 2016, the assessment provided an opportunity for over 200 participants across all sectors to offer feedback and score how well the entire system (not limited to the County's public health

Table 3. MAPP Assessments by PHAB Reaccreditation Standards.

PHAB Standard	PHAB Language	MAPP Assessment
1.1.1	Collaborative process for the enhancement of the community health assessment	Community Health Status Assessment
1.1.2	Community Health Assessment	Community Health Status Assessment, Community Themes and Strengths
1.1.3	Increasingly multidimensional and detailed descriptions of the health issues and/or community resources of the population or population groups.	Community Themes and Strengths
1.3.5	Analysis of health inequities	Community Health Status Assessment

department) is functioning in terms of each of the 10 Essential Public Health Services. The system received higher scores compared to the 2012 LPHSA for all but one Essential Service, with five Essential Services ranked in the "Optimal" range.

Results from the MAPP assessments are found in the results section which follows. Regional-level data and results are located in each Regional Community Enrichment Plan found in the Appendix of this document.

Hospital Association of San Diego and Imperial Counties (HASDIC) & HHSA Coordination

Under the Community Benefits Program section of the Affordable Care Act, hospitals are required to perform their own community health status assessments. The results of the assessments are meant to guide hospitals in providing care for the communities which they serve. In 2016, the County of San Diego partnered with HASDIC to align community health assessments. The purpose of aligning the County's CHA cycle with the HASDIC cycle was to maximize efforts, to coordinate data sharing, and to move towards integrating data measures to result in a complementary plan that looks at both population health and individual health. The alignment of cycles supported three key goals:

1. Improved ability to share information between local hospitals and the County from shared assessments,
2. Reducing the burden on communities and organizations who are involved in both assessment processes, and
3. Increasing the opportunity for partnership and collaboration between local hospitals and the County.

As a result of the Community Benefits Program, HHSA and HASDIC are working together bi-directionally in conducting the CHA and the Community Health Needs Assessment (CHNA). For example, when HHSA developed the survey to capture community perceptions of priority health challenges and needed resources, HASDIC staff reviewed the survey and offered input and questions. In this way the results were useful for both assessments and the findings were incorporated into the CHNA report. HASDIC sought out input from the public health workforce to gather similar information about health concerns and priorities to inform its latest CHNA.

Summary of MAPP Process Activities

Developing and conducting the second CHA began in September of 2015 with data presentations delivered to each of the Regional Leadership Teams by the Community Health Statistics Unit. Table 4 provides a timeline of events. These

Table 4. Timeline of MAPP Planning Cycle, 2014-2019.

Year	Key Milestone
2014	• FY 2014-18 Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) published.
2015	• Planning for second cycle of Mobilizing for Action through Planning and Partnerships (MAPP) begins. Community Health Status Assessment conducted: ◊ Community Health Statistics Unit delivers data presentations to Community Leadership Teams in every Region. • Coordination with Hospital Association of San Diego and Imperial Counties (HASDIC) begins. ◊ Participate in data presentations to Regions and assist with survey of community leaders. • Regions monitor progress of FY 2014-18 CHIPs ongoing.
2016	• Survey conducted of community leaders in each Region to assess: ◊ Forces of Change, and ◊ Community Themes and Strengths. • Local Public Health System Assessment conducted (September 23). • Regions monitor progress of FY 2014-18 CHIPs ongoing.
2017	• Begin identification of key priority areas for Community Enrichment Plans (formerly CHIPs, now called CEPs). • Regions monitor progress of FY 2014-18 CHIPs ongoing.
2018	• Regions continue to monitor progress of FY 2014-18 CHIPs. • Meetings convened with Public Health Services (PHS) Branches in order to identify opportunities to coordinate CEPs and PHS Strategic Plan. • *Live Well San Diego* Regional Results Summary published, featuring highlights from FY 2014-18 CHIP. • Regions monitor progress of FY 2014-18 CHIPs ongoing.
2019	• Prepare new FY 2019-21 Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP), including regional CEPs. • Regions monitor progress in implementing new FY 2019-21 CEPs. • Publication of CHA and CHIP delayed until 2020 due to the COVID-19 pandemic response.

presentations were conducted in October and November of 2015. Following the presentation, a discussion was facilitated among the members of the Community Leadership Teams. Community input was collected through these discussions. The Hospital Association of San Diego and Imperial Counties (HASDIC) participated in these sessions in an effort to coordinate and align assessment cycles.

To gather the community voice, a survey was created and distributed to Community Leadership Teams and other community partners. The survey elicited input on the Forces of Change and Community Themes and Strengths. The survey was developed, with HASDIC input, so that this one survey would provide data for both the hospital and County CHAs. SurveyMonkey® was used as the platform for the survey and it was distributed via email to the Regions and their community partners. The results of the survey were analyzed in January of 2016, and shared with HASDIC and the Regions.

In September 2016, the second LPHSA was conducted. It was a one-day event with morning and afternoon sessions. Breakout sessions were organized by Public Health Essential Service functional areas, during which there were facilitated, structured conversations. To ensure invitees were prepared, PHS hosted an informational webinar in advance.

Community Health Improvement Plan and Community Enrichment Plans

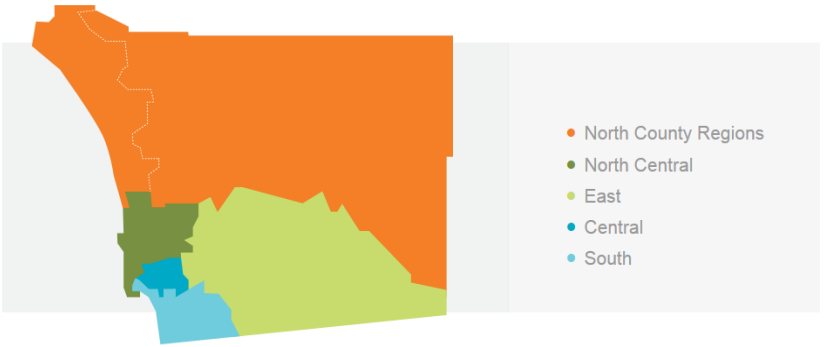
The results of the Community Health Assessment were used to inform the Community Health Improvement Plan (CHIP) for San Diego County and the Community Enrichment Plans (CEPs) for each of the six Regions (CHIP is at this link https://www.livewellsd.org/content/dam/livewell/community-action/2019-21-LWSD-CHIP-Regional-CEP.pdf.) The Community Health Statistics Unit presented findings specific to each Region, which provided the basis for the Regional Community Leadership Teams to identify local issues to address in their CEPs. The Regional Community Leadership Teams worked through this process to create a three-year plan for their Regions to address specific priorities in the Healthy, Safe, and Thriving components of *Live Well San Diego*. These data- driven goals and objectives included topics such as access to mental health services and awareness, healthy eating and physical activity, and community involvement. Metrics to measure the progress on these goals were also identified, and will be tracked over the three-year period covered by this plan. These priorities are identified in the Regional Community Enrichment Plans listed in the Appendix.

Community Leadership Teams

Within the County, there are five *Live Well San Diego* Community Leadership Teams, one for each HHSA Region (North Coastal and North Inland Regions have one combined team; see Figure 9). *Live Well San Diego* Community Leadership Teams tie together the collective efforts of community groups in each Region and provide a central point for planning and organizing collaborative action. Each team is organized differently, but all share a common goal of furthering the *Live Well San Diego* vision. Community Leadership Teams contribute to the CHA by participating in Regional data presentation sessions, engaging with County staff about what the data says, requesting additional data to inform priority areas, and engaging members of the community to determine what the needs of that particular community are.

Each team works to improve the lives of residents, and help all lead healthy, safe, and thriving lives. The priorities for each Leadership Team evolve over time.

Figure 9. Community Leadership Teams by Region.



Community Leadership Teams are currently revisiting these priorities which will be published in the 2019-21 Community Enrichment Plans. The following are a brief history and highlights of their work under the initial CHIPs for 2014-18.

- *Central Region Leadership Team*

  The Central Region Leadership Team was formed in June 2010 to help guide planning for health and safety priorities in the Region, and to foster information sharing and connectivity among group members. With the Promise Zone designation by the federal government, and seed grant awarded by the Healthiest Cities and Counties Challenge, the Central Region Leadership Team is working to improve the lives of those residents who are historically underserved.

- *East Region Leadership Team*

  The East Region Leadership Team was formed in 2011, and involves partners from all sectors, from schools, to cities, to community-based organizations, as well as health care centers. The team focuses on issues surrounding healthy eating, active living, and substance abuse prevention. The team provides education to the community on healthy eating, substance abuse, and helps maintain outdoor spaces to encourage residents to live a more active lifestyle.

- *North Central Region Leadership Team*

  The North Central Region Leadership Team, formed in June 2012, consists of many County and community partners, as well as community clinics. With a focus on behavioral health, physical activity, and preventive healthcare, the team utilizes social media to spread awareness, art to improve pedestrian safety in busy intersections, and educates its residents on the appropriate use of available health care services.

- *North County Regions Community Leadership Team*

  The North County Regions Community Leadership Team is comprised of team members from both the North Coastal and North Inland Regions, as customers served by member organizations often overlap. Formed in January 2012, the team's goal was to identify and discuss health issues pertaining to residents residing within the Region. Since its inception, goals have been set through partner participation in community forums, with the most recent addition being a focus on Thriving.

- *South Region Leadership Team*

  The South Region Leadership Team, formed in October 2010, is working toward improving community wellness, and reducing health disparities among children and families living in South Region San Diego. The Leadership Team brings together public health agencies, local governments, school districts, health care organizations and professionals, and community-based organizations to promote policy, environment and systems changes that create safe, healthy and equitable communities. South Region San Diego is participating in Communities of Excellence 2026, an opportunity to study and change the way the community operates, using the Baldrige performance excellence framework.

Structure of the CHA Document

The Community Health Status Assessments (in the following section of this document) for this second version of the CHA include a demographic assessment, followed by a section describing the top 10 diseases that contribute to morbidity and mortality within the Region. The following assessments are organized by Area of Influence, to identify the status of the community in more than just the area of health. Data included in this section are the ten *Live Well San Diego* Indicators, any supporting indicators, and community partner assessments relevant to that area of influence. Using the Areas of Influence, the data depicts all aspects of "living well," and the Indicators are used to track progress in resident and community well-being. Organization by the Areas of Influence supports *Live Well San Diego,* as to live well encompasses a broader sense of well-being that reflects the social determinants of health. This CHA captures data and planning for fiscal years 2018-19 to 2020-21 of the MAPP process, and uses data primarily from 2015, but ranging from 2012-2018 depending on the assessment.

The forces of change, and community themes and strengths assessments are organized by Region, where possible. This illustrates the differences between needs within each Region, as the communities within each Region are unique in terms of the demographics of the people living there and the health issues they may face. The driving forces of change, and the themes and strengths, vary between communities, so it is important to make that distinction within this document. The LPHSA was conducted countywide, so the data for that assessment is presented for the entire County.

Summary

Overall, PHS continues to follow the MAPP process for community health planning. However, there are some differences between the way the assessments were conducted in the second cycle compared to the first. Data presented to the Community Leadership Teams as part of the Community Health Status Assessment was more comprehensive, reflecting growing recognition of the importance of the social determinants of health. In surveying Community Leadership Teams and other local leaders within the Regions, the PHS team collaborated with HASDIC and solicited feedback on a wide range of issues to capture perspectives on the broad array of issues that impact the community. The Local Health System Assessment drew a much larger group of participants who were able to self-select the areas in which they offered their expert insights.

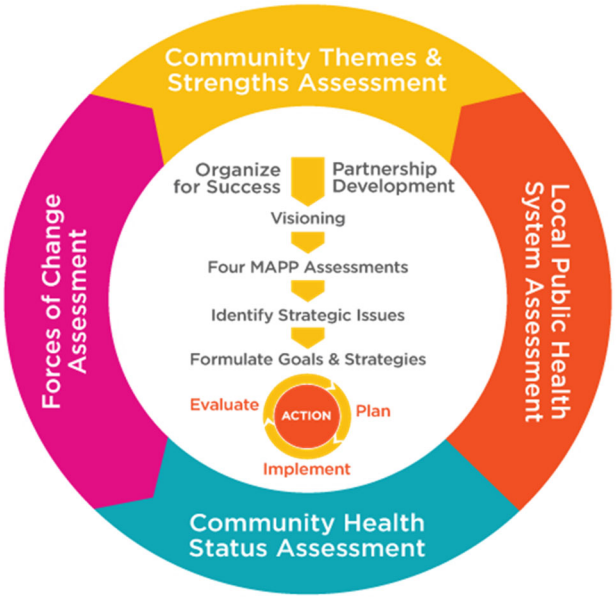
RESULTS OF MAPP ASSESSMENT

Community Health Status Assessment

Forces of Change Assessment

Community Themes & Strengths Assessment

Local Public Health Systems Assessment



COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

RESULTS

Community Health Status Assessment

This Community Health Status Assessment, utilizing the *Mobilizing for Action through Planning and Partnerships* (MAPP) model, is intended to paint a complete picture of the factors that affect the health and well-being of the community, as well as identify priority issues impacting community health and quality of life. The assessment is the basis for identifying priority areas of improvement for communities that are then reflected in Community Health Improvement Plans within the community. This section explains the process by which this CHA was prepared, and because it is so comprehensive, this section also describes the organization of the document. The CHA follows the requirements of the Public Health Accreditation Board (PHAB; Domain 1, Measure 1.1.) which details the collaborative process for enhancing the community health assessment, the required components, the expectations in terms of multidimensional and detailed descriptions of the health issue and community resources, and finally how the CHA is made available to the community.

Process for Preparing the Community Health Status Assessment

This assessment describes the health status of the San Diego community, and, in addition, includes a complete assessment for each of the six HHSA service delivery Regions. When this second cycle of the CHA was initiated, Community Health Statistics Unit staff presented County and Regional data to each of the five community leadership teams in 2015 and then annually thereafter. The health indicators presented were derived from the Community Health Statistics Unit San Diego County Community Profiles. Health indicators included non-communicable (chronic) disease, communicable (infectious) disease, maternal and child health, injury, and behavioral health data.

General demographic data is presented first in this CHA. For an overall picture of severity and quantity of health concerns, mortality and morbidity data are provided, including death, hospitalization discharge, and emergency department discharge severity levels. These indicators have been monitored since 2000 and were selected because of their availability, source reliability, and alignment with *Healthy People 2000, 2010* and *2020* objectives. Health indicators, in which evidence-based interventions could have a positive impact on the health and well-being of County residents, were highlighted.

Different from the previous CHA, data and assessments were organized by Area of Influence, to show alignment of progress with the *Live Well San Diego* vision. Each of the ten *Live Well San Diego* Indicators that were selected to measure progress "maps" to one of the five Areas of Influence. Communities progress towards the goal of the *Live Well San Diego* vision of a Region that is building better health, living safely, and thriving by "moving the needle" towards improvement for each health indicator.

The community health assessment data for each of the five Regions can be found in the Regional Community Health Assessments section of this document. While some health concerns are shared, the data for each Region reveal unique strengths and challenges that informs the development of the *Live Well San Diego* Community Health Improvement Plans (CHIP).

Organization of the Community Health Status Assessment

This CHA is comprehensive in that it looks beyond analysis performed by the public health department. Additional programs across HHSA also have a role in assessing the community's health status and risks. This section provides an overview of the County's most important health issues by summarizing various health status reports from both County programs and community-based organizations. The health issues identified in each assessment include details about uninsured, low income, and minority populations. These assessments give a broad view of health issues in San Diego County and provide background and context for the priority health issues identified in the *Live Well San Diego* CHIP. The goal is to paint a picture of the community's health and well-being status overall, and to share data on all assessments done by PHS and other HHSA departments relevant to accreditation.

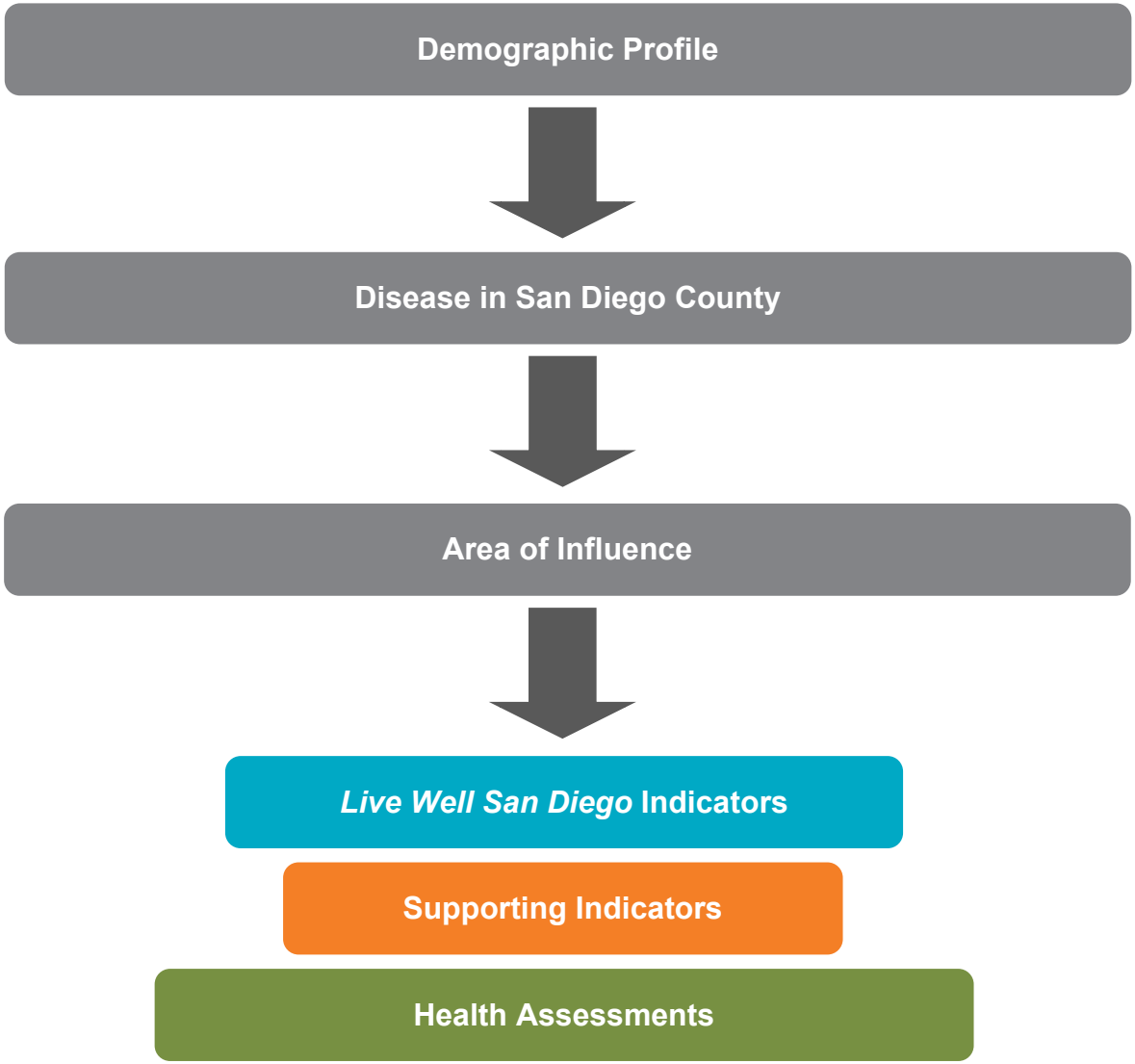
The main elements of the Community Health Status Assessment are presented as follows (for visual representation, see Figure 10):

RESULTS

The main elements of the Community Health Status Assessment are:

1. **Demographic Profile**: illustrates population characteristics of the County and its six HHSA service delivery Regions, which contribute to social determinants of health and vary by place within the County.
2. **Disease in San Diego County**: describes the contributing diseases and behaviors to the 3-4 -50 concept, and the 15 leading causes of mortality within San Diego County. This section is intended to describe health issues as they contribute to disease burden within the County.
3. **Areas of Influence**: describes data relating to each of the five Areas of Influence – Health, Knowledge, Standard of Living, Community and Social. Data are organized in this way to reflect the social determinants of health. Within each Area of Influence, there appears:
    - **Brief Description of the Area of Influence:** explains how the Area of Influence is important to the well-being of the community,
    - ***Live Well San Diego* Indicators:** data for those Indicators that fall within that Area of Influence, broken out by lenses where available.
    - **Supporting Data:** Additional data that is related to the Area of Influence, also broken out by the lenses where available, and
    - **Other Health Assessments:** conducted by PHS, other HHSA departments, and community partners.

Figure 10. Organization of MAPP Community Health Status Assessment.



The Community Health Assessment is one of the four MAPP components and this figure shows how the Community Health Assessment for San Diego County is organized.

DEMOGRAPHIC PROFILE

Demographic Profile of San Diego County

San Diego County is the second most populous county in the State of California, accounting for approximately 8.3% of California residents. The County area encompasses approximately 4,300 square miles, with 70 miles of beach along the Pacific Ocean. Roughly the size of the State of Connecticut, the County area is 65 miles from north to south and 86 miles from east to west. It borders Orange and Riverside counties to the North, Mexico to the South, Imperial County to the East, and the Pacific Ocean to the West. Much of the County's land area is considered rural, with agriculture being an important component of the County's economy.

Demographic Characteristics of Residents

According to the U.S. Census Bureau's American Community Survey, San Diego County was comprised of a diverse population of 3.2 million residents in 2015. There were nearly equal percentages of males and females.

The majority of San Diego County residents were nonelderly adults (aged 25-64). Almost one-third of San Diego County residents were aged 25-44, with another one fourth falling between the ages of 45-64. Compared to San Diego County overall, Central and North Central Regions had higher percentages of residents between the ages of 25-44, and East and North Inland Regions had higher percentages of adults aged 45-64 (Figure 11).

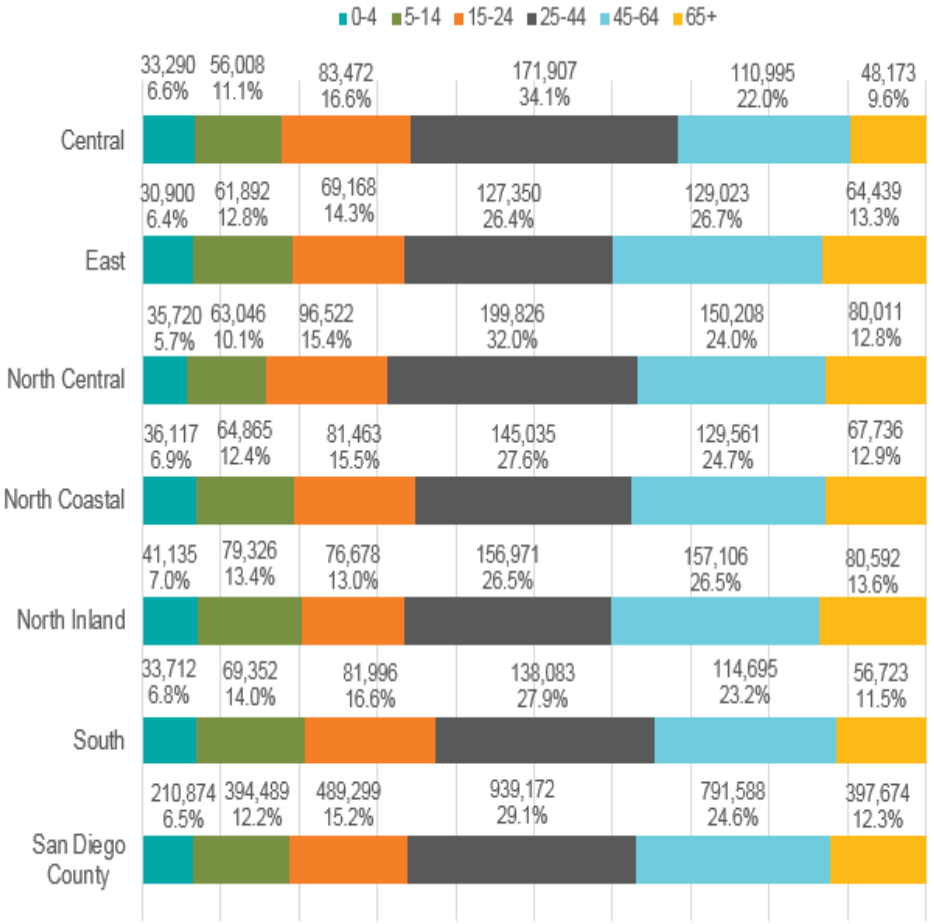
The age distribution was similar among all Regions, and the County overall. All Regions had about the same percentages of children aged 0-4. Regions with higher percentages of children aged 5-14 were the North Inland Region and the South Region, compared to the County overall. South Region also had a higher percentage of residents aged 15-24, along with the Central Region.

About one-eighth of the residents within the County were over the age of 65. Compared to the County overall, the East, North Central, North Coastal, and North Inland Regions had greater percentages of senior citizens (aged 65 and over).

Within the County, almost one-third of residents were Hispanic. Almost half were white, one-twentieth were black, and over one-tenth were Asian or Pacific Islander (Figure 12, next page).

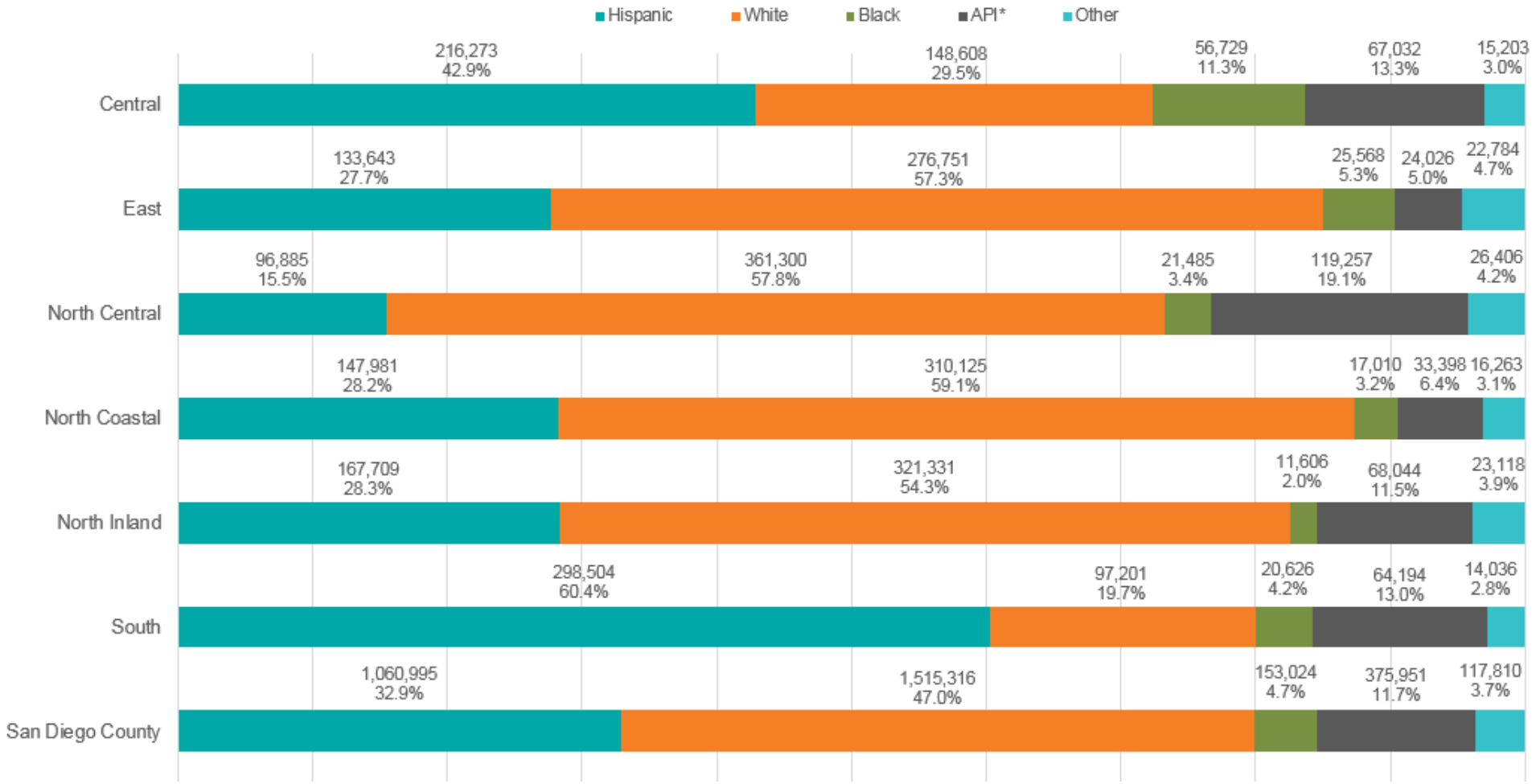
The South Region had the highest percentage of Hispanic residents, with 3 out of every 5 residents identifying as Hispanic. Central Region also had a large percentage of Hispanic residents, with 3 out of every 7 residents identifying as Hispanic. Central Region also had the highest percentage of black residents (1 out of 10). North Central Region had the lowest percentage of Hispanic residents (almost 1 out of 6), but also had the highest percentage of Asian/Pacific Islander residents (1 out of 5).

Figure 11. Population by Age Group, San Diego County by HHSA Region, 2015.



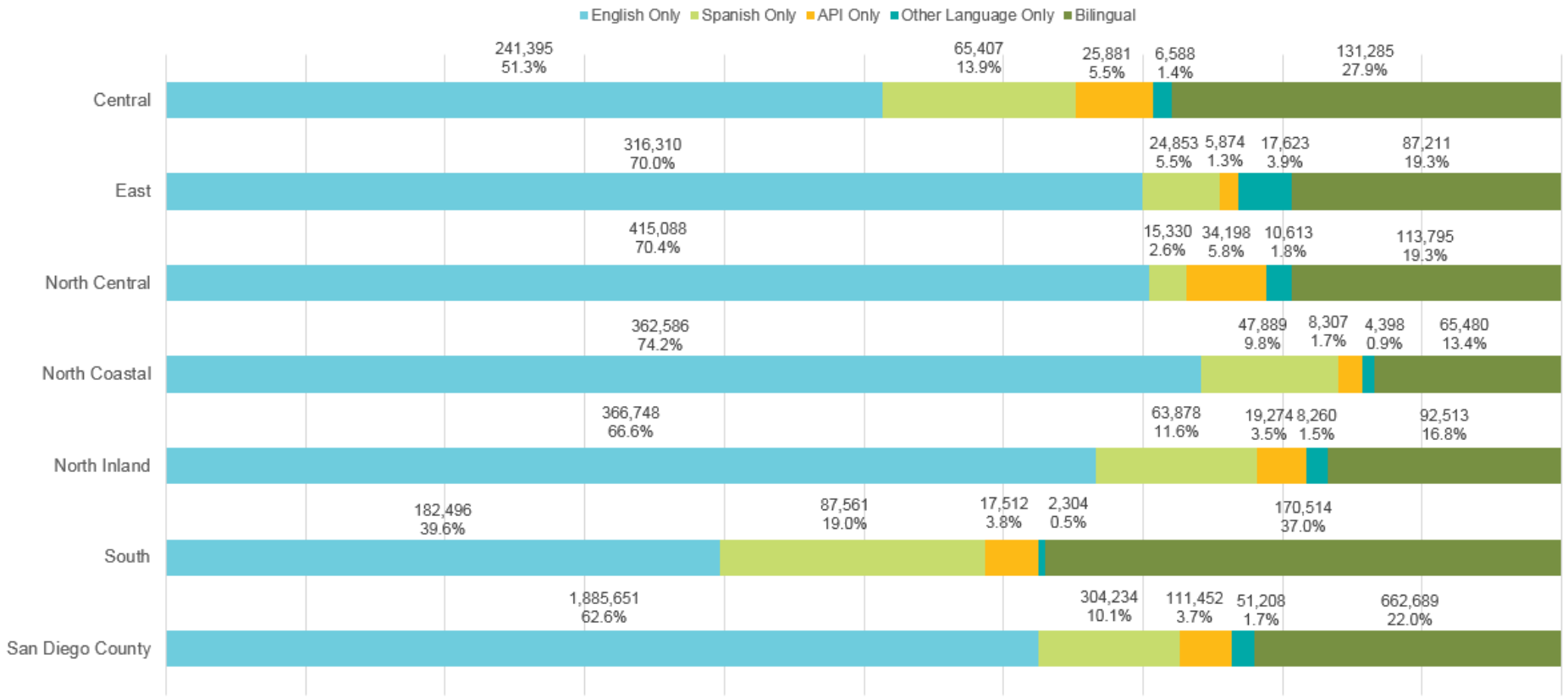
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B01001. Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 12. Population by Race/Ethnicity, San Diego County by HHSA Region, 2015.



**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B03002.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 13. Population by Language Spoken at Home, San Diego County by HHSA Region, 2015.

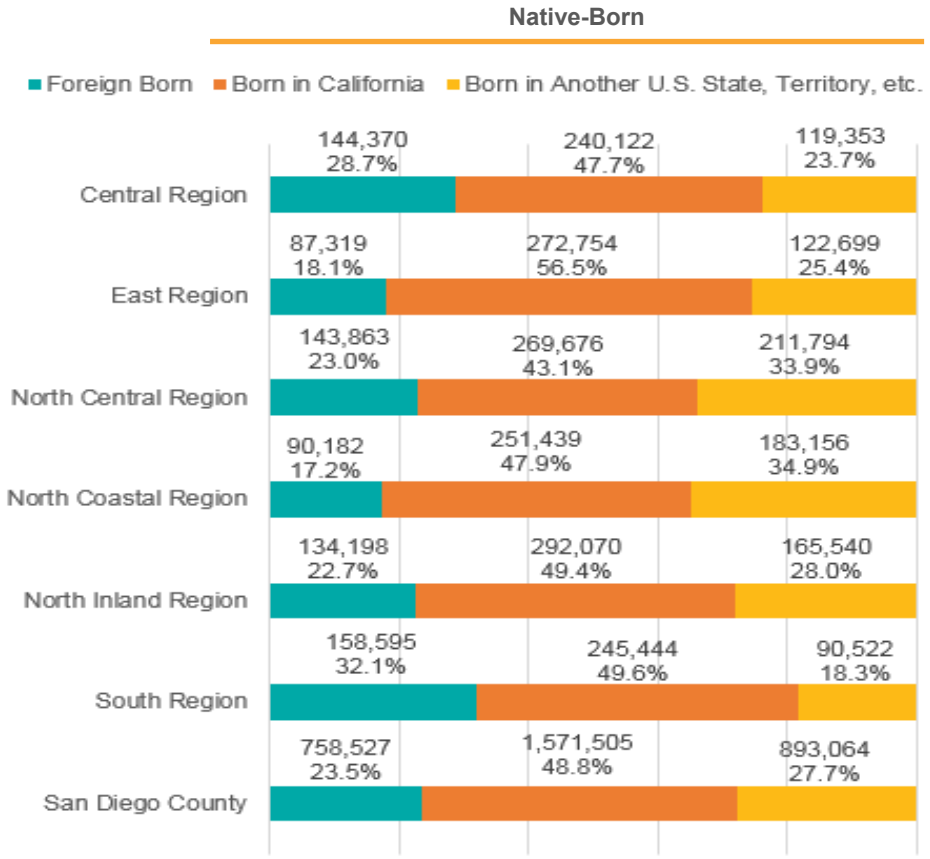


**API refers to Asian/Pacific Island languages, and includes: Chinese, Japanese, Korean, Mon-Khmer, Cambodian, Hmong, Thai, Laotian, Vietnamese, other Asian Languages, Tagalog, and other Pacific Island languages. Other languages includes: Native North American Languages, African Languages, Hebrew, Arabic, and other unspecified languages.*
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Nearly 63% of the population aged five years or older within the County were English-only speakers, another 10% were Spanish-only speakers, and 22% were bilingual (Figure 13).

In all Regions, and the County overall, the majority of residents were English-only speakers. South Region had the lowest percentage of English-only speakers (39.6%), and also the highest percentage of bilingual residents (37.0%). South Region also had the highest percentage of Spanish-only speaking residents (19.0%).

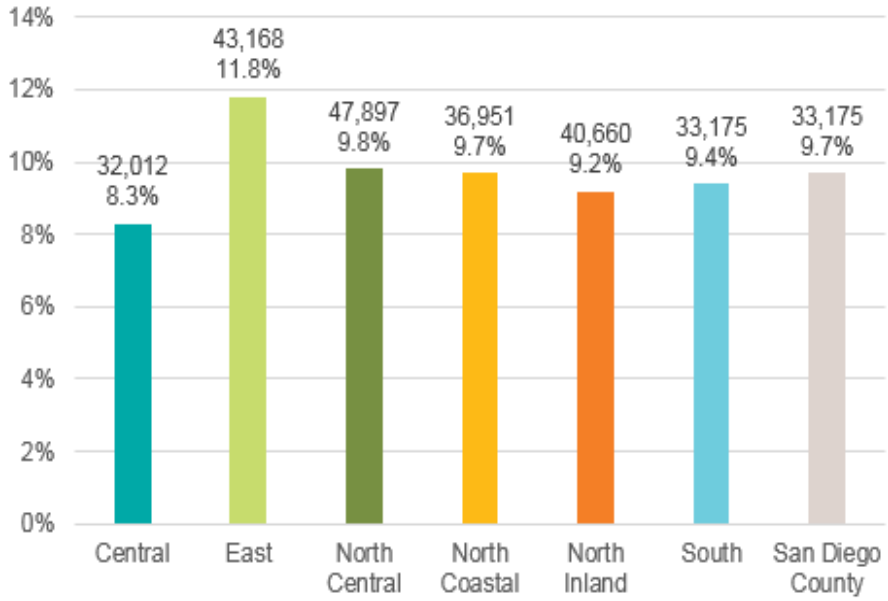
Figure 14. Population by Nativity and Place of Birth, San Diego County by HHSA Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B06001. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Native-born residents accounted for 76.5% of San Diego County residents (Figure 14). In San Diego County, the majority of residents were native-born (dark and light orange bars in figure represent native-born). Half of San Diego County residents were born in California (48.8%). About half of residents in each Region were also born in California, except for East Region, where nearly three-fifths of residents were born in California.

Figure 15. Veterans in the Population, San Diego County by HHSA Region, 2015.

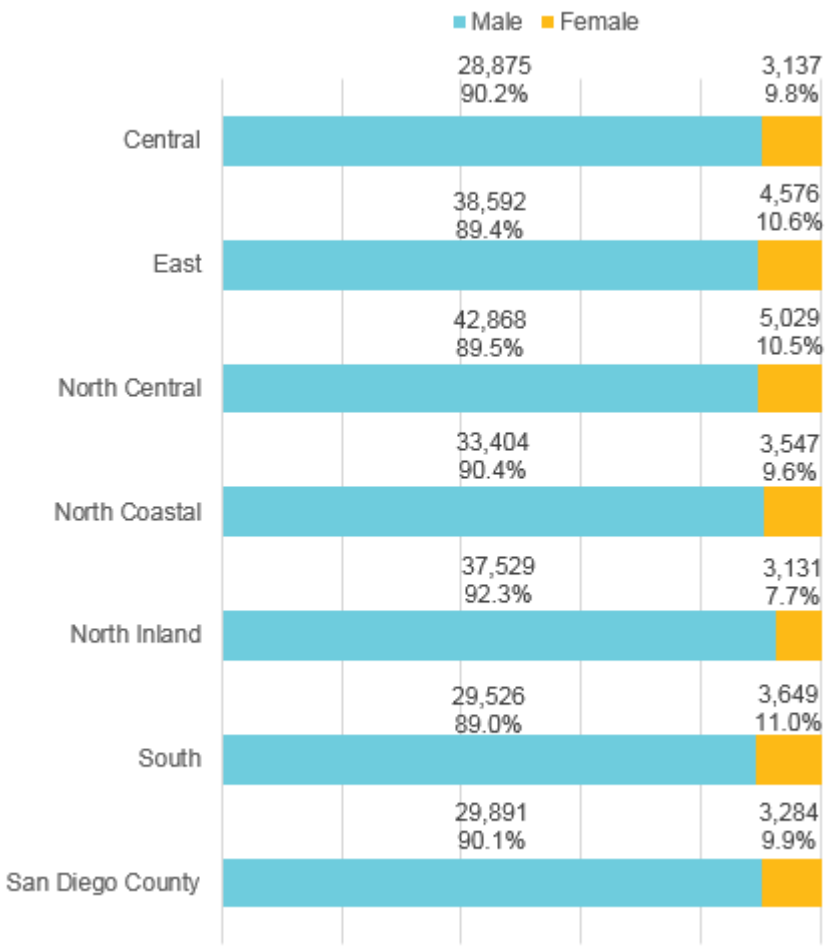


Note: Percent represents percent of population age 18+ in each Region who are veterans. Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2101. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Approximately one in ten residents in San Diego County were veterans (Figure 15). Veterans include anyone who served in the military (U.S. Army, Navy, Marine Corps, Air Force, or Merchant Marine during WWII), but does not include anyone who was in the military reserves, unless they were ordered to active duty.

The Region with the highest proportion of veterans was the East Region (11.8%). The Region with the lowest proportion of veterans was the Central Region (8.3%). Overall, the proportion of veterans in each Region was similar to the County overall, at about 10%.

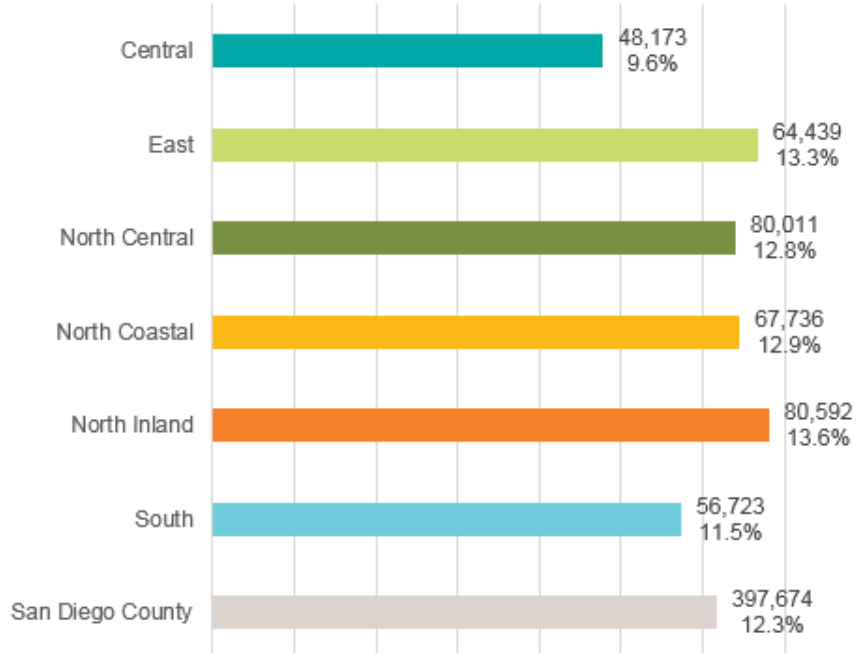
Figure 16. Veterans in the Population by Gender, San Diego County by HHSA Region, 2015.



Note: Percent represents percent of veteran population that is male or female.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B06001. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In 2015, the veteran population in San Diego County was mostly male. Within the veteran population, about 9 in 10 veterans were male (Figure 16). About 1 in 10 veterans were female in San Diego County. The Region with the lowest proportion of female veterans was North Inland Region (7.7%). The Region with the highest proportion of female veterans was South Region (11.0%).

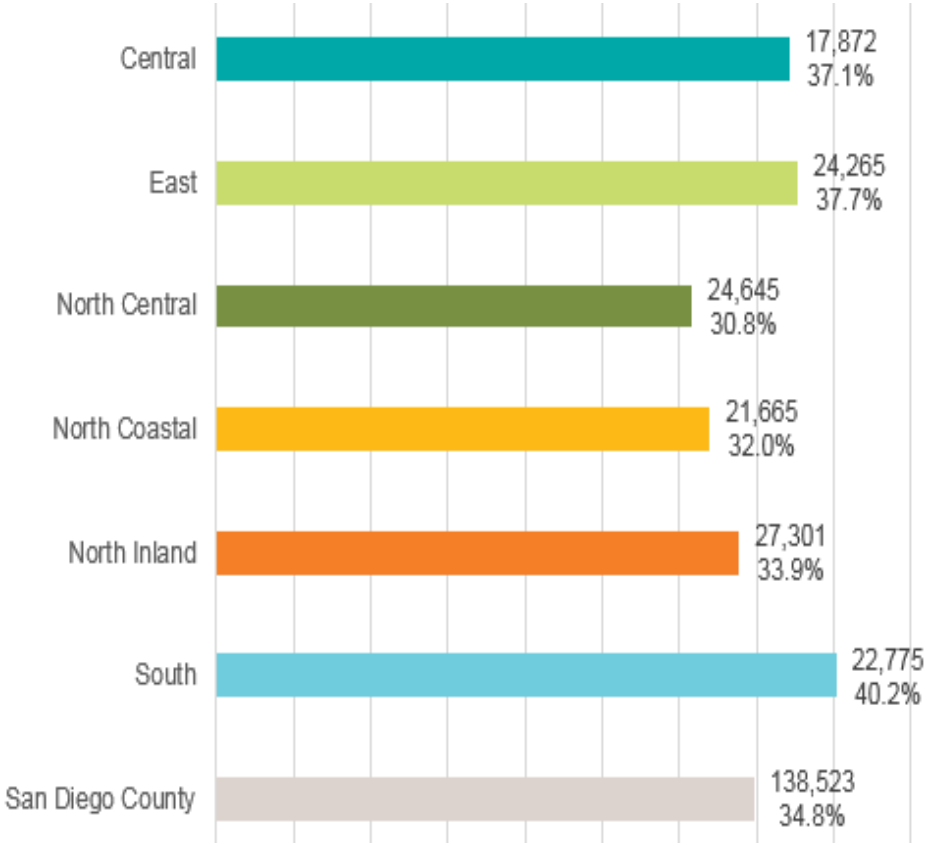
Figure 17. Senior Population (Residents 65 Years and Older), San Diego County by HHSA Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1810, B10051, B01001. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In San Diego County, about 12.3% of the population was aged 65 and over, or classified as a senior citizen (Figure 17). The Region with the highest proportion of seniors was the North Inland Region (13.6%), followed by the East Region (13.3%). The Region with the lowest percentage of the population as seniors was the Central Region (9.6%).

Figure 18. Residents Aged 65 Years and Over With a Disability, San Diego County by HHSA Region, 2015.

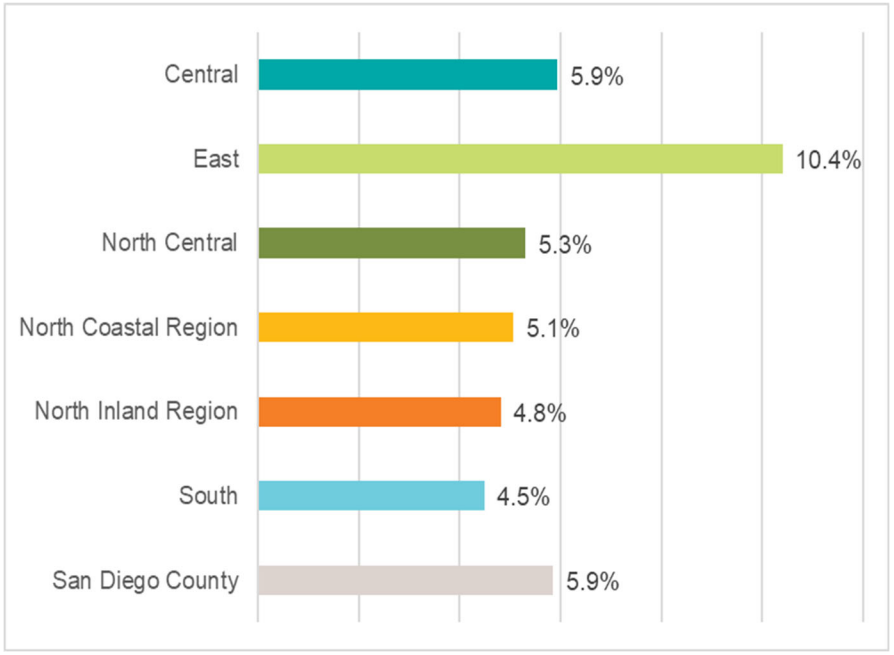


Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1810. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Of those aged 65 and over in the County, about one-third had a disability. The Region with the highest percentage of disabled seniors was the South Region (40.2%), followed by East (37.7%) and Central (37.1%). The Region with the lowest percentage of disabled seniors was the North Central Region (30.8%; see Figure 18).

The proportion of grandparents raising grandchildren was measured for the population aged 60 and above. In San Diego County, 1 in 16 grandparents aged 60 and above who were living with grandchildren in the household were raising a grandchild (with no parent present). The Region with the highest proportion of grandparents raising grandchildren was the East Region, where over 1 in 10 grandparents are solely responsible for their grandchild, followed by the Central Region (1 in 16; see Figure 19 below).

Figure 19: Grandparents Aged 60 and Over Raising Grandchildren, San Diego County by HHSA Region, 2015.



Note: The figure above describes the percent of 60+ grandparents responsible for grandchildren without a parent present out of 60+ grandparents living with grandchildren in households.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B10051.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

MORBIDITY AND MORTALITY

According to the Centers for Disease Control and Prevention, morbidity is defined as any departure, subjective or objective, from a state of physiological or psychological well-being, encompassing disease, injury, and disability. Mortality refers to death.

In this section, conditions contributing to the greatest amount of morbidity and mortality are discussed. First, the 3-4-50 concept is introduced and explained, with data relevant to each indicator presented. Next, prevention quality indicators, measures formulated and defined by the U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality, are presented. These indicators describe the rate of hospitalizations for conditions or complications that could have been prevented with adequate primary or outpatient care. Lastly, the leading causes of death by Region and County overall are presented, in contrast to those for the State of California and United States as a whole.

The purpose of this section is to describe what conditions are contributing the most to the morbidity and mortality of people living in San Diego County.

3-4-50

Introduction

Chronic diseases are now among the leading causes of death and disability worldwide. This reflects an improvement in the prevention and treatment of infectious diseases as well as significant changes in dietary habits, physical activity levels, and tobacco use in the population.[1] Three behaviors (poor diet, physical inactivity, and tobacco use) contribute to four chronic diseases (cancer, heart disease and stroke, type 2 diabetes, and lung diseases such as asthma) that result in over 50 percent of all deaths worldwide. This is the foundation of the 3-4-50 concept. The influence of these three unhealthy behaviors may be seen in San Diego County as these four chronic diseases are among the most common causes of death and disability in our Region.

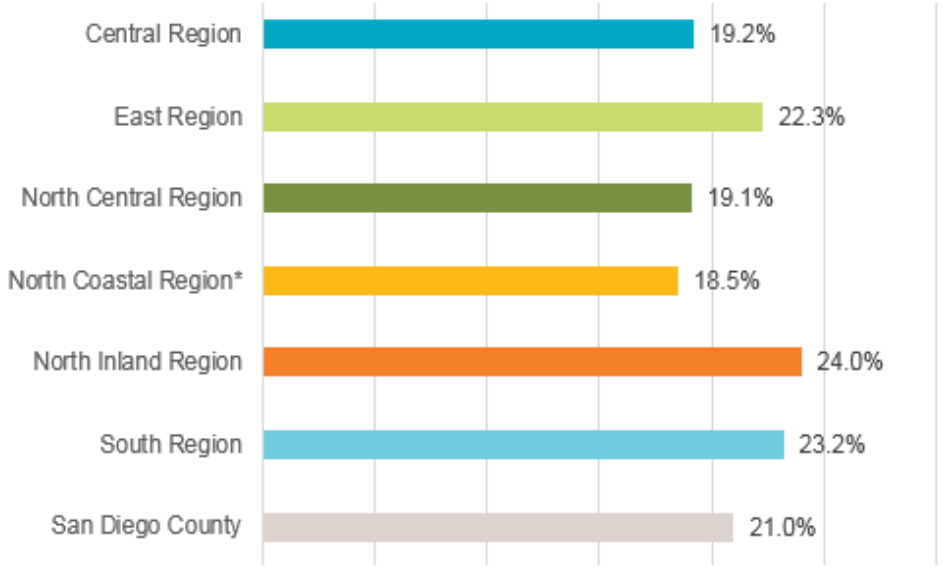
Three Behaviors: Poor Diet

Diet, which is ultimately a personal choice, is one of the factors that can contribute to obesity. Obesity is the result of too many calories consumed and not enough calories expended. Understanding caloric requirements is key to maintaining a normal weight.

[1] *Chronic disease and health promotion. World Health Organization. http://www.who.int/chp/en/. Accessed February 7, 2013. 3Four50, www.3four50.com. Accessed February 7, 2013.*

The environment plays an important role in diet. Easy access to fresh food at reasonable cost allows individuals the opportunity to make healthier choices. However, the healthy choice is often less convenient, which means it is important that individuals are able to prepare and cook healthy meals. Foods high in fats, sugar, and salt are inexpensive and easily available through fast food restaurants, convenience markets, and vending machines. Over a generation, our tastes have changed. These foods have become habit rather than occasional treats and portion size has grown exponentially. The recommended adult serving of meat, chicken, or fish is 3 ounces. Restaurant portions are typically 6 to 12 ounces, making it possible to consume an entire day's requirement for protein and calories in one meal.

Figure 20. Population Eating Fast Food Three or More Times Per Week, San Diego County by HHSA Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

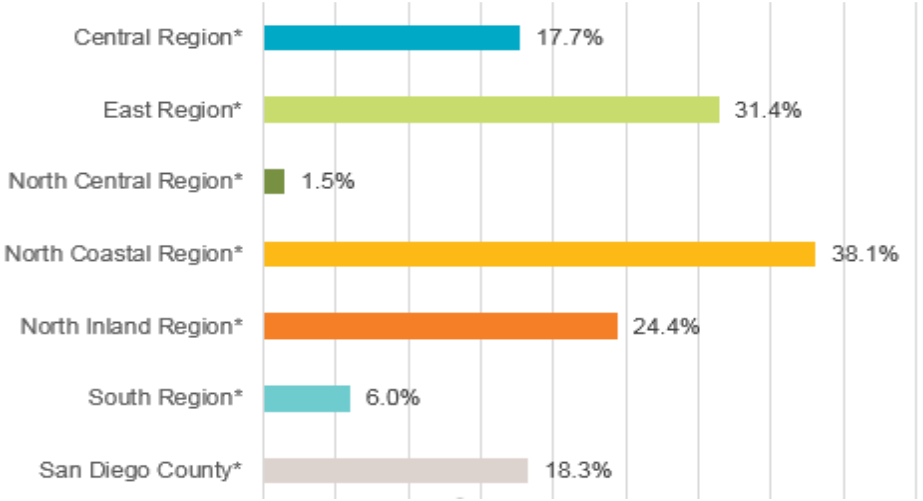
In 2015, over 1 out of 5 San Diego County residents ate fast food three or more times every week. North Inland Region, followed by South Region, had the highest percent of residents who ate fast food three or more times every week (Figure 20).

Three Behaviors: Physical Inactivity

As society evolved into the information or digital age, work has changed from primarily physical labor to primarily mental labor. Labor-saving machines contributed to an increasingly sedentary life-style. The automobile became the main form of transportation for the majority of the population. The physical environment, including lack of sidewalks and adequate lighting, posed challenges to walking.

The single biggest challenge to becoming physically fit is making the time to exercise or play. The recommended level of physical activity for adults is a total of 150 minutes of moderate activity every week.

Figure 21. Percent of Children Engaged in Physical Activity for One Hour Daily, San Diego County by HHSA Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

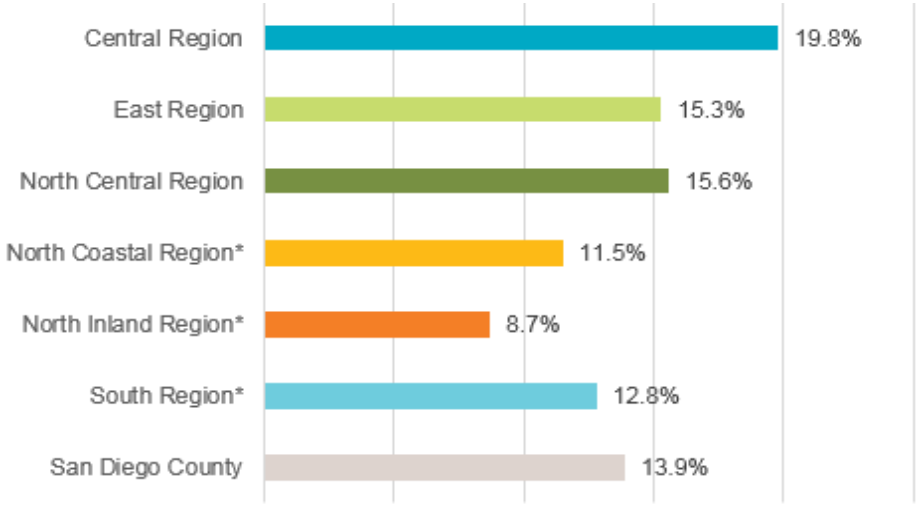
In 2015, 18.3% of San Diego County children engaged in physical activity for at least one hour daily. North Coastal Region had the highest percent of children engaged in physical activity for at least one hour daily (Figure 21).

Three Behaviors: Tobacco, Alcohol, and Drug Use

Smoking is the leading factor contributing to lung cancer and chronic obstructive pulmonary disease (COPD) deaths in the United States. Exposure to second-hand smoke increases risk of heart disease and lung cancer in adults, and asthma attacks and respiratory infections in children. In San Diego County, the Health and Human Services Agency also cautions against alcohol abuse and drug use/abuse because of the impact of these behaviors on several chronic diseases.

In 2015, 13.9% of adults in San Diego reported that they were current smokers. The Central Region had the highest percent of smokers, at nearly 20% of adults (Figure 22).

Figure 22. Percent of Adults who are Current Smokers, San Diego County by HHSA Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

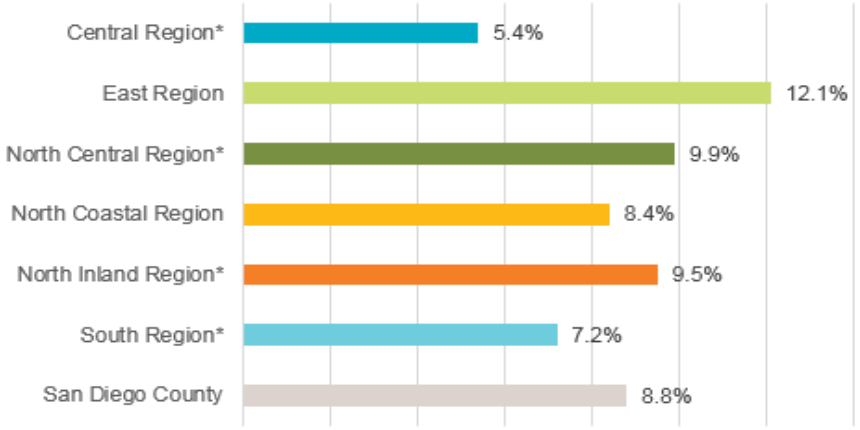
Four Diseases: Cancer

Cancer is a term used to describe a group of diseases in which abnormal cells divide without control and invade other tissues. Cancer cells can then spread to other parts of the body through the blood and lymph systems.[3] There are more than 100 different types of cancer, which are named for the organ or type of cell in which they start.

Four Diseases: Heart Disease and Stroke

Heart disease refers to any acute or chronic condition that involves the heart or its blood vessels: the muscle itself, valves, blood flow, and beating rhythm.[4] Heart disease primarily affects older adults, and includes CHD, cardiomyopathy, cardiac arrhythmias, and congestive heart failure. Heart disease, together with stroke, make up cardio-vascular disease. For the purpose of this analysis, heart disease is considered separately from hypertension due to the debilitating symptoms it presents on its own, which serve as an enabler for many other diseases.

Figure 23. Ever Diagnosed with Heart Disease, San Diego County by HHSA Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Stroke is a distinct type of cardiovascular disease, also called cerebrovascular disease. Specifically, stroke is a disease that affects the arteries leading to and within the brain. A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot, or ruptures. When this happens, part of the brain cannot get blood and oxygen, and begins to die.[5]

In 2015, 8.8% of adult San Diegans had ever been diagnosed with heart disease. The Region with the highest percentage of residents who had ever been diagnosed with heart disease was East Region, at 12.1% (Figure 23).

Four Diseases: Diabetes

Diabetes mellitus is a serious disease in which the levels of blood glucose, or blood sugar, are above normal. It is possible to live without knowing one has the disease; in fact one out of four people with diabetes do not even know they have the disease.[6] Uncontrolled diabetes can cause major health problems and disability. People with uncontrolled diabetes are more likely to have heart disease and stroke, vision problems such as blindness, nerve damage to hands and feet leading to amputation, kidney failure, and loss of teeth.[6]

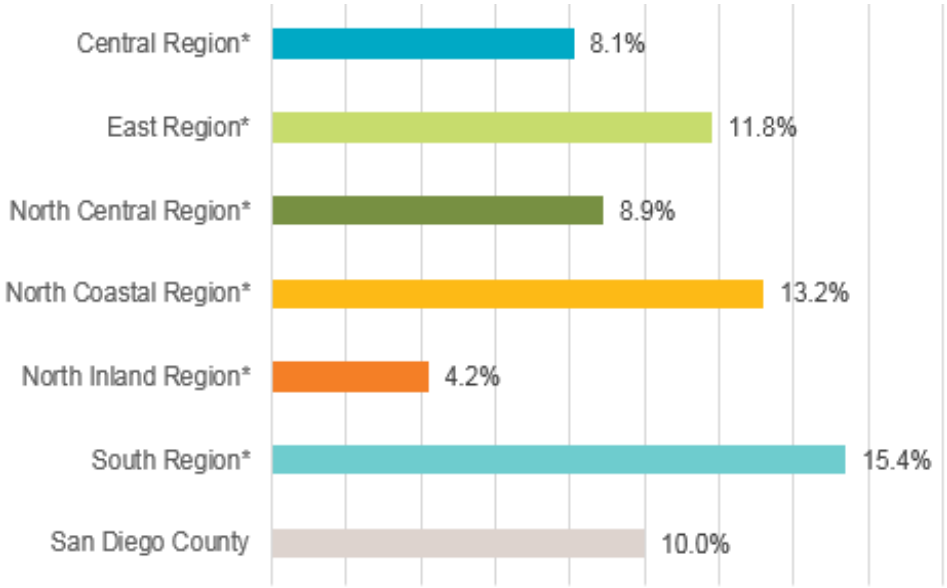
Of the three types of diabetes (Type 1 diabetes, Type 2 diabetes, and gestational diabetes), Type 2 diabetes is most common, accounting for 90% to 95% of all diabetes cases. Type 2 diabetes is typically associated with obesity and physical inactivity, and most commonly occurs after the age of 40.[6] Type 2 diabetes is a condition characterized by high blood glucose levels caused by either a lack of insulin or the body's inability to use insulin efficiently. Pre-diabetes occurs when blood glucose levels are higher than normal but not high enough to be diagnosed as diabetes. Pre-diabetes often leads to type 2 diabetes.[6]

In 2015, 10.0% of adults in San Diego County had ever been diagnosed with diabetes (Figure 24).

Four Diseases: Asthma and Chronic Obstructive Pulmonary Disease (COPD)

Asthma is a chronic inflammatory disease of the respiratory system which causes the airways of the lungs to constrict and become inflamed in response to certain triggers. It is the most common chronic disease in children and can also be found in adults. COPD is a disease that makes it hard to breathe. The disease is progressive, meaning it gets worse over time, and includes chronic bronchitis and emphysema.[7] Cigarette smoking is the leading cause of COPD; however, long-term exposure to second-hand smoke and other lung irritants, such as air pollution, chemical fumes, or dust may also

Figure 24. Ever Diagnosed with Diabetes, San Diego County by HHSA Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

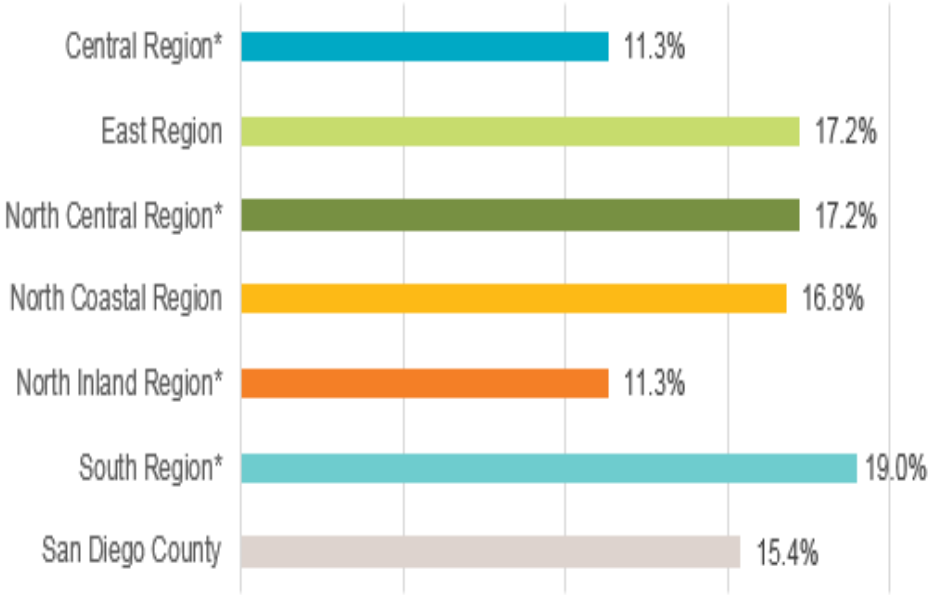
contribute to the disease. COPD occurs most often in older adults and may affect more than 10% of adults 65 years or older.[7]

In 2015, 15.4% of all San Diegans over the age of 1 year old had ever been diagnosed with Asthma (Figure 25).

Over 50% of Deaths

Three behaviors - poor diet, physical inactivity, and tobacco use - contribute to four major chronic diseases - cancer, heart disease, type 2 diabetes, and pulmonary disease - which are responsible for more than 50% of deaths worldwide. In San Diego County in 2016, 53% of deaths are due to these chronic diseases (see Figure 26 and Table 5, following pages, for information by HHSA Region).

Figure 25. Ever Diagnosed with Asthma, San Diego County by HHSA Region, 2015.



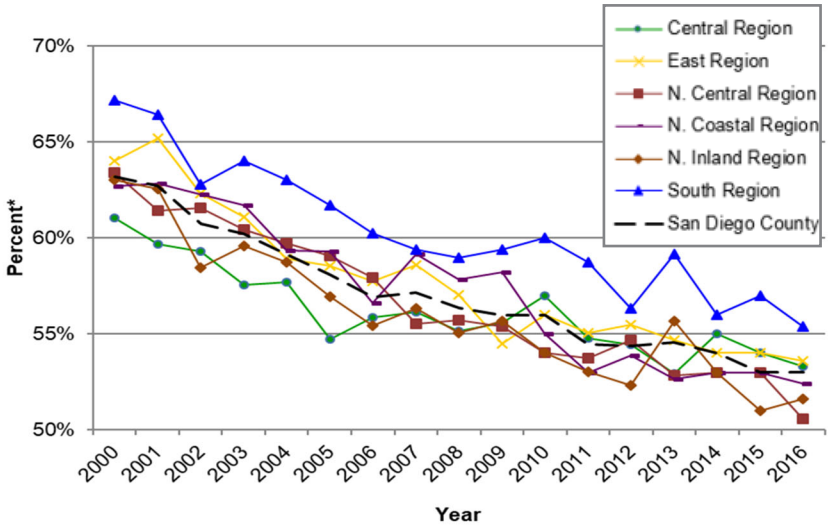
**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Compared to the County overall, South, Central, and East Regions had higher 3-4-50 death percentages in 2016 (Figure 26).

Summary

Overall, the percentage of deaths due to 3-4-50 diseases is decreasing within the County overall, and within the HHSA Regions as well. While relatively low percentages of San Diegans are participating in the risk behaviors that lead to deaths from one of

Figure 26. 3-4-50 Death[†] Percentages* Among San Diego County Residents, 2000-2016.



**3-4-50 deaths as a percentage of all cause deaths.*
[†]3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
[§]Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014 -2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

the 3-4-50 diseases, more work is needed to continue to lower the percentage of deaths due to chronic disease. Addressing 3-4-50 behaviors and diseases ultimately helps San Diegans to live well.

References

1. *World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).*
2. *3Four50, www.3four50.com (Accessed July 2, 2010).*
3. *National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).*
4. *Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).*
5. *American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015)*
6. *American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).*
7. *Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).*

Prevention Quality Indicators

Introduction

Prevention Quality Indicators (PQIs) are measures than can be used to identify quality of care for conditions where good outpatient care can prevent the need for hospitalization for that condition. In other words, early intervention and prevention, and if needed, outpatient/primary care, can circumvent the need for hospitalization.

PQIs were created in 2001 through a partnership between the U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality (AHRQ) and the University of California, San Francisco, Stanford Evidence-based Practice Center, and the University of California, Davis. The indicators are calculated using hospital discharge data, and results are reported out as rates per 100,000 population (of the population for which the indicator is measured).

PQIs can be used to determine health care quality issues, assess access to primary care and/or outpatient care, and help public health agencies' health care systems, and community-based organizations improve the quality of care in their communities. These indicators can also help identify unmet community health care needs. Illnesses described with PQIs can often be avoided with adequate preventive or outpatient care.

Preventable Hospitalizations

Table 6 describes PQI rates for San Diego County and the State of California for the year 2016. Where San Diego County's rate is highlighted in green, the rate was lower than the State overall. In areas where the County rate is highlighted in orange, the County was performing worse than the State overall.

Table 5. 3-4-50 Death[†] Percentages* Among San Diego County Residents, 2000-2016.

Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Central Region	61%	60%	59%	58%	58%	55%	56%	56%	55%	56%	57%	55%	54%	53%	55%	54%	53%
East Region	64%	65%	62%	61%	59%	59%	58%	59%	57%	54%	56%	55%	55%	55%	54%	54%	54%
North Central Region	63%	61%	62%	60%	60%	59%	58%	56%	56%	55%	54%	54%	55%	53%	53%	53%	51%
North Coastal Region	63%	63%	62%	62%	59%	59%	57%	59%	58%	58%	55%	53%	54%	53%	53%	53%	52%
North Inland Region	63%	63%	58%	60%	59%	57%	55%	56%	55%	56%	54%	53%	52%	56%	53%	51%	52%
South Region	67%	66%	63%	64%	63%	62%	60%	59%	59%	59%	60%	59%	56%	59%	56%	57%	55%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

**3-4-50 deaths as a percentage of all cause deaths.*
[†]3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
[§]Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In general, San Diego County performed better than the State of California regarding most PQIs. San Diego County had a lower rate of preventable hospitalizations than the State of California for all measured conditions except dehydration (Table 6).

San Diego County had a lower rate of admission for all conditions measured for PQI taken together (PQI 90: overall composite) than the State of California (Table 7).

Both the chronic composite and the diabetes composite hospitalization rates were lower for San Diego County than for the State of California meaning that residents of San Diego County were less frequently hospitalized for one of the measured chronic conditions, or diabetes and related complications, than residents of the State overall.

Several of these indicators are related to 3-4-50 diseases, more specifically, COPD and asthma, heart failure, and diabetes. Improvement is needed to reduce the rate of hospitalizations for these chronic conditions, as indicated by the chronic composite indicator, which encompasses all of the aforementioned diseases.

Summary

PQIs are measures of the rates of preventable hospitalizations. High-quality primary or outpatient care can prevent hospitalizations for these conditions. Several of these indicators are related to 3-4-50 diseases, showing that improvement can be made in managing and preventing these chronic conditions.

[†]AHRQ Quality Indicators TM Prevention Quality Indicators. http://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V50/PQI_Brochure.pdf. Accessed July 23, 2018.
[§]U.S. Department of health and Human Services, Agency for Healthcare Research and Quality. Prevention Quality Indicators Overview. http://www.qualityindicators.ahrq.gov/modules/pqi_resources.aspx. Accessed July 23, 2018.

Table 6. Preventable Hospitalizations (Prevention Quality Indicators [PQI]; Version 6.0, ICD-10-CM), San Diego County, 2016.

PQI #	Indicator	Description	Observed Rate*	
			San Diego County	California
1	Diabetes Short-term Complications	Principal diagnosis of diabetes with ketoacidosis, hyperosmolarity, or coma.	45.5	54.4
2	Perforated Appendix†	Diagnosis of perforation or abscesses of the appendix.	39.3	39.4
3	Diabetes Long-term Complications	Principal diagnosis of diabetes with renal, eye, neurological, circulatory, or complications not otherwise specified.	78.0	79.8
5	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults (Ages 40+)	Principal diagnosis of COPD or asthma, ages 40 and over.	246.0	265.6
7	Hypertension	Principal diagnosis of hypertension.	19.3	25.0
8	Heart Failure	Principal diagnosis of heart failure.	300.0	317.7
10	Dehydration	Principal diagnosis of dehydration.	122.5	116.5
11	Community Acquired Bacterial Pneumonia	Principal diagnosis of bacterial pneumonia.	117.6	140.0
12	Urinary Tract Infection	Principal diagnosis of urinary tract infection.	101.8	113.8
14	Uncontrolled Diabetes	Principal diagnosis of diabetes without mention of short-term or long-term complications.	26.4	33.9
15	Asthma in Younger Adults (Ages 18-39 years)	Principal diagnosis of asthma in cases aged 18-39.	14.9	22.6
16	Lower-Extremity Amputation Among Patients with Diabetes	Any-listed diagnosis of diabetes and any-listed procedure of lower-extremity amputation (except toe amputations)	20.8	23.6

**Rate per 100,000 population.*
†Rate per 100 Appendicitis cases.
Note: Cases with admission source for transferred from a different hospital, skilled nursing facility, intermediate care facility, or other health care facility excluded.
Source: Agency for Healthcare Research and Quality, Prevention Quality Indicators (PQIs) Version 6.01; OSHPD CA Patient Discharge Data, 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 7. Preventable Hospitalizations (Composite Prevention Quality Indicators [PQI]; Version 6.0, ICD-10-CM), San Diego County, 2016.

PQI #	Indicator	Description	Observed Rate*	
			San Diego County	California
90	Overall Composite	Admissions with diabetes (with short-term and long-term complications, uncontrolled, with lower extremity amputation), COPD, asthma, hypertension, heart failure, dehydration, bacterial pneumonia, or urinary tract infection in cases aged 18 or over.	962.0	1,048.9
91	Acute Composite	Principal diagnosis of dehydration, bacterial pneumonia, or urinary tract infection.	341.9	370.3
92	Chronic Composite	Admissions with diabetes (with short-term and long-term complications, uncontrolled, with lower extremity amputation), COPD, asthma, hypertension, or heart failure.	620.0	678.7
93	Diabetes Composite	Admissions with diabetes (with short-term and long-term complications, uncontrolled, with lower extremity amputation).	148.3	163.6

**Rate per 100,000 population.*
Note: PQ numbers are not sequential because only selected preventable diseases included in the final list. Cases with admission source listed as transferred from a different hospital, skilled nursing facility, intermediate care facility, or other health care facility are excluded from totals.
Source: Agency for Healthcare Research and Quality, Prevention Quality Indicators (PQIs) Version 6.01; OSHPD CA Patient Discharge Data, 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Leading Causes of Death

Introduction

The leading causes of death are mortality statistics useful for showing the relative burden of cause-specific mortality. The top 10 most common rankable causes of death are determined in San Diego County each year, based on rankable categories and reported underlying cause of death. Rankings show the most frequently occurring causes of death out of those rankable. It is important to note that rankings do not in any way depict risk of dying from one condition or another. Mortality rates for a specific cause of death may increase or decrease, but the ranking may not change over time.

Rankable causes of death are categories determined based on recommendations from the 1951 Public Health Conference on Records and Statistics. The original list had 64 selected causes of death; the list used for the 2015 rankings only had 51 categories. For more information on the categories and the conditions they encompass, please visit https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf.

Tables 8 and 9 on the following pages describe leading causes of death in San Diego County in 2015. Data is presented first comparing the County to the State and Nation overall, and then by HHSA Region.

Analysis

The leading cause of death in San Diego County in 2015 was Malignant Neoplasms, more commonly referred to as Cancer. The second most common underlying cause of death in 2015 among San Diego County residents was Heart Disease. This pattern held true for most HHSA Regions as well, except for Central and South Regions, where Diseases of the Heart was the leading cause, followed by Malignant Neoplasms.

Table 8. Leading Causes of Death[1,2] Among San Diego County Residents Compared to State and Nation, 2015.

Rank	San Diego County	California	United States
1	Malignant Neoplasms	Diseases of the Heart	Diseases of the Heart
2	Diseases of the Heart	Malignant Neoplasms	Malignant Neoplasms
3	Alzheimer's Disease	Alzheimer's Disease	Chronic Lower Respiratory Diseases
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Accidents/ Unintentional Injuries
5	Accidents/ Unintentional Injuries	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
6	Chronic Lower Respiratory Diseases	Accidents/ Unintentional Injuries	Alzheimer's Disease
7	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
8	Intentional Self-Harm (Suicide)	Influenza and Pneumonia	Influenza and Pneumonia
9	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Nephritis, Nephrotic Syndrome and Nephrosis
10	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)

[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 10 leading causes of death presented here are based on the San Diego County residents for 2015.

[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

San Diego County Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System.

California Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Stats of the State of California. https://www.cdc.gov/nchs/pressroom/states/california/california.htm. Accessed July 25, 2018.

Unites States Source: Heron, M. Deaths: Leading Causes for 2015. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System. National Vital Statistics Reports, Volume 66, Number 5, November 27, 2017. https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf. Accessed July 25, 2018.

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, June, 2018.

MORBIDITY AND MORTALITY

Table 9. Leading Causes of Death[1,2] Among San Diego County Residents by HHSA Region, 2015.

Rank	Central	East	North Central	North Coastal	North Inland	South	San Diego County
1	Diseases Of The Heart	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Diseases Of The Heart	Malignant Neoplasms
2	Malignant Neoplasms	Diseases Of The Heart	Diseases Of The Heart	Diseases Of The Heart	Diseases Of The Heart	Malignant Neoplasms	Diseases Of The Heart
3	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease
4	Cerebrovascular Diseases	Alzheimer's Disease	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases
5	Alzheimer's Disease	Cerebrovascular Diseases	Accidents/Unintentional Injuries	Accidents/Unintentional Injuries	Accidents/Unintentional Injuries	Diabetes Mellitus	Accidents/Unintentional Injuries
6	Diabetes Mellitus	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases
7	Chronic Lower Respiratory Diseases	Diabetes Mellitus	Diabetes Mellitus	Intentional Self-Harm (Suicide)	Diabetes Mellitus	Accidents/Unintentional Injuries	Diabetes Mellitus
8	Chronic Liver Disease And Cirrhosis	Essential Hypertension And Hypertensive Renal Disease	Intentional Self-Harm (Suicide)	Diabetes Mellitus	Chronic Liver Disease And Cirrhosis	Chronic Liver Disease And Cirrhosis	Intentional Self-Harm (Suicide)
9	Intentional Self-Harm (Suicide)	Chronic Liver Disease And Cirrhosis	Essential Hypertension And Hypertensive Renal Disease	Essential Hypertension And Hypertensive Renal Disease	Intentional Self-Harm (Suicide)	Influenza And Pneumonia	Chronic Liver Disease And Cirrhosis
10	Essential Hypertension And Hypertensive Renal Disease	Intentional Self-Harm (Suicide)	Influenza And Pneumonia	Influenza And Pneumonia	Influenza And Pneumonia	Essential Hypertension And Hypertensive Renal Disease	Essential Hypertension And Hypertensive Renal Disease

[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 10 leading causes of death presented here are based on the San Diego County residents for 2015.

[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System.

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, June, 2018.

Diseases of the Heart was also the leading cause of death for the State of California, and the United States as a whole as well (Table 8 and Table 9).

Deaths from Alzheimer's Disease were more common in California, the County overall, and within the HHSA Regions than it is in the United States as a whole.

Summary

Overall, the most common causes of death in 2015 were Malignant Neoplasms and Diseases of the Heart, ranking either first or second within each HHSA Region, the County overall, the State of California, and the nation. Alzheimer's Disease deaths were more common in California, the County, and the HHSA Regions than it was in the country overall.

Infant Mortality*

The Centers for Disease Control and Prevention (CDC) define infant mortality as the death of an infant before his or her first birthday, while defining the rate of infant mortality as the number of those infant deaths per 1,000 live births in the same year.[1] It is common practice to consider the infant mortality rate (IMR) as a representative indicator of population health.[2] It is theorized that using IMR as an indicator might mirror other factors of population health such as social well-being, rates of illness and disease, economic development, general living conditions and others.[3] It has also been used as a proxy measure for access and quality of pre-term and post-term medical care, for both the mother and infant.[4] In 2016, the top three causes of infant mortality in the United States were congenital malformations, low birth weight and Sudden Infant Death Syndrome.[2]

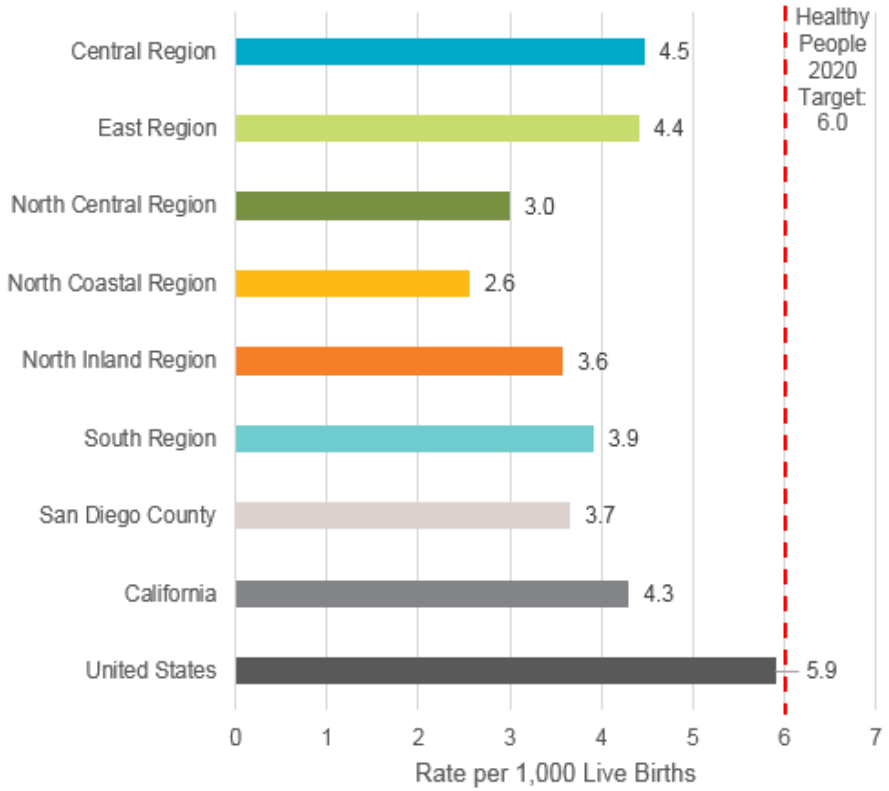
Infant Mortality Rate by Region

The overall infant mortality rate for all HHSA Regions, San Diego County, the State of California and the nation was below the Healthy People 2020 target of 6.0 deaths per 1,000 live births in 2015 (Figures 27 and 28). The IMRs in all HHSA Regions were similar. Central and East Regions had higher rates than San Diego County overall. San Diego County had a lower rate than the State of California and the United States as a whole.

Death rates have decreased in every HHSA Region, and the County as a whole, since the year 2000. The Region with the largest percent decrease in IMR between 2000 and 2015 was the North Central Region, at 53.5%. In 2000, both Central and East Regions had IMRs higher than the Healthy People 2020 target, but have since seen decreases to IMRs below the target.

** Footnotes for "Infant Mortality" Section appear on page 44.*

Figure 27. Infant Mortality Rate, San Diego County by HHSA Region, 2015.

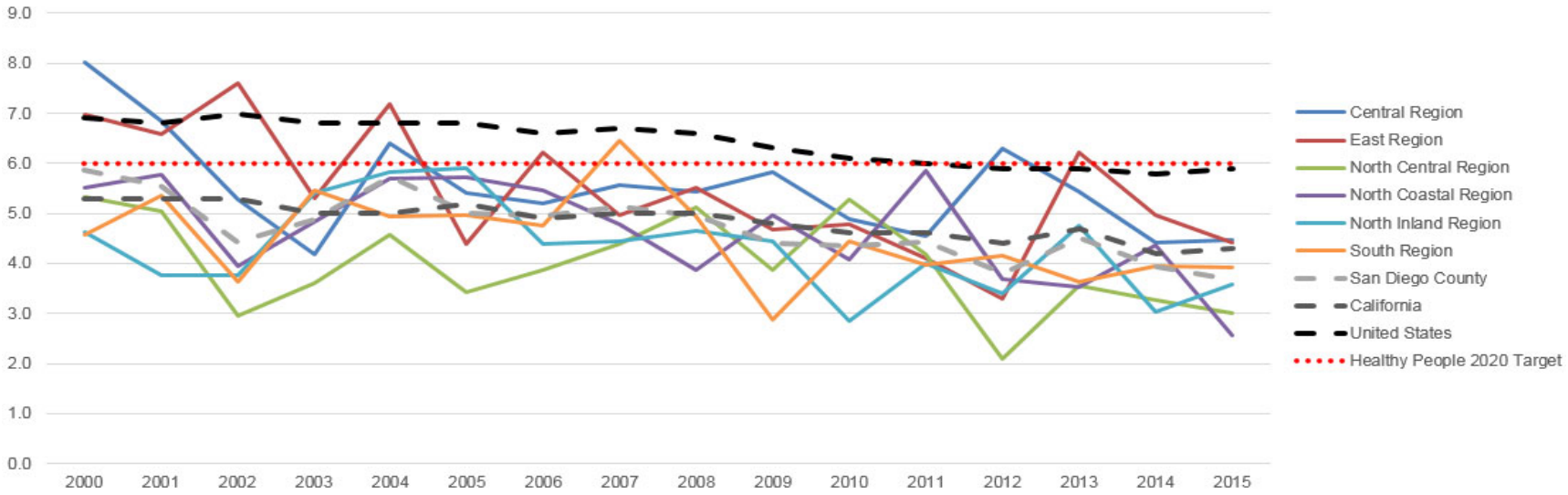


Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

Infant Mortality Rate by Race/Ethnicity

IMRs by Race/Ethnicity are shown in Figures 29 and 30 on the following page. In 2015, the County met the Healthy People 2020 goal of 6.0 deaths per 1,000 live births for all races/ethnicities (for which there were sufficient data) except for those

Figure 28. Infant Mortality Rate,* San Diego County by HHSA Region, 2000-2015.



**Rate of infant death per 1,000 live births.*
Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

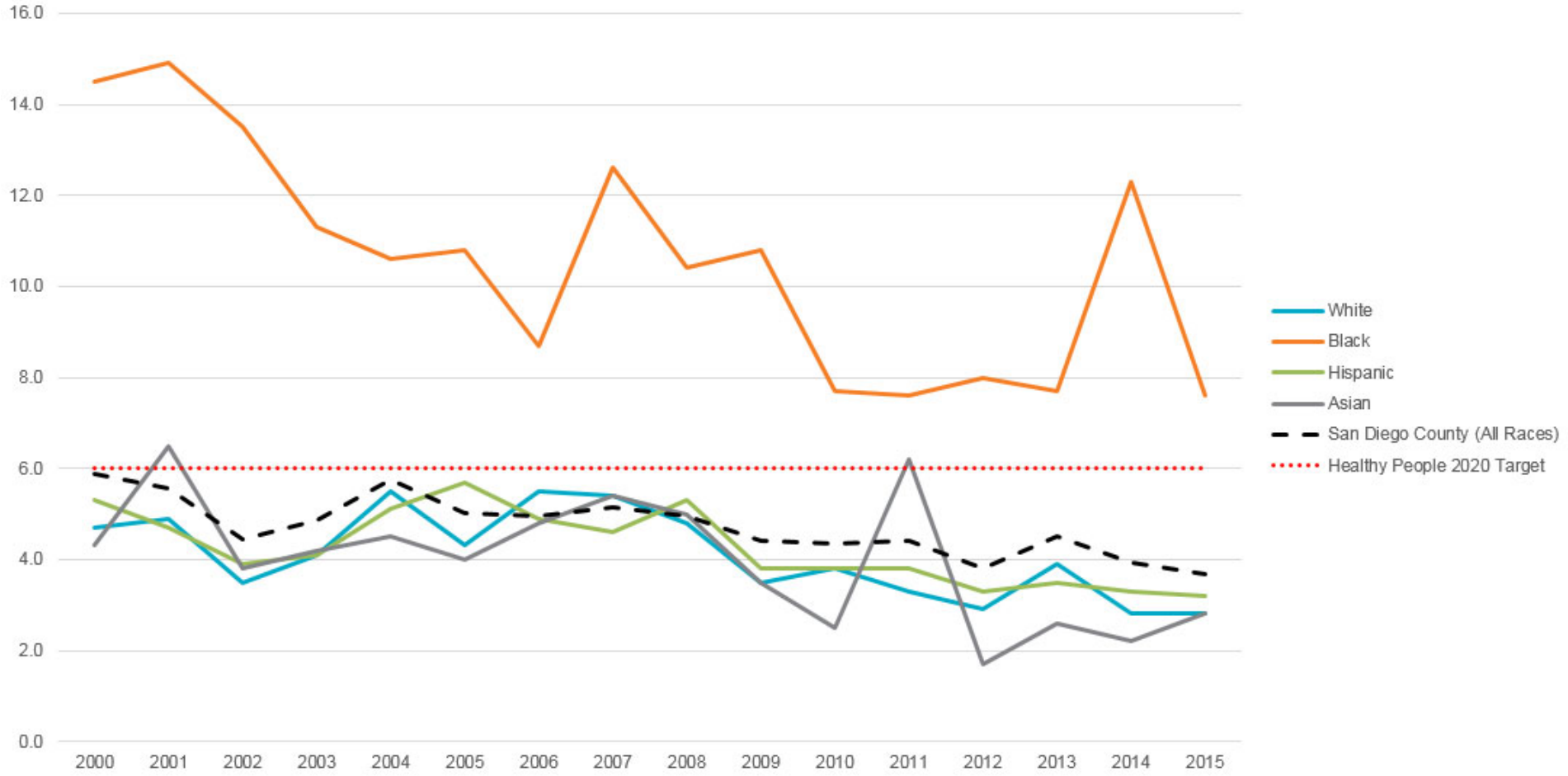
born to black mothers. It has long been observed that African American Infant Mortality (AAIM) has remained higher than for those who identified as white.[4] For example, the County of San Diego's (CoSD) AAIM rate in 2015 was 7.6, compared to 2.8 for whites. This indicates that African American infants were over 2.5 times as likely to die within their first year compared to whites (Figure 29). There are many factors that might explain this disparity; differences in access to medical care, low socioeconomic status, low educational status, substance abuse, racism, stress, and environmental issues.[4] Programs like County of San Diego's Black Infant Health addresses all these factors to reduce infant mortality.

Historically, the IMR for infants born to black mothers has been higher than all other races/ethnicities. For the 2011-2015 time period, the leading cause of infant mortality in blacks within the County was "newborn affected by maternal complications of pregnancy" with a total of 19 cases observed. Complications of pregnancy can occur both before and during pregnancy, and may reflect barriers to the quality or access to medical care as well as social and economic factors experienced by black mothers in this population.[5]

The IMR for black infants has also been higher than the Healthy People 2020 target each year, and continues to be higher than the target. The rate is trending downwards, however. The IMR for infants born to black mothers has decreased by 47.6%, the most of any race or ethnicity, between 2000 and 2015.

** Footnotes for "Infant Mortality" Section appear on page 44.*

Figure 29. Infant Mortality Rate* by Race of Mother, San Diego County, 2000-2015.



**Rate of infant death per 1,000 live births.*

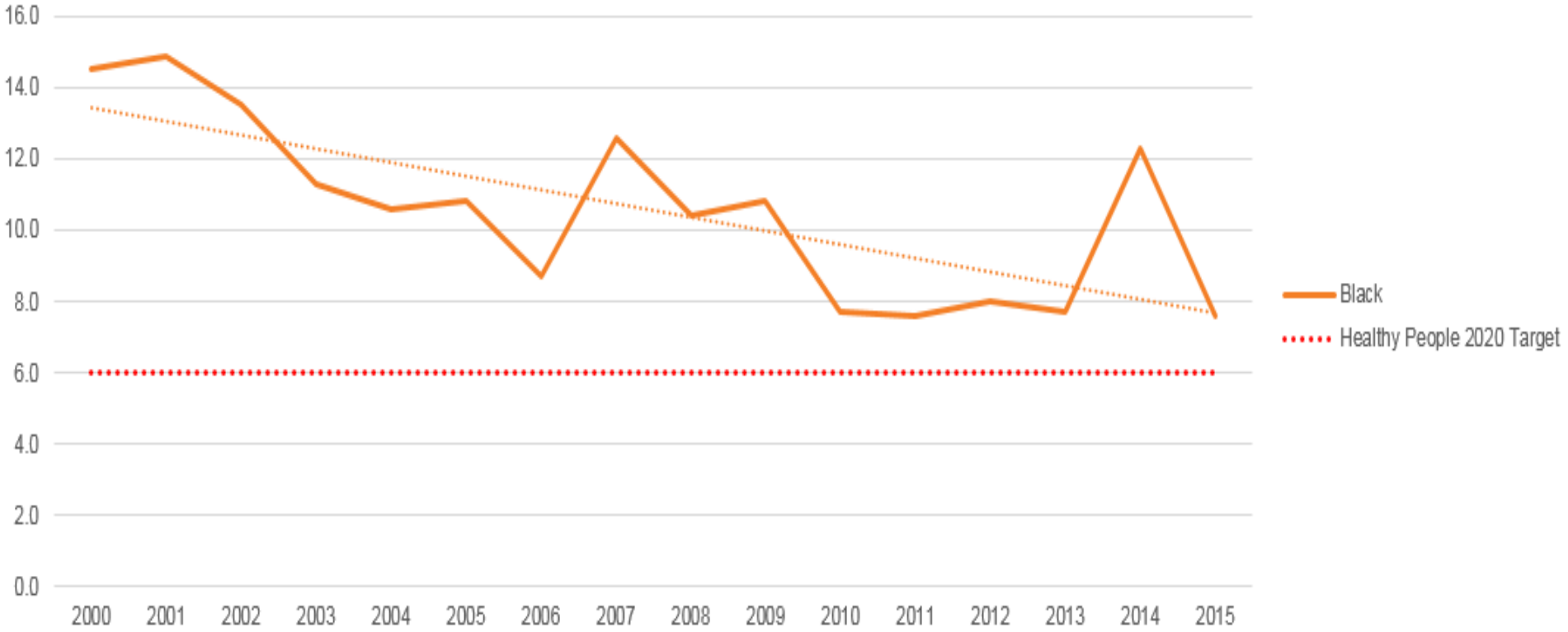
Note: Data not shown for less than 5 cases. Data not shown for races/ethnicities with less than three consecutive years of sufficient data, including American Indian/Alaska Native, Pacific Islander, two or more races, and other race/ethnicity. While an increase in cases was observed in 2007 and 2014, these rates are subject to acute spikes due to the small denominator of live births for this category (<2,000).

Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

** Footnotes for "Infant Mortality" Section appear on page 44.*

Figure 30. Black Infant Mortality Rate*, San Diego County, 2000-2015.



**Rate of infant death per 1,000 live births.*
Note: While an increase in cases was observed in 2007 and 2014, these rates are subject to acute spikes due to the small denominator of live births for this category (<2,000).
Source: Maternal, Child Health and Family Services.

Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

**Footnotes to "Infant Mortality" Section:*
1. Centers for Disease Control and Prevention (CDC). Infant Mortality. Reproductive Health. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Published 2017.
2. Kochanek KD, Murphy SL, Xu J, Arias E. Mortality in the United States, 2016. NCHS Data Brief. doi:10.1056/NEJM184002260220306.
3. Reidpath DD. Infant mortality rate as an indicator of population health. J Epidemiol Community Heal. 2003;57(5):344-346. doi:10.1136/jech.57.5.344.
4. Fry-Johnson YW, Levine R, Rowley D, Agboto V, Rust G. United States black:white infant mortality disparities are not inevitable: Identification of community resilience independent of socioeconomic status. Ethn Dis. 2010;20(1 SUPPL.1):1-10.
5. Reproductive Health. (2018, July 02). Retrieved July 03, 2018, from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-complications.html.

Suicide

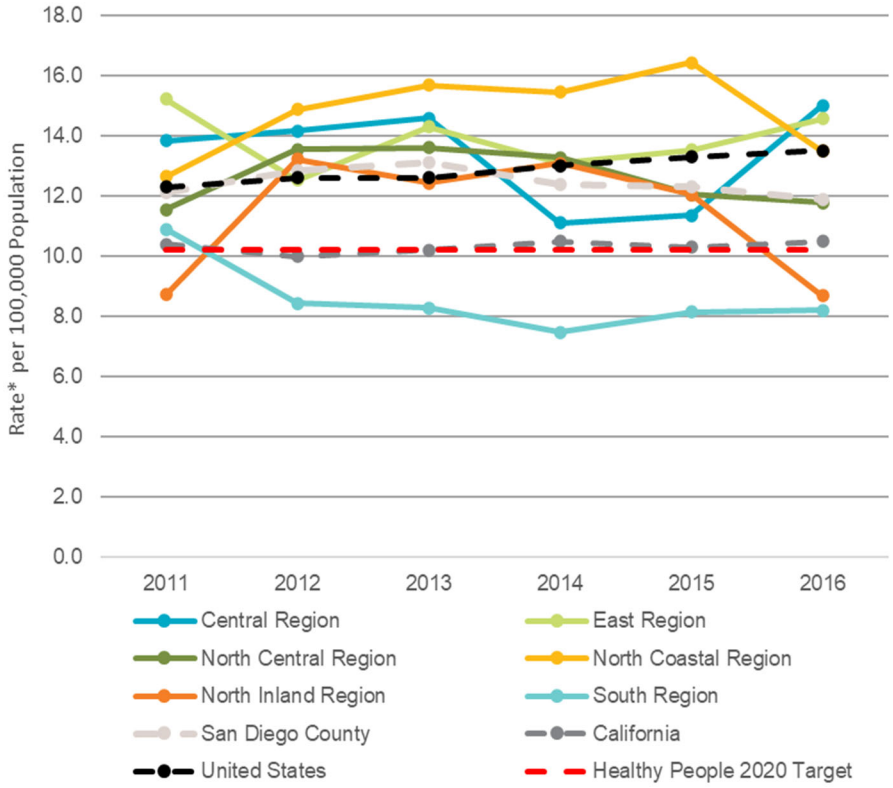
In 2016, San Diego County had a higher suicide rate than the State of California, lower than the United States as a whole, and was over the Healthy People target (10.2 per 100,000 population). In the Central Region, the suicide rate was highest compared to the other Regions. The rates in both North Inland and South Regions were lower compared to the County overall (Table 10). Between 2011-2016, rates in Central, North Central, and North Coastal Regions, as well as the County overall had increased (Figure 31). Central, East, North Central, North Coastal, and San Diego County as a whole all had suicide death rates higher than the Healthy People 2020 Target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicide death by the year 2020).

Table 10. Suicide,* San Diego County by HHSA Region, 2016.

Geography	2016 Suicide Death Rate*
Central Region	15.0
East Region	14.6
North Central Region	11.8
North Coastal Region	13.5
North Inland Region	8.7
South Region	8.2
San Diego County	11.9
California	10.5
United States	13.5
Healthy People 2020 Target	10.2

**All rates are age-adjusted; rate per 100,000.*
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 31. Suicide,* San Diego County by HHSA Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

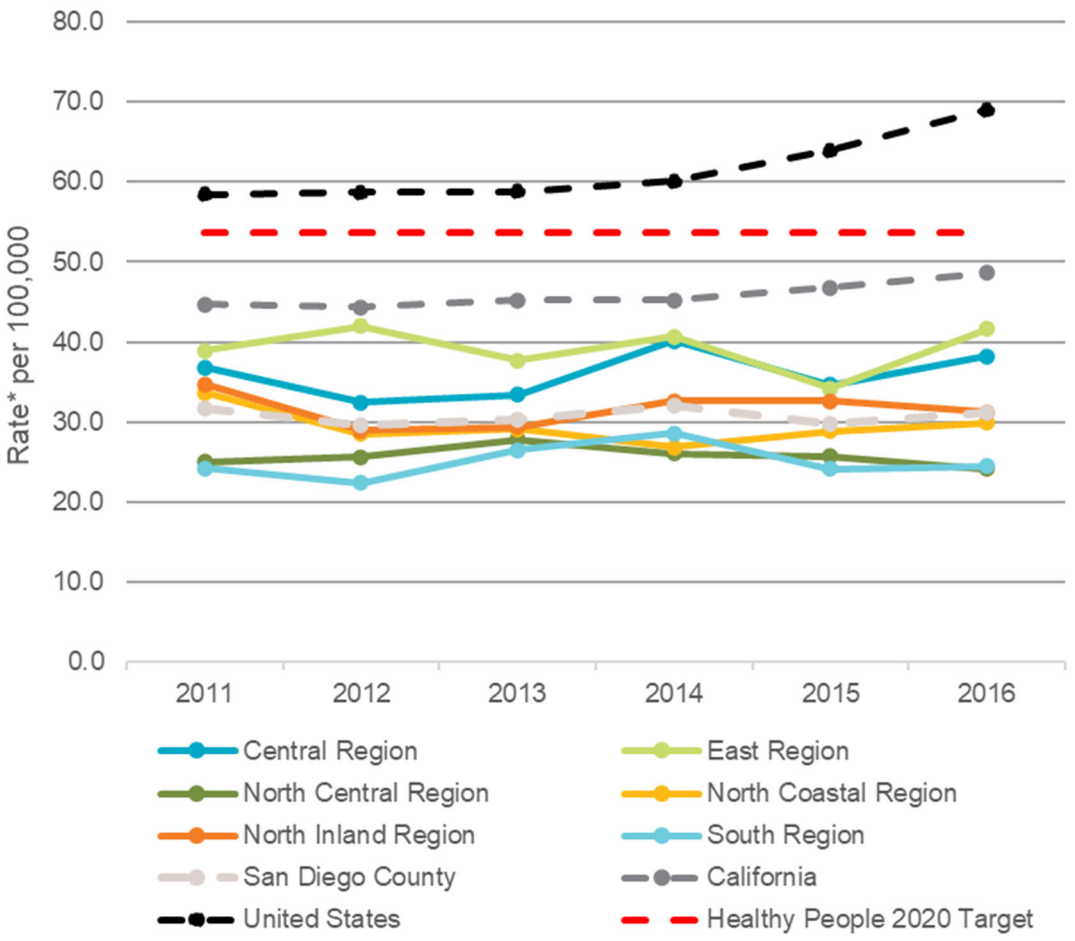
Unintentional Injury

Unintentional injuries include any accident that results in cutting or piercing of the skin, drowning or submersion, falls, or motor vehicle accidents. Nationally, more than 3 million people are re-hospitalized, 27 million people are treated in emergency departments and released, and over 192,000 die as a result of violence and unintentional injuries each year. The cost of both fatal and nonfatal injury in the U.S. in 2013 was $671 billion, in both medical and work loss costs, according to the CDC.

In 2016, San Diego County as a whole, and all HHSA Regions, had rates of unintentional injury death below the State of California and the United States overall (Table 11, next page). The rate of unintentional injury death in San Diego County, and all HHSA Regions, was below the Healthy People 2020 target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce unintentional injury death by the year 2020).

The Region with the highest unintentional injury death rate was East Region; the lowest was North Central Region. Between 2011-2016, the unintentional injury death rate increased in Central Region, East Region, and South Region. North Central Region, North Costal Region, North Inland Region, and San Diego County overall experienced a decrease between 2011-2016 in the unintentional injury death rate (Figure 32).

Figure 32. Unintentional Injury Death Rate*, San Diego County by HHSA Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

MORBIDITY AND MORTALITY

Table 11. Unintentional Injury Death Rate,* San Diego County by HHSA Region, 2016.

Geography	2016 Unintentional Injury Death Rate*
Central Region	38.2
East Region	41.6
North Central Region	24.2
North Coastal Region	29.9
North Inland Region	31.2
South Region	24.5
San Diego County	31.1
California	48.6
United States	69.0
Healthy People 2020 Target	53.7

**All rates are age-adjusted; rate per 100,000.*
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

AREAS OF INFLUENCE

Live Well San Diego Areas of Influence and Indicators

Areas of Influence

The following pages show data by Area of Influence, or factors that influence quality of life. The *Live Well San Diego* Areas of Influence and Indicator Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Table 12).

Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to *live well*.

Table 12. Indicators by Area of Influence.

Areas of Influence	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community Involvement

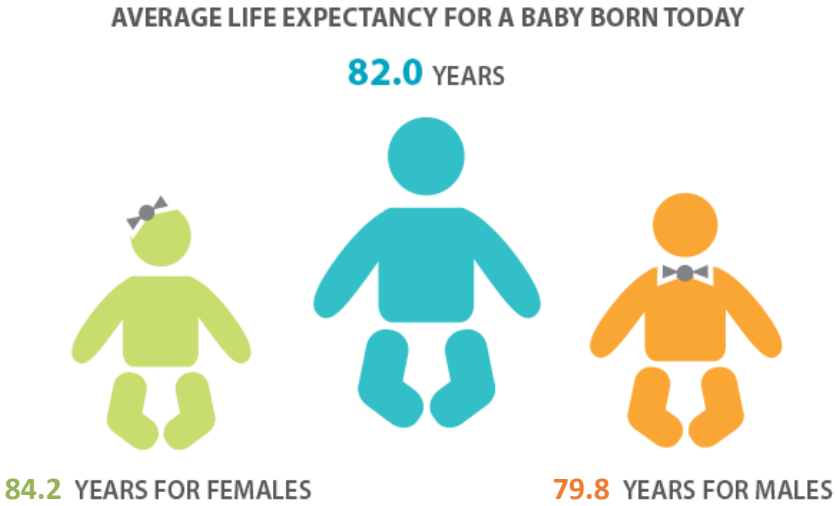
HEALTH

HEALTH

The health of an individual influences their ability to Live Well. Improving health and supporting healthy choices is essential to Building Better Health in San Diego County. Two of the top ten indicators measuring progress for *Live Well San Diego* fall under the Health Area of Influence. The first, life expectancy, refers to the measure of length of life expected at birth. The second, quality of life, describes the percent of the population that is sufficiently healthy and able to live independently. An individual's disability status can create barriers to education, employment, and ability to live independently, thus influencing their quality of life.

Live Well San Diego Indicator 1: Life Expectancy

Life expectancy at birth is measured as the average number of years a baby born today is expected to live, if current mortality patterns continue throughout his or her lifetime. Females born today are expected, on average, to live longer than males born today.

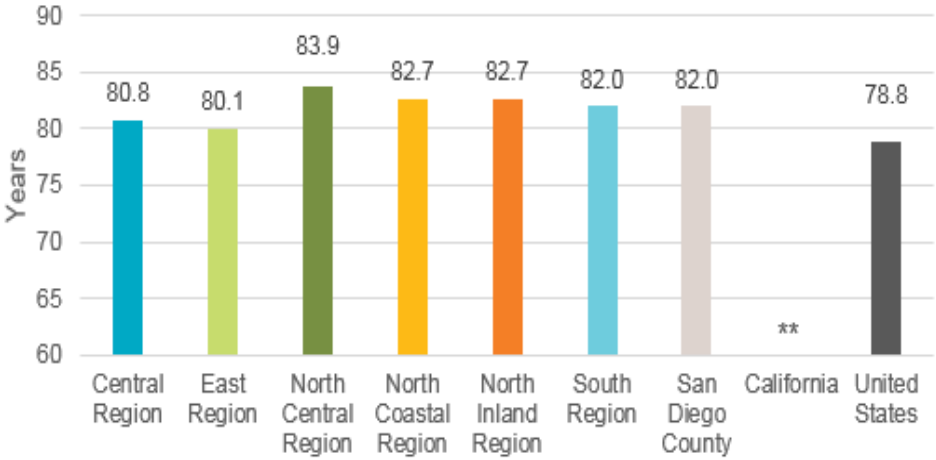


California: Data Not Available

United States: 78.8 Years

The life expectancy for a baby born in 2015 was higher in San Diego County overall (82.0 years), and all HHSA Regions, than the United States as a whole (78.8 years). North Central Region had a higher life expectancy for its residents (83.9 years) than all other Regions, and compared to the County overall. The Region with the lowest life expectancy was the East Region at 80.1 years (Figure 33).

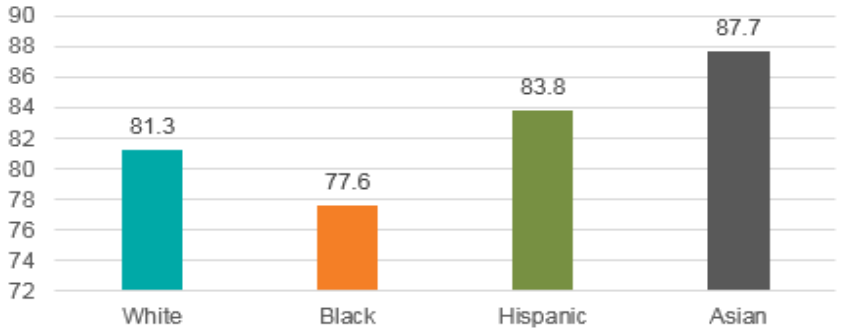
Figure 33. Life Expectancy at Birth, San Diego County by HHSA Region, 2015.



***Data not available.*
Source: Life Expectancy; U.S. and State data from the United States Centers for Disease Control and Prevention, FastStats. County and Regional data prepared by the County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, 2015. Accessed: 09/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

When compared by race/ethnicity, Asian residents had the highest life expectancy, at 87.7 years, which was higher than the County overall for all races. Hispanic residents also had a higher life expectancy than the County overall, at 83.8 years. Black residents had the lowest life expectancy, at 77.6 years (Figure 34).

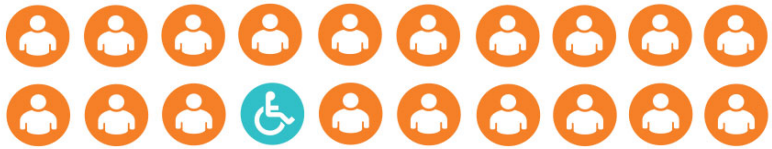
Figure 34. Life Expectancy by Race/Ethnicity, San Diego County, 2016.



Source: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, 2018. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator 2: Quality of Life

Quality of life is measured as the percentage of the population sufficiently healthy to live independently. The ability to live independently has a positive impact on physical, mental, emotional, and social well-being.*



19 IN **20** PEOPLE ARE HEALTHY ENOUGH TO LIVE INDEPENDENTLY*

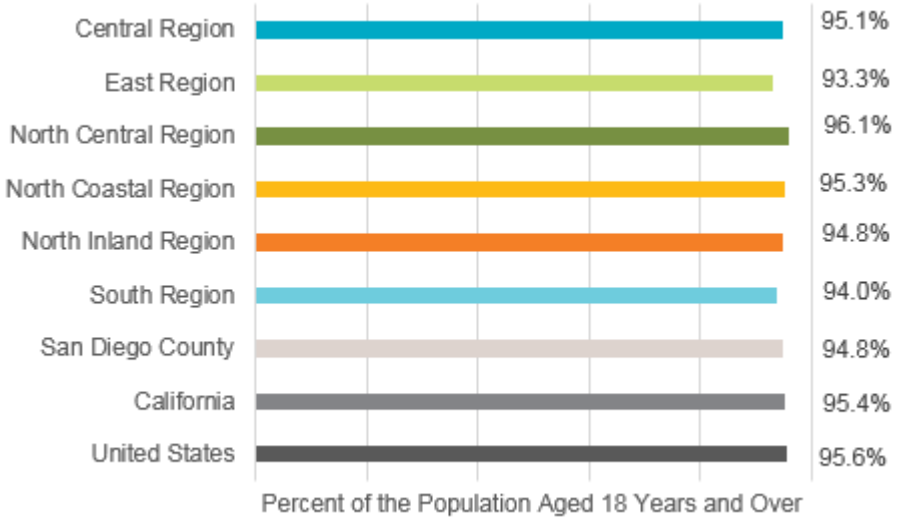
California: 95.4%

United States: 95.6%

**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*

In San Diego County, 19 out of 20 people were healthy enough to live independently (meaning the individual does not have any physical, mental, or emotional condition that impacts their ability to live independently). The percentage of people who were able to live independently was slightly lower in San Diego County (94.8%) than it was in California (95.4%) and the United States as a whole (95.6%; Figure 35).

Figure 35. Quality of Life,* San Diego County by HHSA Region, 2015.



**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1810. Estimates for those without independent living and/or self-care difficulty, 2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

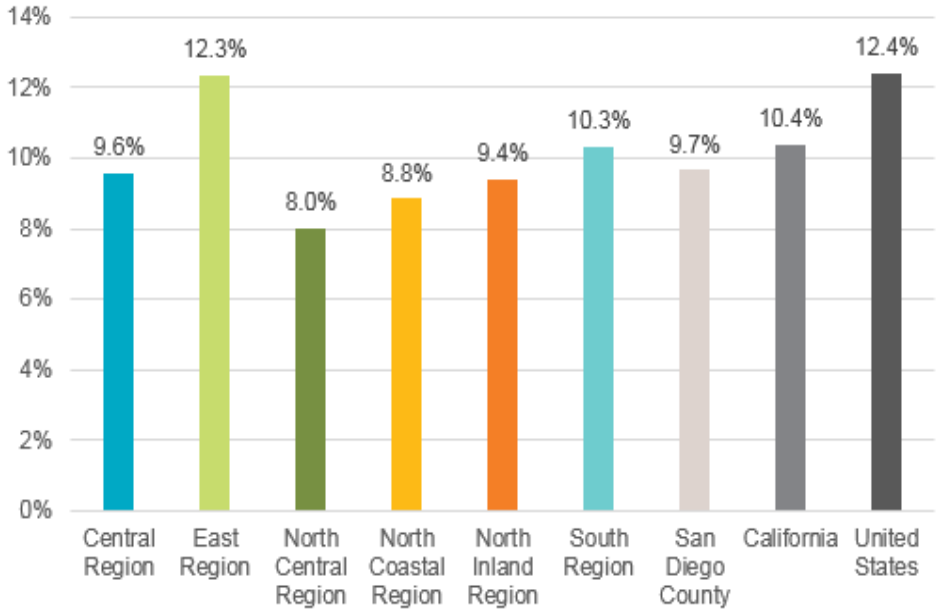
Supporting Indicators

Disability Status and Type

Disability is defined as a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business. Disability also contributes to an individual's ability to live independently.

In 2015, 301,597 residents in San Diego County reported having a disability. The Region with the highest percentage of disabled residents was the East Region, with 1 in 8 residents reporting having a disability. The Region with the lowest percentage of disabled residents was the North Central Region, with 1 in 12 residents reporting having a disability (Figure 36).

Figure 36. Disability Status, San Diego County by HHSA Region, 2015.



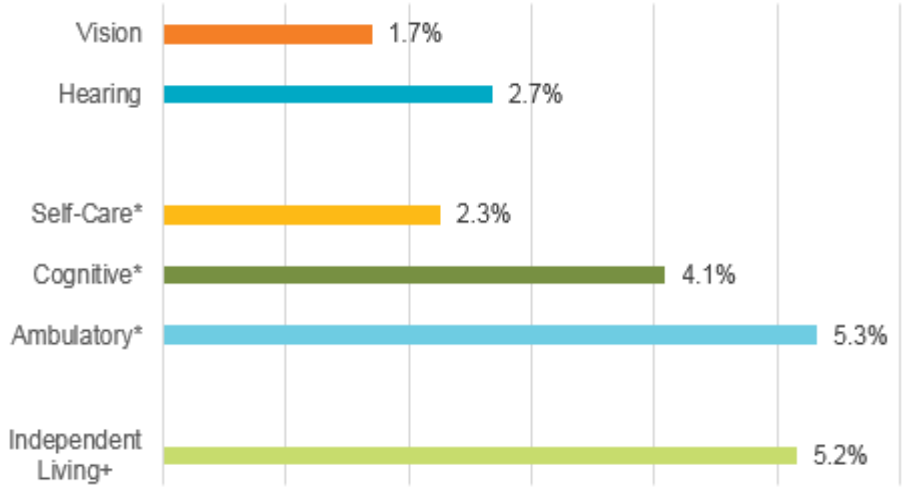
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In the population overall, 1.7% of residents reported having a vision difficulty, and less than 2.7% reported having a hearing difficulty.

In the population aged five years and over, 2.3% of residents reported having a self-care difficulty, 4.1% reported having a cognitive difficulty, and 5.3% reported having an ambulatory difficulty.

In the population aged 18 years and over, 1 in 20 residents reported having an independent living difficulty. Residents may report more than one type of difficulty and may be included in more than one of the disability types shown in Figure 37.

Figure 37. Disability Status by Type, San Diego County, 2015.



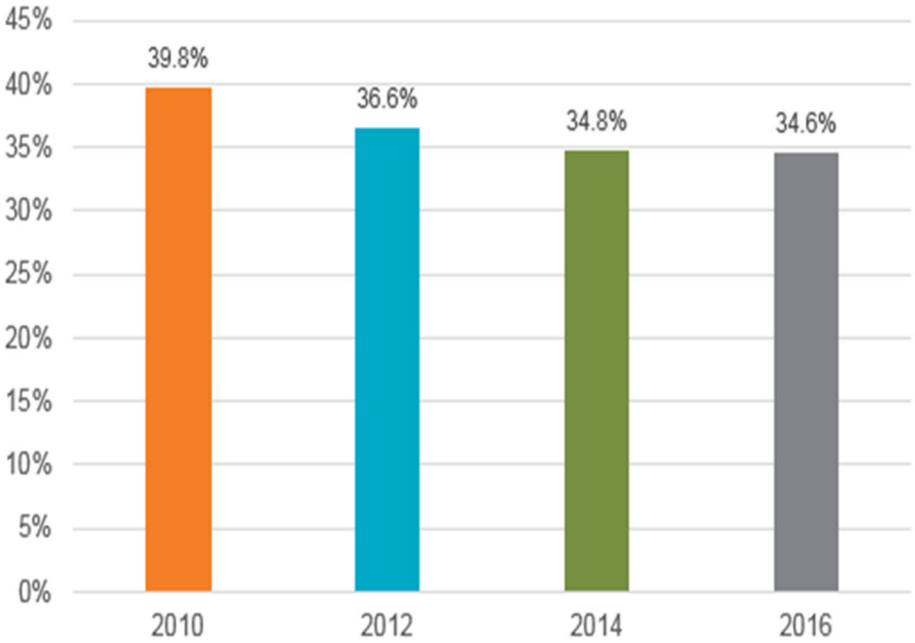
**Excludes population under 5 years of age.*
+Excludes population under 18 years of age.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Special Populations

Chula Vista Elementary School District Healthy Weight Surveillance Project, 2016

The Chula Vista Elementary School District (CVESD) evaluated the rates of overweight and obesity between 2010-2016. The project began when the District's wellness coordinator began looking for a way to measure the health of the students served by the CVESD. Data on heights, weights, and ages of 25,827 students were collected by trained professionals. Data analysis support was provided by the Community Health Statistics Unit within the County HHSA. The Maternal, Child, and Family Health Services Branch wrote the procedure as a guide for other school districts with funding from the Communities Putting Prevention to Work grant (available at the website BMI-toolkit.pdf (sandiegocounty.gov).

Figure 38. Overweight/Obese CVESD Students by Year, 2010-2016.

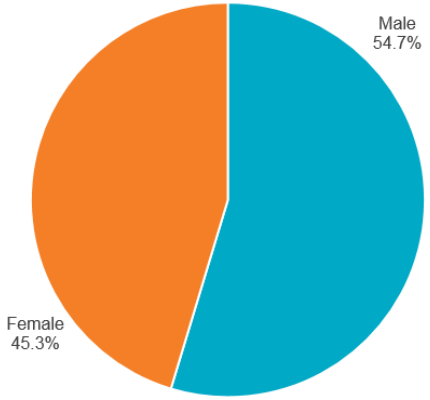


Source: Chula Vista Elementary School District Healthy Weight Surveillance, 2010—2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The BMI of students from 45 elementary schools who were in kindergarten through sixth grades were measured. Within CVESD, there was a 17.1% decrease in obese students from 2010-2016, and an 8.0% decrease in overweight students. The percentage of students who were overweight or obese in 2016 decreased to 34.6%, compared to 39.8% in 2010 (Figure 38).

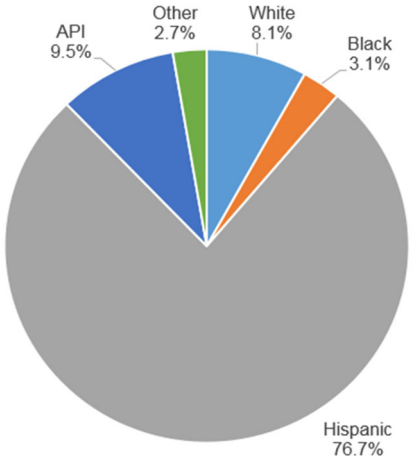
The figures on this page describe the percentage of overweight or obese students by year, gender, and race/ethnicity in 2016 (Figures 38, 39, and 40).

Figure 39. Overweight/Obese CVESD Students by Gender, 2016.



Source: Chula Vista Elementary School District Healthy Weight Surveillance, 2010—2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 40. Overweight/Obese CVESD Students by Race/Ethnicity, 2016.



Source: Chula Vista Elementary School District Healthy Weight Surveillance, 2010—2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Oral Health Assessment

Assembly Bill 1433 requires schools to distribute the Oral Health Assessment (OHA) Form to parents who are registering their child in public school, in either kindergarten or first grade. The form collects general demographic information about the student from the parent, and information about dental caries and decay from a licensed dental professional. Schools must collect the Oral Health Assessment Forms by May 31 of the school year and are responsible to report totals to their district. All Regions are required to collect this data.

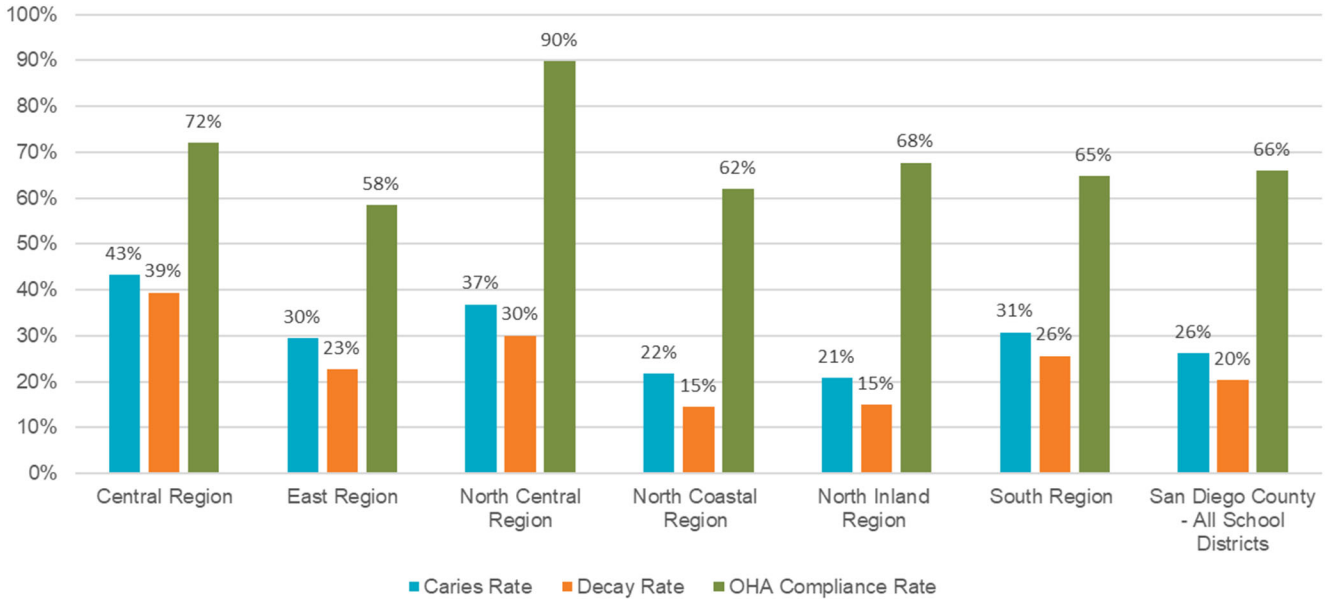
The summary report submitted by each district contains information about the number and percentage of children with an OHA on file, which is also called the compliance rate (Figure 41). Once reports are submitted to the local Child Health and Disability Prevention (CHDP) Program, data are analyzed. Although the following results provide insight on current oral health issues among school children, findings should be interpreted with caution because of potential data accuracy and reporting issues. All school districts are required to participate.

Overall, out of 35,212 eligible kindergartners and first graders in San Diego County during the 2017-2018 school year, 22,538 (66%) participated in the oral health assessment (Figure 43). Approximately 26% (6,036) were experiencing dental caries. Of those who participated, 20% (4,672) were experiencing untreated dental decay.

Compared to the County overall, participating students in the Central (43%), North Central (37%), South (31%), and East (30%) Regions had higher rates of dental caries. Participating students in the Central (39%), North Central (30%), South (26%), and East (23%) Regions had higher rates of decay than the County overall. The Regions with the highest rates of OHA compliance (participation) were the North Central Region (90%) and the Central Region (72%) (Figure 41).

Data are available by individual school district for each HHSA service delivery Region. Data by School District by Region are presented in the corresponding Region's section at the end of the overall CHA document.

Figure 41. Oral Health Assessment (OHA) Results, San Diego County by HHSA Region, 2017-2018.



Note: In districts where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.

Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

Refugee Health

Refugee Health Assessment Program (RHAP)

Within the fiscal year (FY) 2014-2015, there were 1,787 refugee/humanitarian entrants in San Diego County (Table 13). Of those, 1,482 were classified as refugees. Other types of humanitarian entrants include secondary migrants, Cuban and Haitian parolees, granted asylees, and victims of human trafficking.

The Refugee Health Assessment Program (RHAP) provides eligible entrants with culturally and linguistically appropriate comprehensive health assessments, including follow-up and referrals for health conditions identified in the assessment process, within the first three months of their arrival in San Diego County. Health screenings provided through this program include testing for tuberculosis, anemia, lead exposure in children, pregnancy, STDs, HIV, and parasitic and vector-borne infections. Services provided include immunizations, mental health assessment, health and wellness promotion education, and healthcare referrals.

In FY 2014-2015, the most commonly diagnosed parasitic infection among arrivals tested for the infection was *Blastosystis hominis* (20.3%), followed by giardiasis (beaver fever, 4.4%) and *Dientamoeba fragilis* (1.2%). Approximately 15.9% of arrivals screened (N=1,784) tested positive for latent TB infection (Figure 42).

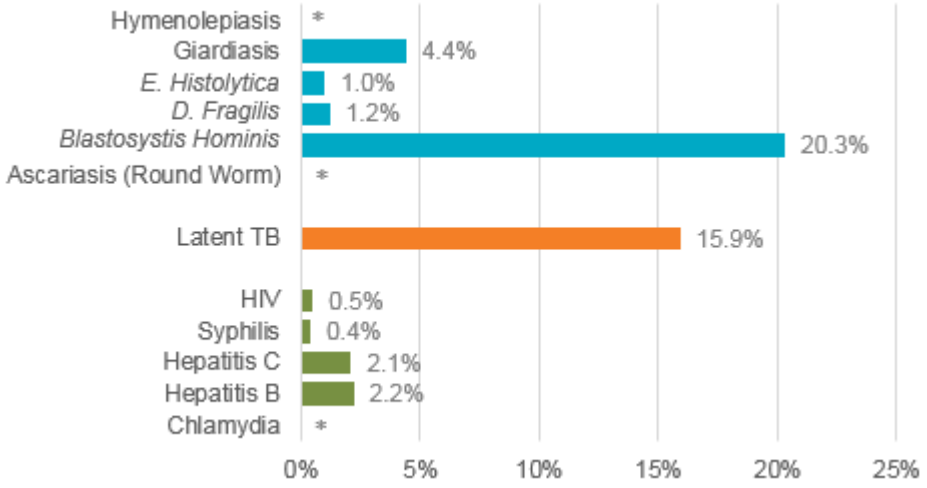
The most common chronic health issue diagnosed in FY 2014-2015 arrivals was oral health, with approximately 1 in 8 arrivals experiencing dental caries. One in ten arrivals was obese. One in seventeen arrivals had poor eyesight (Figure 45). In children aged 6 months to 15 years screened for blood lead levels, 1 in 11 had elevated levels.

Table 13. Refugee Arrivals to San Diego, FY 2014-2015.

Country of Birth	Number of Arrivals	% of Arrivals
IRAQ	864	48.3%
AFGHANISTAN	134	7.5%
SOMALIA	122	6.8%
CUBA	90	5.0%
CONGO, THE DEMOCRATIC REPUBLIC OF THE	84	4.7%
IRAN, ISLAMIC REPUBLIC OF	77	4.3%
MYANMAR	63	3.5%
ETHIOPIA	53	3.0%
BURUNDI	42	2.4%
SYRIAN ARAB REPUBLIC	36	2.0%
Other Africa	86	4.8%
Other Asia	96	5.4%
Other LAC	25	1.4%
Other EUR	15	0.8%
Total	1,787	100.0%

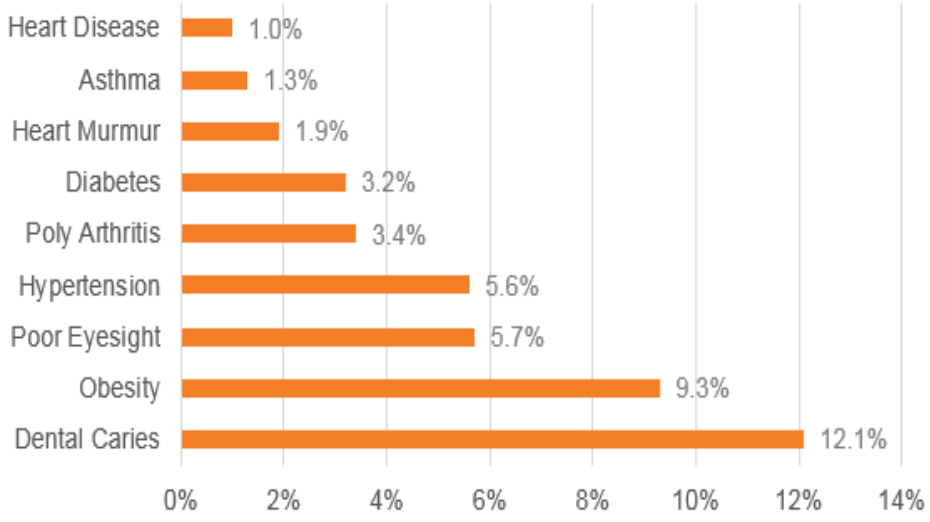
Note: The data represents refugees served through the RHAP program, and not all refugees who arrived to San Diego County. The data does not include refugees served by Alliance for African Assistance, refugees missing appointments or with incomplete assessments, using other providers, and/or outmigration to other counties/ states.
Source: Refugee Health Information System (RHEIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 42. Infectious Disease Screening Results, Refugee Arrivals, FY 2014-2015.



**Data not displayed for <5 cases.*
Note: Not all arrivals were screened for each infection.
Source: County of San Diego, Health & Human Services Agency, Public Health Services, Tuberculosis and Refugee Health Branch, San Diego Refugee Health Assessment Program (RHAP), FY 2014-2015.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 43. Chronic Disease Screening Results, Refugee Arrivals, FY 2014-2015.



Note: Not all arrivals were screened for each condition.
Source: County of San Diego, Health & Human Services Agency, Public Health Services, Tuberculosis and Refugee Health Branch, San Diego Refugee Health Assessment Program (RHAP), FY 2014-2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

American Indian/ Alaska Native

In 2017, San Diego County had an estimated 21,064 American Indian/Alaska Native (AIAN) residents. This population lives on 18 federally recognized reservations and also in communities throughout the County.

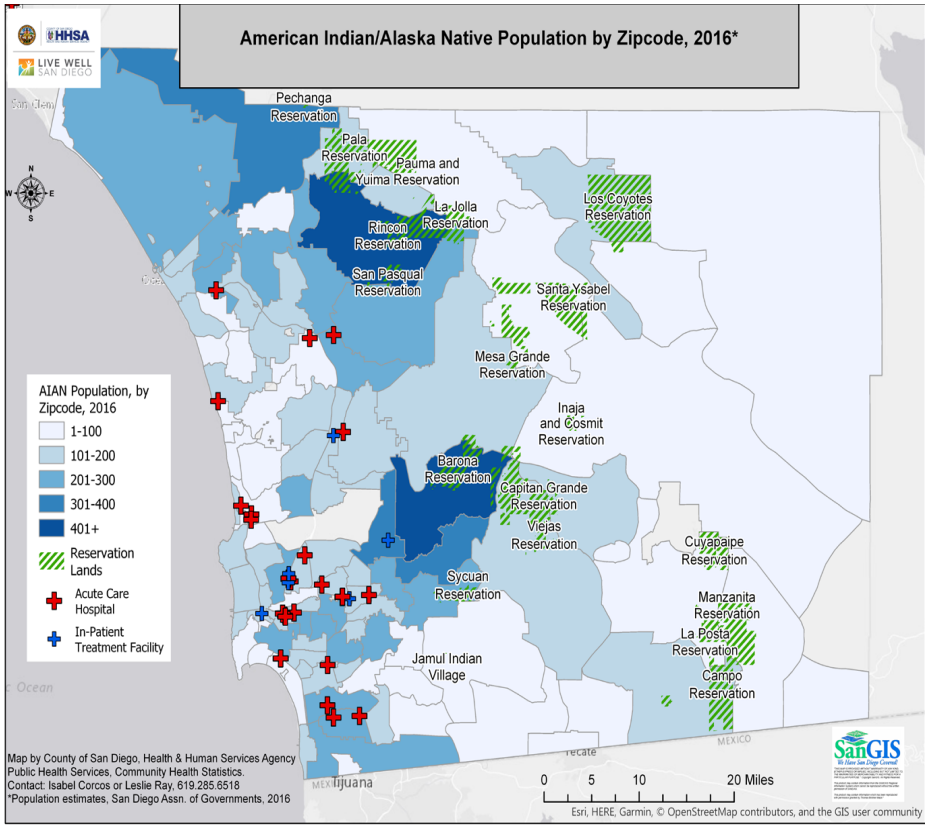
- Reservation lands account for almost 200 square miles, or about 4.7% of land within the County. (Figure 44)

Demographics

- **Education**—Nearly 1 in 4 (23.1%) AIAN residents had less than a high school education in 2017.
- **Unemployment**—About 1 in 15 (6.6%) AIAN residents were unemployed in San Diego County in 2017.
- **Poverty**—Over 1 in 5 (20.4%) AIAN residents were at or below poverty level in San Diego County in 2017.
- **Foreign Born Status**—Overall, 1 in 7 (13.2%) AIAN residents were foreign born in 2017.
- **Disability Status**—In 2017, 1 in 7 (14.3%) AIAN residents reported a disability. Of those ages 65+, nearly half reported a disability.
- **Health Insurance Status**—In 2017, 1 in 5 (20.6%) AIAN residents did not have health insurance.

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Tables C15002C, B17001C, C27001C, B05003C, B18101C, C23002C.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

Figure 44. American Indian/Alaska Native Population by Zip Code, 2016.



Health Disparities among American Indian/Alaska Natives

In 2018 a study was conducted by the County of San Diego Public Health Services Branch to compare health disparities of AIAN residents with those of other race/ethnicities. This study also examined the major causes of mortality/morbidity for the AIAN population in San Diego County over six years using medical encounter data from local hospitals and emergency departments. These encounters include general acute care hospitalization, in-patient treatment in a psychiatric or chemical rehabilitation hospital, and emergency department discharge.

Table 14. Medical Encounter Rates* for Selected Health Conditions by Race/Ethnicity, San Diego County, 2016.

	Highest	<<<	Rates	>>>	Lowest
Chronic Disease Death	**AIAN**	**Hispanic**	**Black**	**API*** **	**White**	**Total**
Alzheimer's Disease and Related Dementias	35.4	26.0	44.6	34.0	126.6	**74.5**
CHD	106.3	37.0	105.1	54.5	135.8	**88.8**
COPD/Chronic Lower Respiratory Diseases	42.5	6.9	24.9	14.1	53.0	**30.6**
Diabetes	63.8	19.6	37.0	24.0	22.7	**22.3**
Lung Cancer	42.5	8.6	28.7	28.4	46.6	**29.8**
Overall Cancer	141.7	81.0	135.7	113.0	227.4	**155.0**
Behavioral Health	**AIAN**	**Hispanic**	**Black**	**API*** **	**White**	**Total**
Death						
Alcohol Related Disorders	35.4	10.2	12.1	3.1	20.5	**14.4**
Hospitalization**						
Alcohol Related Disorders	63.8	52.2	73.3	10.0	109.3	**76.7**
In-Patient Treatment§						
Alcohol Related Disorders	99.2	18.4	30.6	1.8	77.9	**47.2**
Mood Disorders	226.7	180.1	403.4	105.9	367.6	**286.0**
Schizophrenia	297.5	165.9	803.6	108.7	275.7	**250.1**
ED Discharge						
Alcohol Related Disorders	453.4	210.1	411.0	50.4	465.5	**329.6**
Anxiety	170.0	287.8	444.2	112.0	290.4	**286.8**
Mood Disorders	155.9	112.4	375.3	55.0	255.7	**193.7**
Opioid Related Disorders	92.1	28.1	57.4	5.1	64.3	**46.3**
Schizophrenia	304.6	93.5	556.9	48.6	177.2	**156.7**
Substance Related Disorders	162.9	101.3	343.5	26.3	158.5	**137.6**
Self-Inflicted Injuries	240.9	133.8	327.5	54.0	193.2	**173.1**
Injury Death	**AIAN**	**Hispanic**	**Black**	**API*** **	**White**	**Total**
Overdose/Poisoning	42.5	5.6	17.2	4.1	17.6	**11.8**
Unintentional Injuries	77.9	19.1	40.1	19.2	45.5	**32.8**

**Rates per 100,000 residents, 2016.*
***Discharge from a general acute care hospital.*
§In-patient treatment refers to discharge from a psychiatric or chemical rehabilitation facility.
****API refers to Asian/ Pacific Islanders and include Asian, Pacific Islander, and Native Hawaiian.*
Sources: Hospital and Emergency Department Discharges, California Department of Public Health, Office of Statewide Health Planning and Development (OSHPD).
Vital Records Business Intelligence System (VRBIS) (2016).
Population estimates: San Diego Association of Governments (SANDAG), 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

Results

Chronic Disease Surveillance—The diabetes death rate was highest for AIAN, nearly 3 times higher than the total rate. AIAN death rates from COPD/lower respiratory diseases and lung cancer ranked second, below those of whites (Table 14).

Behavioral Health Surveillance—Compared to other race/ethnicities, death and inpatient treatment rates for alcohol related disorders were highest among AIAN, and the emergency department discharge rate ranked 2nd highest. The emergency department discharge rate for opioid related disorders for AIAN was twice as high as the total County rate (Table 14).

Injury Surveillance—AIAN had the highest death rate due to overdose/poisoning, over 3 times higher than the total rate, and 8 to 10 times as high as Hispanics and API residents, respectively. The death rate from unintentional injuries was also the highest among AIAN residents, more than twice the total rate, and 4 times higher than Hispanics and API residents (Table 14).

Internal Health Assessments

In the following sections, the results of additional internal and external local health assessments are described. The purpose of this section is to help paint a more complete picture of the health of San Diego residents.

Behavioral Health Services Community Engagement Report 2017

Each year, Behavioral Health Services (BHS) provides services and programs to more than 70,000 San Diegans through 11 County-operated programs, 300 contracted programs, and 800 fee-for-service providers. In August of 2017, Behavioral Health Services held two community forums and a tele-town hall (random dialing of a San Diego call list) to collect feedback on programs and services.

Members of the community were asked to discuss three questions:

1. Why do you think someone might not be getting the care they need for mental health or substance use disorders?
2. In what ways could BHS better support you or others in getting care for mental health and substance use disorders?
3. There are many needs and issues that BHS must balance when creating a plan and budget for serving the community. What do you think are the most important things for BHS to consider?

For the purposes of this assessment, only the responses to the first question are presented (Figure 45). For more information. Please refer to the full BHS report available at 2017_Community_Engagement_Report.pdf (camhsa.org) .

In-Person Community Forums

One community forum was held in North County on August 10, 2017, and 63 community members participated. A second forum was held in Central San Diego on August 29th. An additional 157 community members participated in that forum.

Attendees were broken into small groups of 8-10, and participated in a roundtable discussion with a trained moderator. Groups were provided with responses and asked to rank them from "most likely" (1) to "least likely" (10) in terms of how relevant they thought the response was.

The first question (and the only for which responses are discussed for the purposes of this assessment) was "Why do you think someone might not be getting the care they need for mental health or substance use disorders?" Potential responses included:

- They are embarrassed or ashamed or worried about what people will think about them.
- They don't know that there are services that could help someone like them.
- They don't know where to get care.
- They don't have transportation to get care.
- They think it will take too long to get help.
- They don't know they can afford help.
- They don't know if their insurance will cover care, or if they can qualify for a public program.
- They can't take time off work or get child care.

The rankings were then averaged across all groups in both forums. The most common reason people cited was that people are "embarrassed or ashamed or worried about what people will think about them." The rest of the answers and averaged rankings are reported in Figure 47.

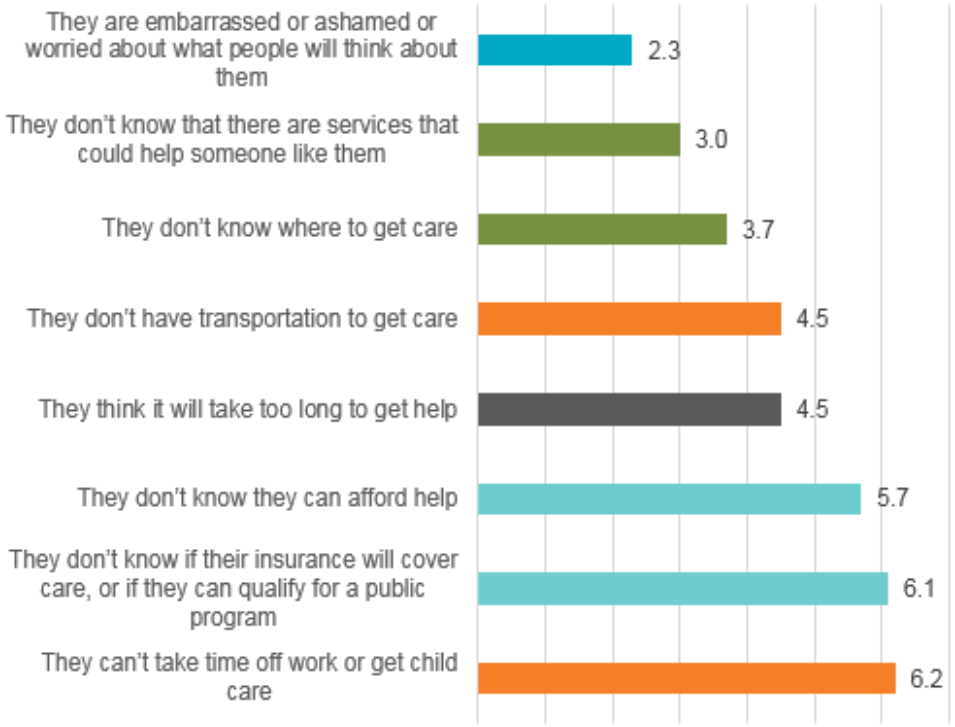
Tele-Town Hall

The tele-town hall vendor made over 6,000 outgoing calls though random dialing of a San Diego resident call list. Of those calls, 451 people answered the phone. At any one time, there were as many as 271 people participating in the call. More than 40 people stayed on the call until the very end.

The tele-town hall participants were asked the same questions as the in-person participants, however, they were asked to pick one response to each question. The tele-town hall software allowed for up to five responses, and due the limited options, responses from the in-person forum were combined into one possible response where appropriate. The responses are depicted in Figure 46.

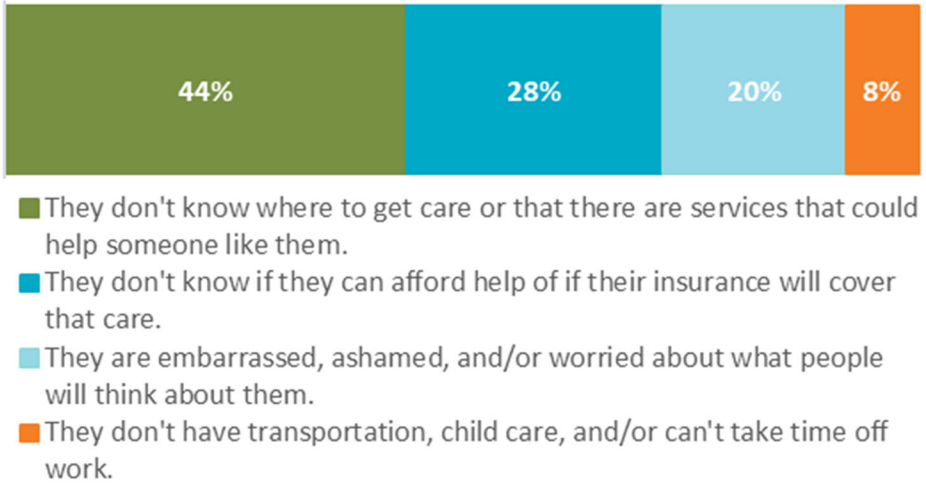
Figure 45. Community Forum Weighted Rankings: Why do you think someone might not be getting the care they need for mental health or substance use disorders?

*Note: A lower number means a higher ranking due to a lower number being assigned to the most likely.



Note: Groups were provided with responses and asked to rank them from most likely to least likely, in terms of how relevant the participants thought the response was. The score above represents the weighted rankings based on all responses across all groups. A lower rank (closer to zero) means that participants believed that the response was a more likely reason why someone would not be getting care.
Source: County of San Diego, Health and Human Services Agency, Behavioral Health Services, Community Engagement Report—2017 http://sandiego.camhsa.org/files/2017_Community_Engagement_Report.pdf Accessed July 7, 2018.

Figure 46. Community Tele-Town Hall Responses: Why do you think someone might not be getting the care they need for mental health or substance use disorders?



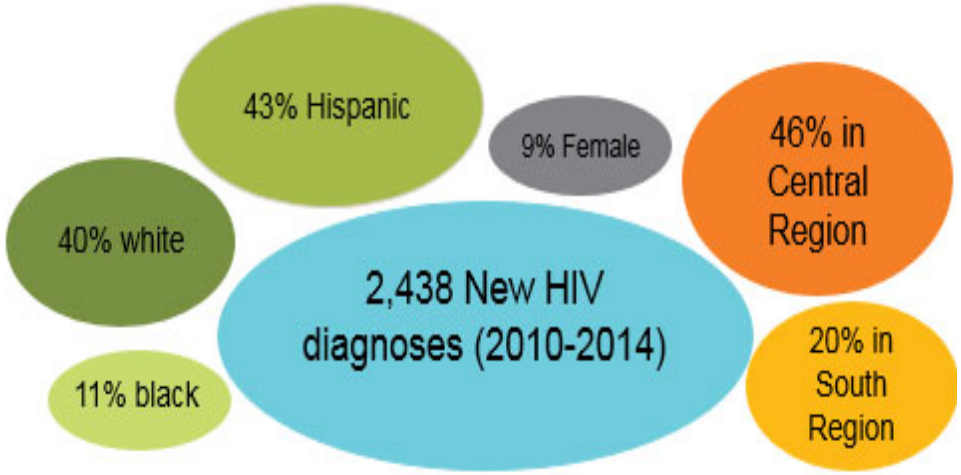
Note: Due to software limitations, participants were only given five options, and were asked to select only one response.
Source: County of San Diego, Health and Human Services Agency, Behavioral Health Services, Community Engagement Report—2017. http://sandiego.camhsa.org/files/2017_Community_Engagement_Report.pdf. Accessed July 7, 2018.

"They don't know where to get care or that there are services that could help someone like them" was the response from 44% of persons to the question "Why do you think someone might not be getting the care they need for mental health or substance use disorders?"

HIV/AIDS Assessment

Between 2010-2014, there were 2,438 new HIV diagnoses in the County, mostly men but 9% of which were women. The majority of cases (46%) resided in the Central Region of San Diego County, followed by the South Region (20%). In 2014, there were a total of 177 new HIV cases for a rate of 11.9 cases per 100,000 individuals. Of those, 40% were white, 11% were black, and 43% were Hispanic (Figure 47 below).

Figure 47. New HIV Diagnoses by Demographics, 2010-2014.

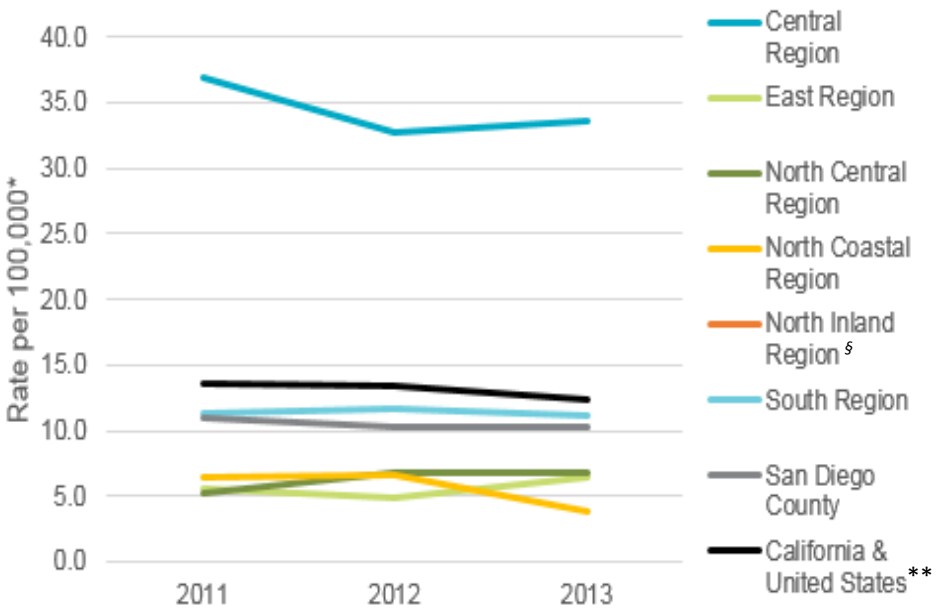


Source: County of San Diego, Health and Human Services Agency, Public Health Services, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), retrieved December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The most common mode of transmission for males was men who have sex with men (MSM) (81%), followed by intravenous drug users (5%). The most common mode of transmission for females was heterosexual intercourse (71%) followed by intravenous drug users (21%).

From 2011-2013, every Region saw a decrease in the rate of new HIV diagnoses except the Central and North Central Regions, which experienced a small increase. Central Region had the highest rate of new infections, while the North Coastal Region saw the lowest rate of new infections (Figure 48).

Figure 48. HIV Incidence* by Year, by HHSA Region, 2011-2013.



**Rate per 100,000 population.*
***California and United States rates represented as one line due to overlap of numerical rate.*
§ Rates not calculated for fewer than 20 events.
United States Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention. HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf. Accessed December 2017.
California Source: California Department of Public Health, Center for Infectious Diseases, Office of AIDS, Sacramento, California. California HIV Surveillance Report—2015. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California%20HIV%20Surveillance%20Report%20-%202015%20(Final%20Version%20Submitted%20for%20Approval).pdf. Accessed December 2017.
San Diego County Source: County of San Diego, Health and Human Services Agency, Public Health Services, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), retrieved December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In addition to its annual epidemiology reports, the HIV/STD and Hepatitis Branch of HHSA recently conducted a needs assessment with HIV-positive individuals residing in San Diego County. Approximately 7,500 paper surveys were distributed around the County. In total, there were 1,457 survey responses, including 131 surveys completed online. The majority of respondents identified as male (81%), and 3% of respondents identified as transgender. Approximately 47% had a history of chronic mental illness. Ninety survey respondents (6%) said they were not currently in HIV medical care. Survey respondents were also asked if there were services they needed but could not get. The top responses (n=1,287) were dental care (24%), permanent or ongoing help to pay rent (20%), transportation (20%), legal services (13%), emergency utility payment (12%), and a medical specialist other than HIV specialist (11%).

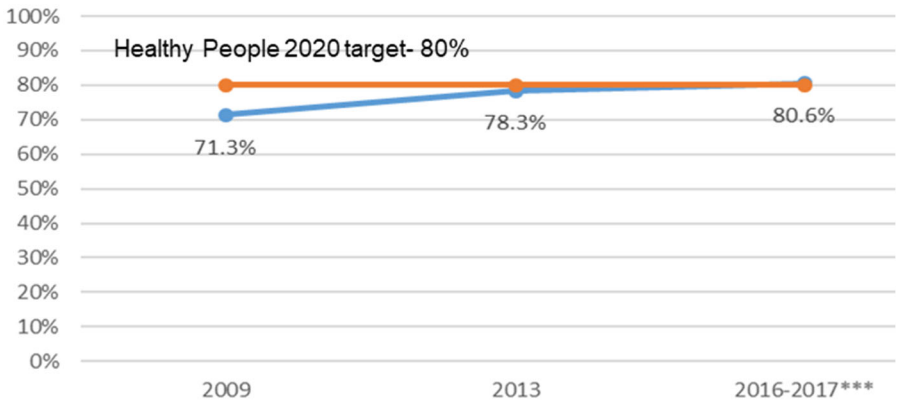
Immunization Assessment

An important aspect of disease control is ensuring that individuals are vaccinated against common diseases to prevent future illnesses. HHSA's Epidemiology and Immunization Services Branch conducts periodic Random Digit Dialing (RDD) telephone surveys. Interviewers make phone calls to randomly selected phone numbers to assess the proportion of infants, children, adults, and seniors living in San Diego County that are fully immunized.

In 2016-2017, telephone surveys found that the County met the *Healthy People 2020* goal of 80% of children receiving all of the standard vaccines. However, the vaccination rate was lower in 2008-2009 due to a Hib (Haemophilus influenza type b) vaccine shortage (Figure 49).

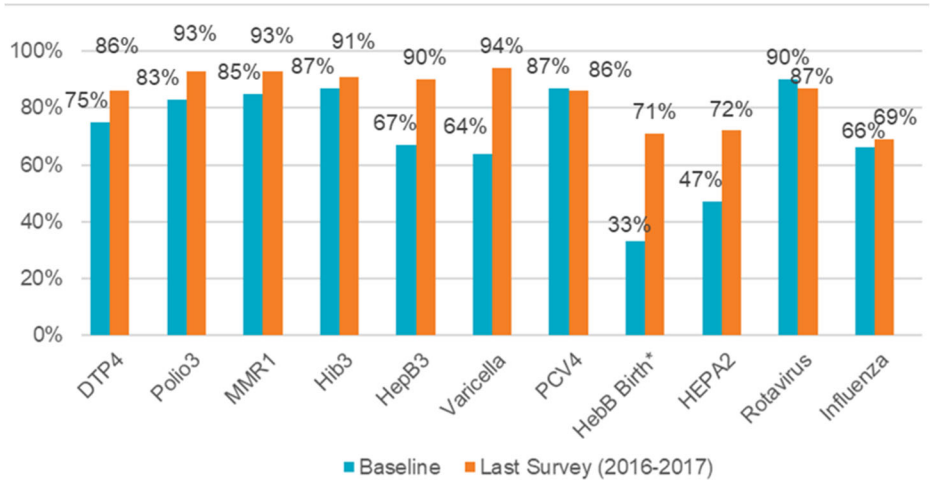
The coverage rates for each vaccine are analyzed separately; some reached the *Healthy People 2020* goal of 80% years ago and have increased slightly since then, such as DTP (Diptheria and tetanus toxoids and whole-cell pertussis) vaccine. The vaccines protecting against hepatitis B (HepB3) and chickenpox (Varicella), started with low coverage, but have since reached the 2020 goal (Figure 50).

Figure 49. San Diego County, Proportion of Children fully immunized with: 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, & 4 PCV (2009-2017).



Source: County of San Diego, Health and Human Services Agency, Public Health Services, San Diego Immunization Program. Retrieved January, 2019. http://www.sdiz.org/data-Stats?RDD-data.html. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.
****SD RDD 2016-2017 sampled children 17-40 months, coverage rate assessed 17-35 months.*

Figure 50. Coverage Levels for Single Antigens, San Diego County Children (19-35 Months), RDD Surveys, 2017.



**Vaccine received < 3 days after birth.*
Source: County of San Diego, Health and Human Services Agency, Public Health Services, San Diego Immunization Program. Retrieved January, 2019. http://www.sdiz.org/data-Stats?RDD-data.html. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

External Health Assessments

County Health Rankings

County Health Rankings looks at health factors and health outcomes by County across the United States. Counties within each individual State are ranked against one another. The comparison among counties provide context, and show that where an individual lives can have a significant impact on their health. The rankings are structured in such a way that a lower numerical rank (i.e. closer to one) means the indicator measured is "better" compared to the other counties within the State of California.

From 2011-2018, Health Outcomes Overall, Length of Life, and Quality of Life rankings improved (Table 15). There was very little or no change in Health Factors Overall, Health Behaviors, and Social and Economic Factors rankings. Clinical Care and Physical Environment rankings worsened between 2011-2018.

The ranking for Physical Environment (measures include air pollution, drinking water violations, severe housing problems, driving alone to work, and long commute-driving alone) has dropped from 27 in 2011 to 49 in 2018. For more information on how rankings are calculated, please visit http://www.countyhealthrankings.org/explore-health-rankings/our-methods.

According to the 2018 County Health Rankings report, the County that is ranked 1st is considered the healthiest County. San Diego County is 10th out of 57 ranked California counties on overall health outcomes (combined morbidity and mortality, measured by length and quality of life).

San Diego County is ranked 20th out of 57 ranked California counties on overall health factors (combined health behaviors, clinical care, social and economic factors, and physical environment, measured by a number of different indicators, which are described in more detail on the following pages).

Table 15. Health Rankings by Category Over Time, San Diego County, 2011-2018.

Year	Health Outcomes Overall Rank	Length of Life	Quality of Life	Health Factors Overall Rank	Health Behaviors	Clinical Care	Social and Economic Factors	Physical Environment
2011	16	14	24	21	19	28	14	27
2012	18	17	24	22	22	28	17	32
2013	17	12	28	19	22	29	14	28
2014	18	12	26	18	20	27	15	25
2015	19	8	29	19	20	25	16	24
2016	14	10	20	18	16	26	16	34
2017	12	12	19	18	10	24	14	49
2018	10	8	14	20	18	26	14	49

From 2011-2018, the Health Outcomes Overall Rank improved, moving from 16th to 10th.

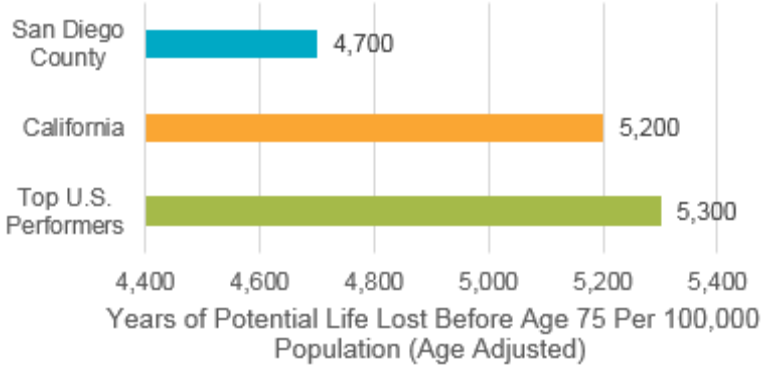
Source: County Health Rankings & Roadmaps. http://www.countyhealthrankings.org/app/california/2018/rankings/san-diego/county/outcomes/overall/snapshot. Accessed May 20, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

HEALTH

County Health Rankings are based on a number of measures that, when taken together, represent an overall category, such as health outcomes. County Health Rankings report the County value, the State value, and a value for which 10% of evaluated counties fall above (Top U.S. Performers).

One of the measures used to determine Health Outcomes ranking is Length of Life. If someone lives fewer years than expected this is premature death. This measure is the years of potential life lost before age 75 for every 100,000 people. Measuring premature mortality, as opposed to overall mortality, focuses on deaths that could have been prevented. In 2014-2016, there were 4,700 years of potential life lost to premature death in San Diego County per 100,000 population (Figure 51). This was lower than the State of California, and better than the Top U.S. performers, meaning San Diego County was within the top 10% of evaluated U.S. counties.

Figure 51. Length of Life: Premature Mortality, San Diego County, 2014-2016.

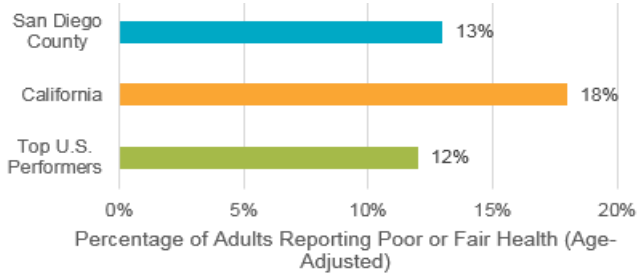


Source: County Health Rankings & Roadmaps; National Center for Health Statistics - Mortality Files, 2014-2016. http://www.countyhealthrankings.org/app/california/2018/measure/outcomes/1/datasource. Accessed May 20, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The other measure to determine the Health Outcomes ranking is Quality of Life. Quality of Life incorporates the percentage of adults reporting fair or poor health, and the average number of mentally unhealthy days reported by adult residents into its ranking.

In San Diego County in 2016, 13% of adults reported fair or poor health. This was lower than the State of California overall (18%), and about equal to the Top U.S. Performers (12%; Figure 52).

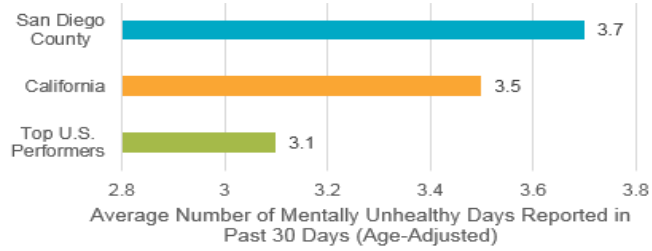
Figure 52. Quality of Life: Poor or Fair Health, San Diego County, 2016.



Source: County Health Rankings & Roadmaps; National Center for Health Statistics - Behavioral Risk Factor Surveillance System, 2016. http://www.countyhealthrankings.org/app/california/2018/measure/outcomes/2/datasource. Accessed May 20, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In San Diego County in 2016, the average number of mentally unhealthy days in the past 30 days reported was 3.7. This was higher than the State of California overall (3.5 days) and the Top U.S. Performers (3.1 days; Figure 53).

Figure 53. Quality of Life: Poor Mental Health Days, San Diego County, 2016.



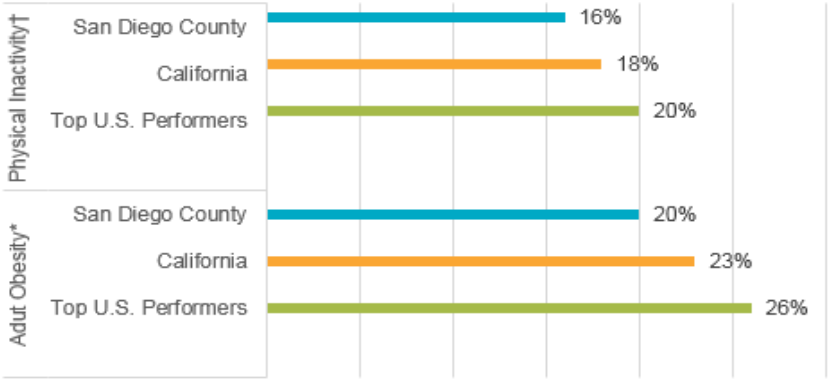
Source: County Health Rankings & Roadmaps; National Center for Health Statistics - Behavioral Risk Factor Surveillance System, 2016. http://www.countyhealthrankings.org/app/california/2018/measure/outcomes/42/datasource. Accessed May 20, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The Health Factors ranking is determined by measures grouped into four categories: Health Behaviors, Clinical Care, Social and Economic Factors, and Physical Environment. The Health Behaviors categories includes measures of those who are obese, physically inactive, and engage in substance use-related behavior. Poor diet and physical inactivity contribute to obesity, and measures of these behaviors helps to evaluate the overall health of the population.

In San Diego County in 2014, 20% of adults reported a Body Mass Index of 30 or more, indicating obesity. This was lower than the State of California overall (23%), and lower than the Top U.S. Performers, indicating that San Diego County was among the top 10% of U.S. counties when it came to reducing obesity (26%; Figure 56).

In San Diego County in 2014, 16% of adults aged 20 and over reported no leisure time activity. This was lower than the State of California overall (18%), and also lower than the Top U.S. Performers, indicating that San Diego County was among the top 10% of U.S. counties (20%; Figure 54).

Figure 54. Health Behaviors: Obesity and Inactivity, 2014.



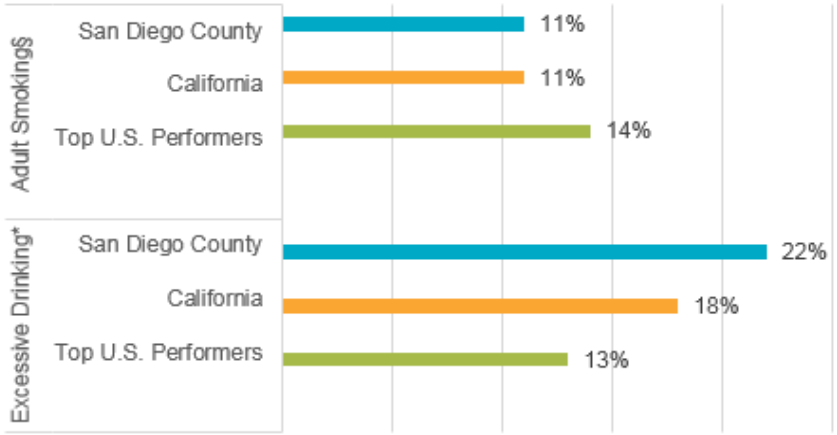
†Percentage of adults age 20 and over reporting no leisure-time physical activity.
Source: County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, 2014. http://www.countyhealthrankings.org/app/california/2018/measure/factors/70/datasource. Accessed May 20, 2018.
**Percentage of adults who report a BMI of 30 or more.*
Source: County Health Rankings & Roadmaps; CDC Diabetes Interactive Atlas, 2014. http://www.countyhealthrankings.org/app/california/2018/measure/factors/11/datasource. Accessed May 20, 2018. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Substance Use incorporates the use of tobacco, alcohol, and other drugs. Tobacco use is the leading cause of preventable death in the United States, and those who use it are not only harming themselves, but also those around them through exposure to secondhand smoke. The same is true when people drink to excess.

In San Diego County in 2016, 11% of adults reported being current smokers. This was about equal to the State of California overall (11%), and also lower than the Top U.S. Performers, indicating that San Diego County is among the top 10% of U.S. counties (14%; Figure 55).

In San Diego County in 2016, 22% of adults reported binge or heavy drinking on a single occasion in the past 30 days. This was higher than the State of California overall (18%) and the Top U.S. Performers (13%; Figure 55).

Figure 55. Health Behaviors: Substance Use, 2016.

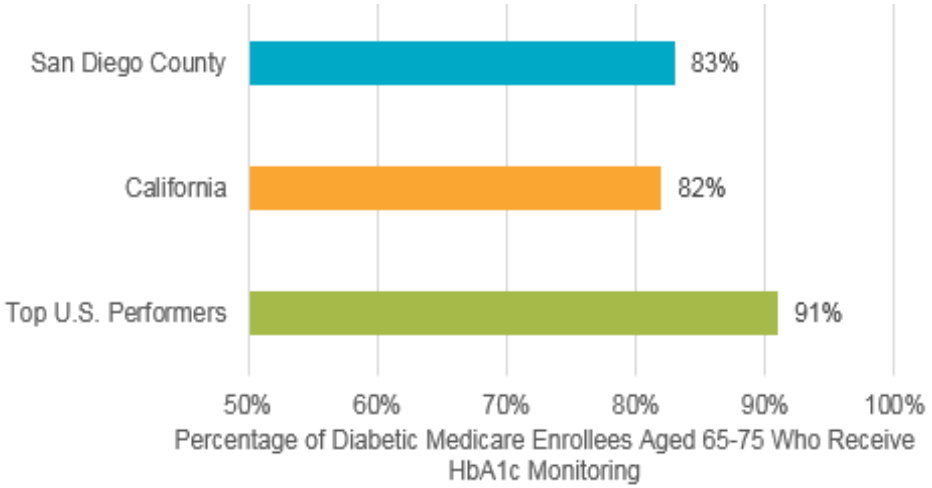


§Percentage of adults who are current smokers.
Source: County Health Rankings & Roadmaps; Behavioral Risk Factor Surveillance System, 2016. http://www.countyhealthrankings.org/app/california/2018/measure/factors/9/datasource. Accessed May 20, 2018.
**Percentage of adults reporting binge or heavy drinking.*
Source: County Health Rankings & Roadmaps; Behavioral Risk Factor Surveillance System, 2016. http://www.countyhealthrankings.org/app/california/2018/measure/factors/49/datasource. Accessed May 20, 2018. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The Clinical Care category, as part of the Health Factors ranking, includes indicators related to access to care, and quality of care. Quality of care includes diabetes monitoring. The monitoring of diabetes is important because it helps to assess the management of diabetes long-term for those who have already developed the condition. When the condition is managed properly, complications relating to diabetes can be delayed or prevented altogether.

In San Diego County in 2014, 83% of diabetic Medicare enrollees received Hemoglobin A1c (HbA1c) monitoring. This is about equal to the State of California overall (82%), but lower than the Top U.S. performers (91%; Figure 56).

Figure 56. Clinical Care: Diabetes Monitoring, 2014.



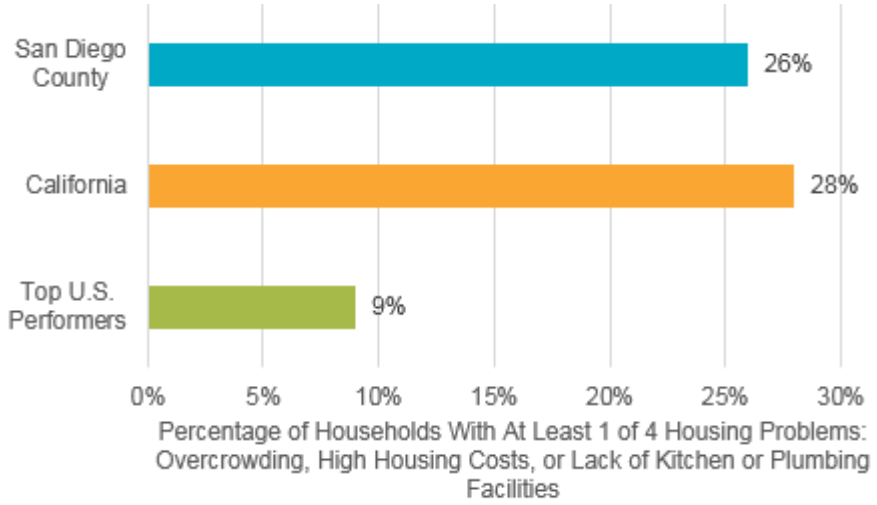
Source: County Health Rankings & Roadmaps; Dartmouth Atlas of Health Care, 2014. http://www.countyhealthrankings.org/app/california/2018/measure/factors/7/datasource. Accessed May 20, 2018. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Social and economic factors also fall under Health Factors for the purpose of this ranking. Many of the social and economic factors measured in this inventory are measured elsewhere in the overall community health assessment; indicators evaluated for and contributing to the Health Factors ranking include high school diploma and college attendance (Knowledge Area of Influence), poverty (Standard of Living Area of Influence), and crime (Community Area of Influence).

The last category within Health Factors is Physical Environment. Many of the factors contributing to the poor ranking for physical environment are presented elsewhere in this assessment.

San Diego County has many housing challenges. The percentage of units with at least one of four housing problems: overcrowding, high cost, or lack of kitchen or plumbing facilities, constitutes the Severe Housing Problems measure. In San Diego County in 2010-2014, 26% of households suffered from one of the four issues mentioned above. This was lower than the State of California overall (28%), but higher than the Top U.S. Performers (9%; Figure 57).

Figure 57. Physical Environment: Severe Housing Problems, 2010-2014.



Note: Overcrowding is defined as more than 1.5 person per room, and High Housing Costs as monthly housing costs (including utilities) that exceed 50% of household income.
Source: County Health Rankings & Roadmaps; Comprehensive Housing Affordability Strategy (CHAS) data, 2010-2014. http://www.countyhealthrankings.org/app/california/2018/measure/factors/136/datasource. Accessed May 20, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018 .

Hospital Association of San Diego and Imperial Counties (HASDIC) Community Health Needs Assessment (CHNA), 2016.

The County of San Diego Public Health Services worked closely with the Hospital Association of San Diego and Imperial Counties (HASDIC) to align complementary health assessment efforts.

HASDIC is a non-profit organization providing leadership, representation, and advocacy. In 2012, not-for-profit and district hospitals along with HASDIC, established a hospital-focused Community Health Needs Assessment (CHNA). This was in response to the Affordable Care Act which added new requirements for tax-exempt hospitals in 2010, requiring hospitals to perform a CHNA and develop implementation strategies based on the findings. The CHNA was initially performed in 2013, then again in 2016, and another is forthcoming as part of an ongoing collaboration with HASDIC. HASDIC worked with the County to survey the public health workforce to inform its latest CHNA. The new CHNA was designed to provide insight into the barriers to health improvement within the County. The CHNA highlights three main components:

1. Availability of County-wide data;
2. In-depth community and health expert feedback gathered through research; and
3. County and Regional targeted guidance for hospital program development that focused on the needs of patients.

The findings from this process in 2016 are designed for hospitals and health care systems to plan community health programs internally, as well as together with other health providers, community-based organizations, and consumer groups. Four main health issues arose as the top community health needs in the County including:

- Cardiovascular Disease,
- Diabetes (type 2),
- Mental/Behavioral Health, and
- Obesity.

Five barriers to accessing health care were identified, and are as follows:

- Understanding health insurance,
- Getting health insurance,
- Using health insurance,
- Knowing where to go for care, and
- Follow-up care and/or appointments.

When looking at the needs for improving community health and hospital programs, the five recommendations made based on the needs of patients and the community are:

- Access to care or insurance,
- Care management,
- Education,
- Screening services, and
- Collaboration.

As part of the CHNA, the Dignity Health/Truven Health Community Need Index (CNI) was also used to identify communities with the highest level of community needs, by zip code, using a scale of 1 to 5. This information was aggregated by HHSA service delivery Region (see Table 16 below). A low CNI indicates communities with lesser need; a higher CNI indicates a community with a greater need.

Overall, on a scale of 1 to 5, San Diego County had an average CNI of 3.6 (low: 1.8; high: 5.0). The Region with the highest CNI (and the greatest need) was the Central Region (Mean CNI = 4.2; low = 3.0; high=5.0).

Table 16. Community Need Index (CNI) Scores by HHSA Region, 2016.

HHSA Region	Minimum CNI	Maximum CNI	Mean CNI
Central	3.0	5.0	4.2
East	2.6	4.8	3.8
North Central	2.0	4.4	3.1
North Coastal	1.8	4.6	3.3
North Inland	2.4	4.4	3.5
South	2.2	5.0	3.7
San Diego County	1.8	5.0	3.6

Source: HASDIC San Diego 2016 Community Health Needs Assessment, Executive Summary. http://hasdic.org/2016-chna/.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

KNOWLEDGE

KNOWLEDGE

Knowledge and access to education play an important part in the ability of an individual to Live Well. Learning throughout the lifetime, for all individuals, impacts their health status. Education is measured by looking at the percentage of the population aged 18 and over that currently has a high school diploma or GED. Graduation from high school is required for individuals to either further their education by going on to college, or in most cases, to get a job. Both of these factors influence the health of an individual. Traditional K-12 education influences a person's ability to interact with others, which may also impact their physical and mental health and well-being.

Live Well San Diego Indicator 3: Education

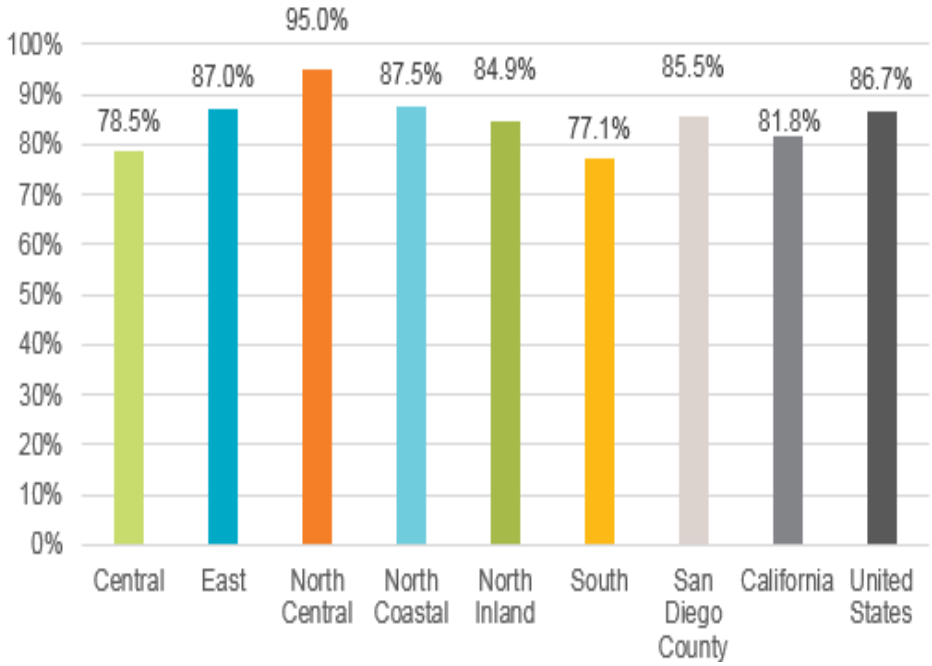
Education is measured as the percentage of the population with a high school diploma or equivalent. Education has a beneficial influence on a variety of economic, social and psychological factors which impact the health and well-being of a population.

California: 81.8%

United States: 86.7%

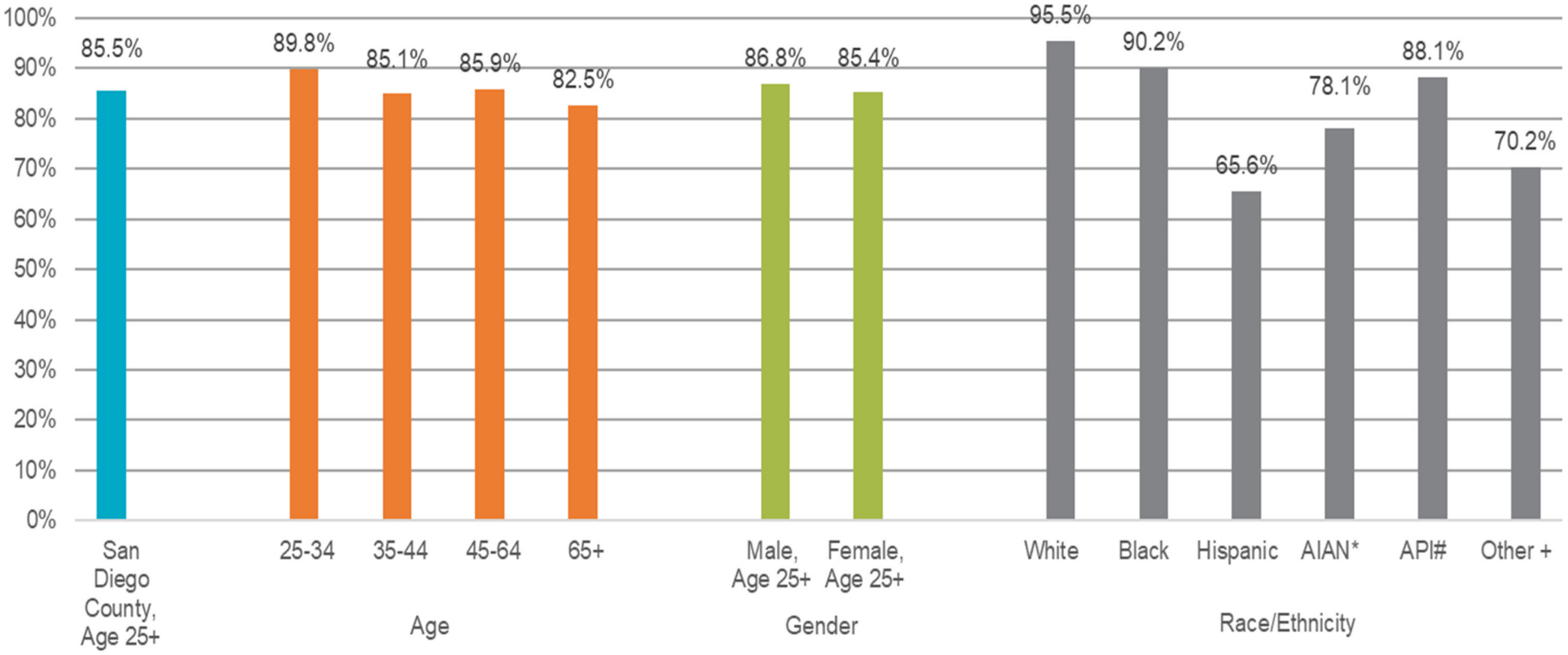
Three out of six Regions had higher percentages of residents 25 and over with a high school diploma or equivalent compared to the County overall (Figure 58). The Region with the highest percentage of those who had completed high school was North Central Region, with 95% of residents having a high school diploma or equivalent. The Regions with the lowest percentages of residents who had completed high school were the South and Central Regions, at 77.1% and 78.5%, respectively.

Figure 58. Education, San Diego County by HHSA Region, 2015.



Note: "Education" refers to the percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1501; High School Diploma, Bachelor's Degree, Graduate or Professional Degree.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

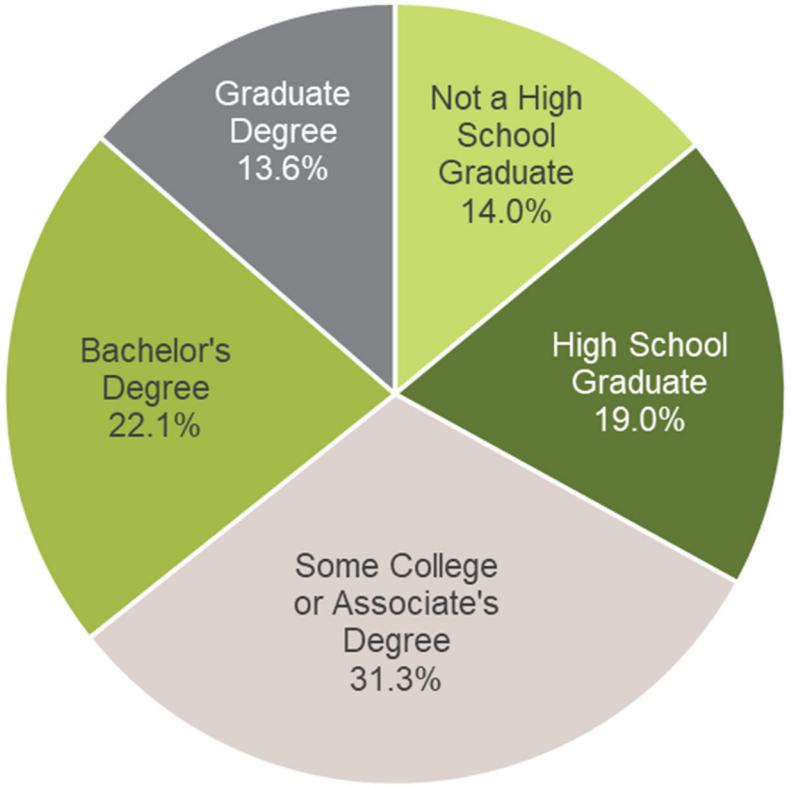
Figure 59. Education by Lenses, San Diego County, 2015.



Note: "Education" refers to the percent of population 25 years and older with at least a high school diploma or equivalent.
**AIAN = American Indian/Alaska Native*
#API = Asian/Pacific Islander
+Other refers to "some other race" and "two or more races."
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1501.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

When compared to males, females had a slightly smaller percent of the population with a high school diploma or equivalent. Those aged 65 and over were the least likely to have a high school diploma or equivalent (82.5%). Those adults aged 35-44 were also less likely to have a high school diploma (85.1%). Hispanics/Latinos had a lower percentage (65.6%) of the population with a high school diploma or equivalent than the County overall (85.5%), as did the Other Race/Ethnicity groups (70.2%), and American Indian/Alaska Natives (78.1%) (Figure 59).

Figure 60. Overall Educational Attainment, San Diego County, 2015.



Note: "Educational Attainment" refers to the percent of population 25 years and older at the listed education level.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP02. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In San Diego County, nearly one-third of residents over the age of 25 have some college or an associates degree. Almost one-quarter of residents have a bachelor's degree or higher. More than one-eighth go on to obtain a graduate or professional degree (Figure 60).

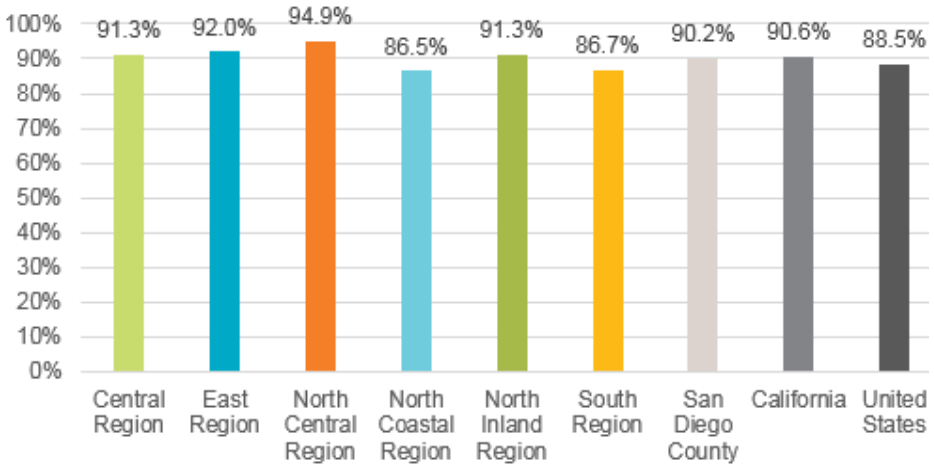
Supporting Indicators

School Enrollment

School enrollment refers to those aged 4-24 enrolled in school. The population aged 4 up to 24 refers to those who would be eligible for kindergarten to 12th grade and college. School enrollment describes the percent of combined gross enrollment of school-aged children in school, whether it be a public or private institution. Those who are homeschooled are not included in this figure. This estimate is based on the assumption that there is an equal distribution among specific age groups.

North Central (94.9%), East (92.0%), Central (91.3%) and North Inland (91.3%) had a higher percentage of school-aged children enrolled in school compared to the County overall (90.2%). North Coastal Region (86.5%) and South Region (86.7%) had a lower percentage of children enrolled in school (Figure 61).

Figure 61. School Enrollment, San Diego County by HHSA Region, 2015.



Note: Combined gross enrollment (enrollment in primary, secondary, and tertiary school regardless of age) out of all who are school age (age 4 through 24 years).
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S14001, B09001, S0101.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Knowledge Assessment

In this section, the results of an additional knowledge assessment is described. This knowledge assessment was undertaken for the Vista Unified School District only.

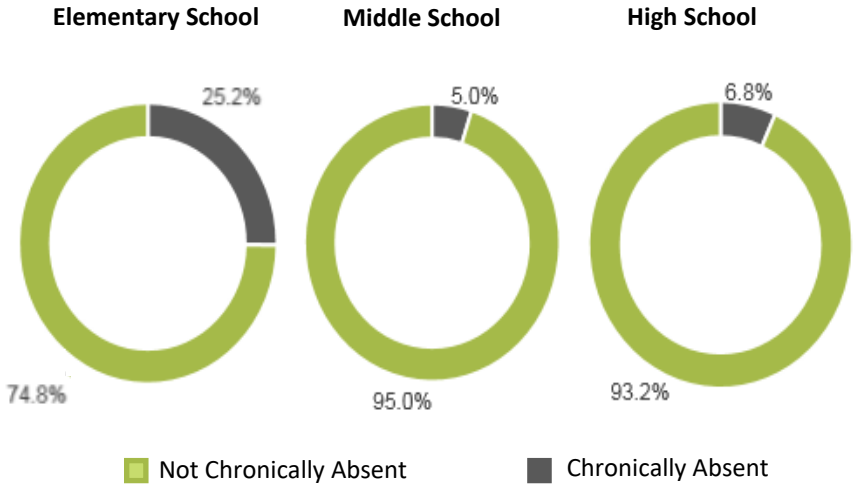
United Way Vista Baseline Report: A Starting Point

The Vista Partnership for Children, anchored by the United Way, is focusing on three areas along the roadmap continuum to prepare children for school and learning, and ultimately helping children to graduate from high school with skills and courses necessary for college admission within the University of California and California State University systems.

The purpose of the baseline report is to document the starting point in the Vista community's journey towards the goals stated above. All relevant data to documenting whether or not goals were met are contained within this report.

For the purposes of this assessment, two relevant indicators are discussed.

Figure 62. School Attendance, Vista Unified School District, School Year 2013-2014.



Source: Vista Unified School District; Vista Partnership for Children; The Children's Initiative.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

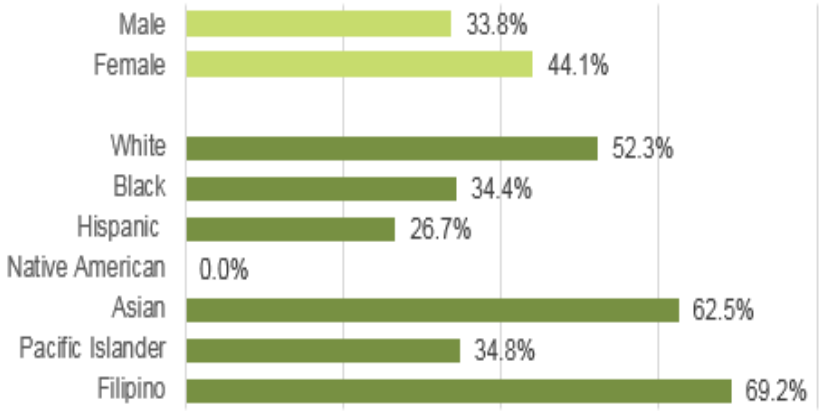
School Attendance

Attendance is a strong predictor of whether a child will succeed in school or not. Poor attendance in Kindergarten puts students at risk for not graduating from high school later on. Chronic absenteeism is defined as missing more than nine days of school for elementary school students, and more than 17 days for middle and high school students. During the 2013-2014 school year, more than 25% of elementary school students were chronically absent (Figure 62).

A-G Course Requirements

A-G course requirements refer to high school courses that are required for admission to either the University of California or California State University systems. At the end of the 2012-2013 school year, less than half of female Vista Unified 12th grade graduates had completed these courses and about one-third of male 12th grade graduates had completed these courses. When separated out by Race/Ethnicity, a higher proportion of Filipino students completed A-G course requirements (Figure 63).

Figure 63. A-G Course Requirement Completion Among 12th Grade Graduates, Vista Unified School District, 2012-2013.



Source: California Department of Education (CDE), Educational Demographic Unit. DataQuest [Data files]. Retrieved from http://data1.cde.ca.gov/dataquest; Vista Partnership for Children; The Children's Initiative.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

STANDARD OF LIVING

The Standard of Living Area of Influence concerns residents having enough resources to live a quality life. Important indicators include unemployment rate, as both having a steady job and making enough money to live a quality life are crucial to an individual's standard of living. San Diego County is an expensive place to live, and the cost of housing is higher than it is in most other urban areas across the United States. Income is measured by the percentage of individuals who spend less than 30% of their income on housing. Being able to afford adequate housing and still being able to afford other necessities (health care, food, transportation, etc.) measures an individual's ability to live well.

Live Well San Diego Indicator 4: Unemployment Rate

Unemployment rate is measured as the percentage of the total labor force that is unemployed. The rate of unemployment has a strong negative influence on the financial health and overall well-being of a population.

Compared to the County overall, the South, East, and Central Regions had the highest percentages of unemployed adults (of those eligible and looking for work). The Region with the lowest unemployment percentage was the North Central Region, at 5.1% (Figure 64).

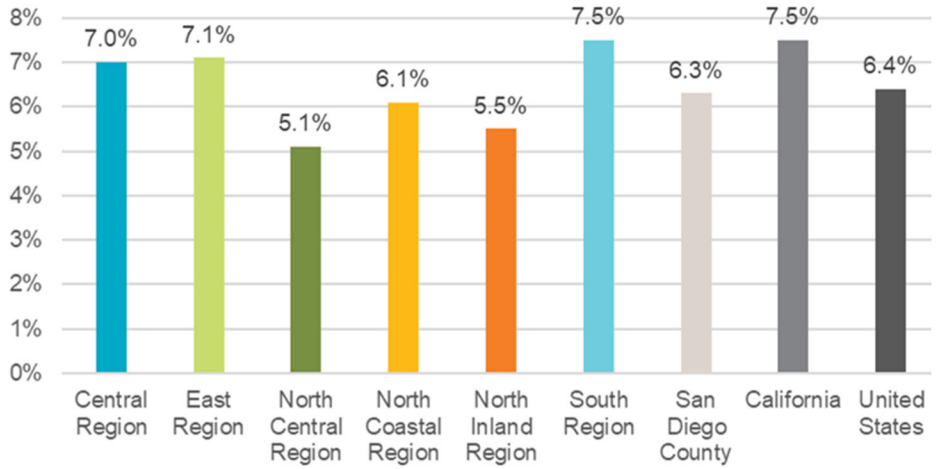
IN 2015, **6.3%** OF PEOPLE IN ELIGIBLE LABOR FORCE WERE UNEMPLOYED

SAN DIEGO COUNTY

California: **7.5%**

United States: **6.4%**

Figure 64. Unemployment Rate, San Diego County, 2015.

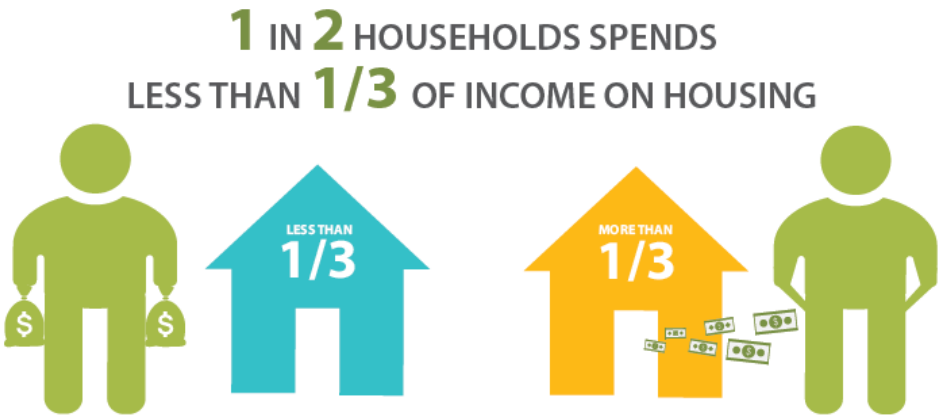


"Unemployment" refers to the population unemployed, of those eligible and seeking work.
Source: 2015-2018 Unemployment Rate. ESRI Community Analyst.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

STANDARD OF LIVING

Live Well San Diego Indicator 5. Income

Income is measured as the percentage of the population spending less than one-third of income on housing. Households who spend more than one-third of household income for housing may have difficulty paying for necessities such as food, transportation, or medical care.

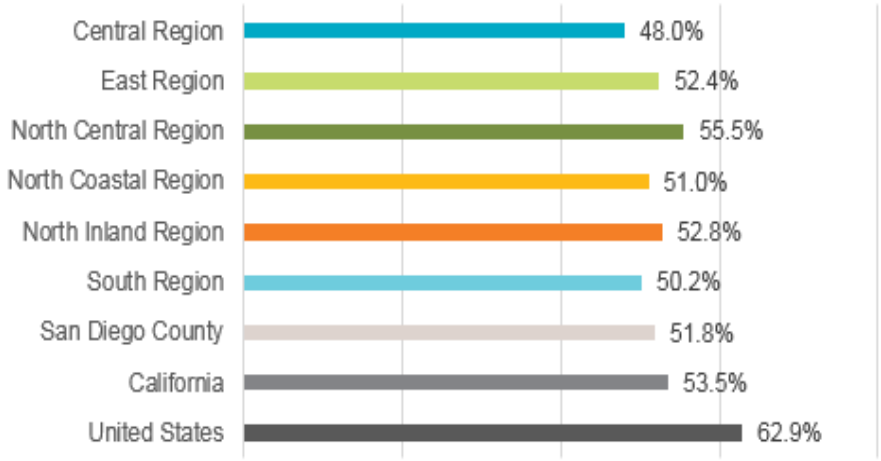


California: 53.5%

United States: 62.9%

About half of households countywide spent less than one-third of their income on housing, a pattern that held true across all HHSA Regions. The Region with the highest percentage of households spending less than one-third of their income on housing was North Central Region, at almost three-fifths of households (Figure 65).

Figure 65. Income (Population Spending Less Than One-Third of Income on Housing), San Diego County by HHSA Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2503.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

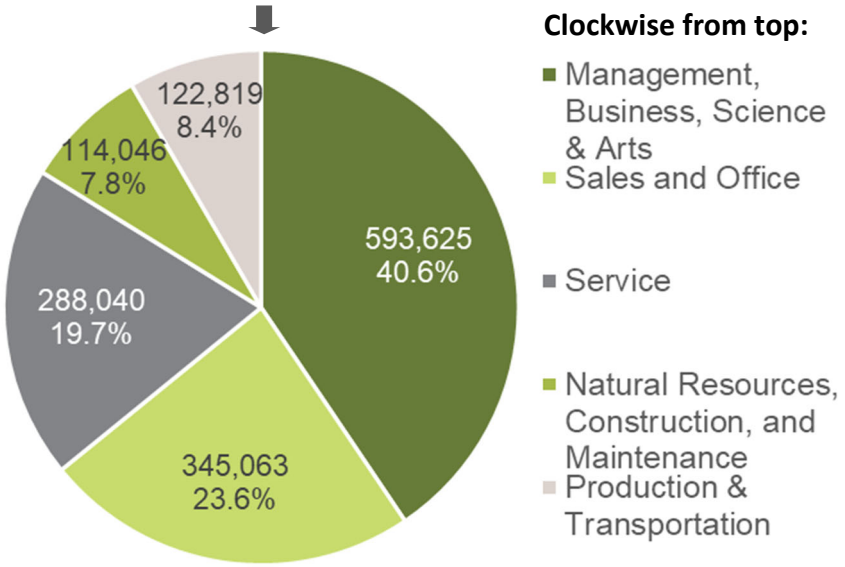
Supporting Indicators

Occupation

An individual's educational attainment likely influences their career. Occupation helps determine level of income, which in turn reflects an individual's or family's spending power when it comes to housing, food, and medical care. Certain occupations come with inherent environmental or occupational risks, which also may influence an individual's health.

Management, business, science & arts includes any occupation in business, finance, computer engineering, architecture, life science-related fields, community and social services, legal services, education, arts, and healthcare. *Service* refers to healthcare support, protective services such as firefighting and law enforcement, food preparation and service, custodial and maintenance, and personal care. *Sales and office* refers to anything related to sales or office and administrative support. *Natural resources, construction, and maintenance* refers to farming, fishing, forestry, construction, extraction, installation, maintenance and repair. *Production and transportation* includes anything related to production, transportation or material moving. In San Diego County, two-fifths of people who were over the age of 16 and employed in a civilian capacity are involved in the *management, business, sciences and arts* sectors. The sector with the least involvement was the *natural resources, construction, and maintenance* sector (Figure 66).

Figure 66. Labor Force by Occupation, San Diego County, 2015.

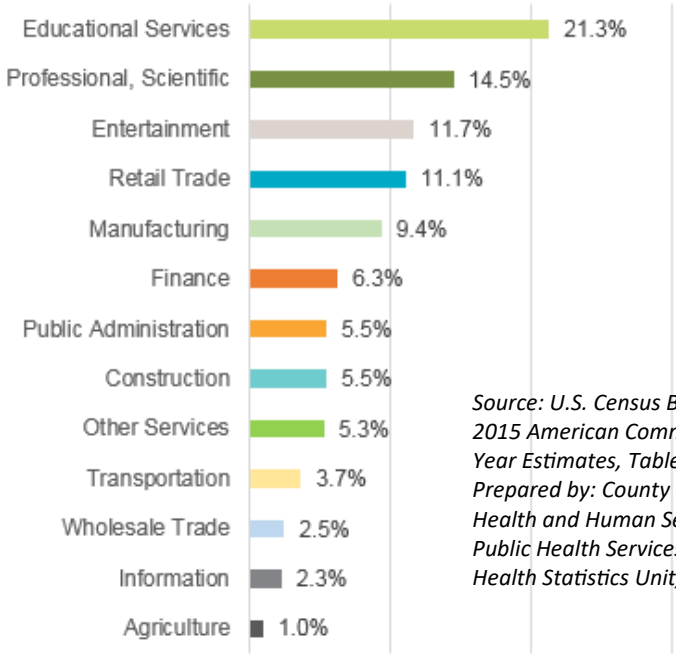


Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Industry

When broken down further by industry, a more detailed picture of the sectors employing the most San Diegans emerges (Figure 67). The industry employing the highest percentage of San Diegans was educational services, which includes the health care and social assistance industries, at just over one-fifth of the employed civilian population. The next largest industry was the professional and scientific

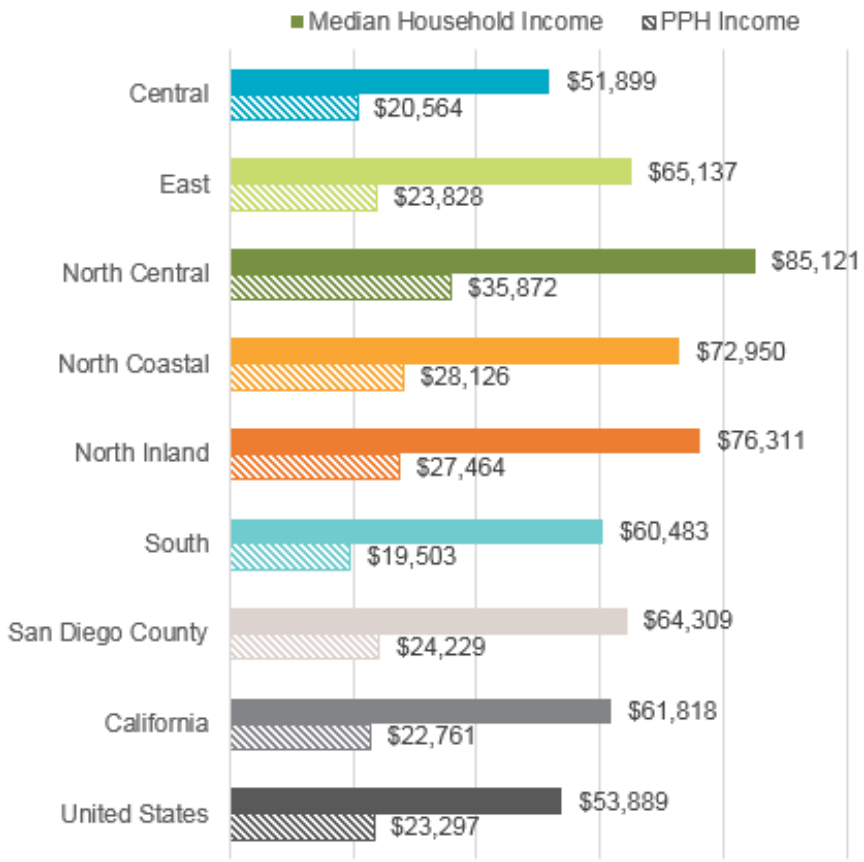
Figure 67. Occupation by Industry, San Diego County, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

industry, which includes the management, administrative, and waste management services industries, at about one-seventh of the population. The industry with the lowest employment was agriculture.

Figure 68. Median and Persons Per Household (PPH) Income by HHSA Region, San Diego County, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Tables DP03, DP04.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Median Household Income and Persons Per Household Income

Income reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to Live Well. Household income includes income earned by the householder and all other people 15 years and older in the household, whether or not they are related to the householder. Median household income is measured by looking at the distribution of income across all households, including those with no income, and picking the point at which half the distribution falls below it, and half the distribution falls above it.

In 2015, the median household income in San Diego County was just over $64,000 per year. The Region with the highest median household income was the North Central Region, with a median household income of over $85,000 per year. The Region with the lowest median household income was Central Region, at just under $52,000 per year (Figure 68).

Persons per household (PPH) income was attained by taking the median income and dividing it by the average number of people per household, which was 2.65 people in San Diego County. The average PPH varies by Region. The PPH Income in San Diego County was just over $24,000 per year. The Region with the highest PPH income was North Central Region at almost $36,000 per person per year. The Region with the lowest PPH income was South Region, at almost $20,000 per person per year (Figure 68).

Cost of Living

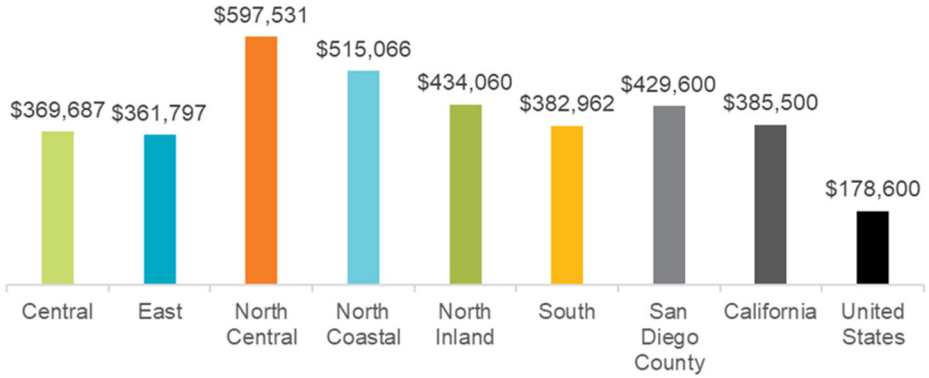
According to the Consumer Price Index compiled by the U.S. Bureau of Labor Statistics, prices for goods, services and shelter rose 1.7% within the first six months of 2017. It was noted that the increase was primarily influenced by rising costs of shelter.[†] According to a study by Cushman and Wakefield, only 26% of households in San Diego can afford median-priced homes.[§]

[†] *United States Department of Labor, Bureau of Labor Statistics. Consumer Price Index, San Diego—First Half 2017. https://www.bls.gov/regions/west/news-release/2017/consumerpriceindex_sandiego_20170714.htm#tableA. Accessed July 23, 2018.*
[§] *Cushman & Wakefield. San Diego MARKETBEAT Multi-Family Spring 2018. http://www.cushmanwakefield.com/en/research-and-insight/unitedstates/san-diego-multifamily-snapshot. Accessed June 25, 2018.*

STANDARD OF LIVING

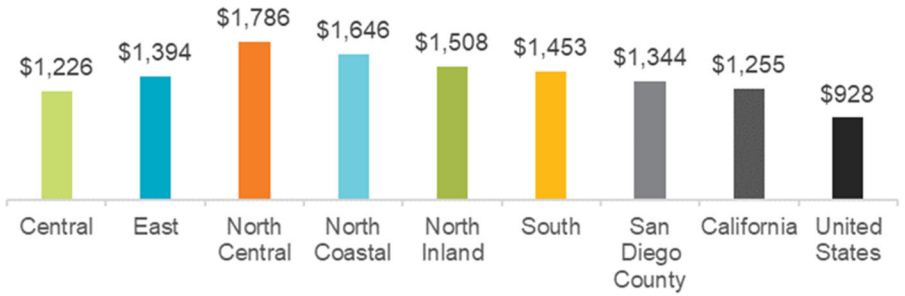
In the United States, the median house value was just under $200,000. In San Diego County, the median was over $400,000. Houses were most expensive in the North Central Region (nearly $600,000), and least expensive in East and Central Regions ($362,000 and $370,000, respectively; Figure 69).

Figure 69. Median House Value by HHSA Region, San Diego County, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

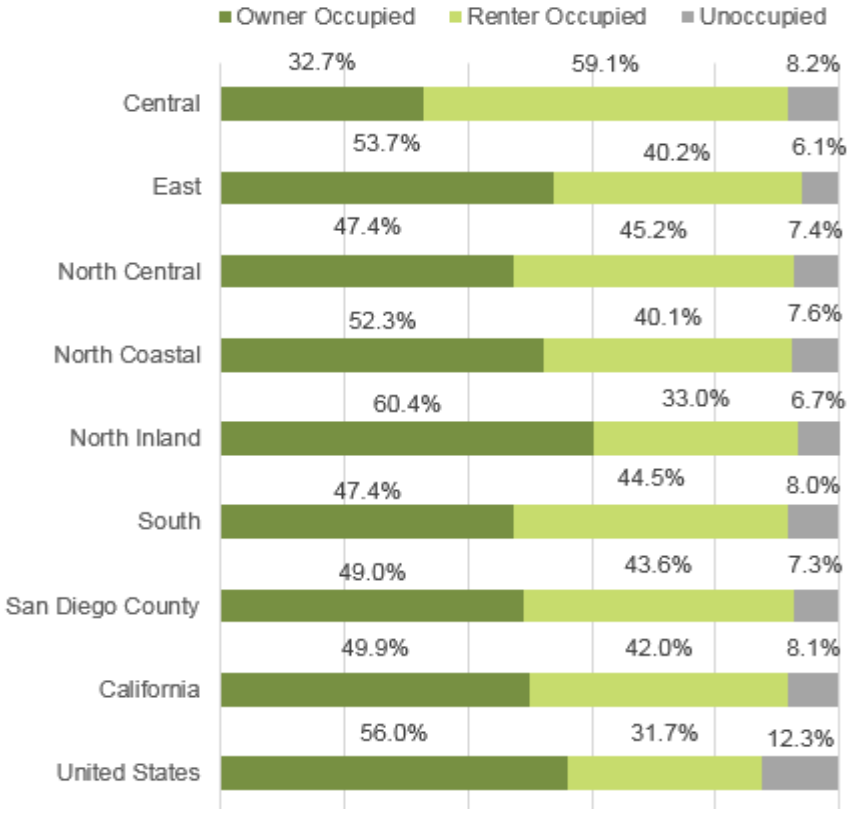
Figure 70: Median Gross Rent by HHSA Region, San Diego County, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Tables B25064. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The median rent in San Diego County was $1,344 per month. The most expensive Region to rent in was North Central Region; the least expensive was Central Region. Compared to the United States overall, it cost nearly $400 more per month to rent in San Diego County. It cost $100 more to rent in San Diego County, on average per month, than to rent in California overall (Figure 70).

Figure 71. Housing Type (Renter or Owner) by HHSA Region, San Diego County, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2503, DP04. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

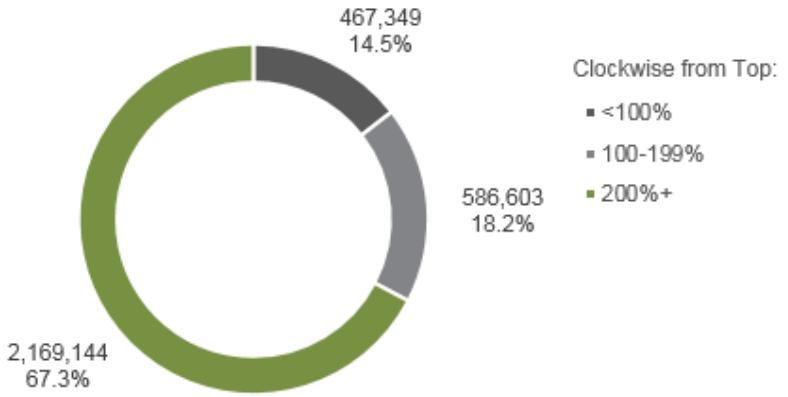
STANDARD OF LIVING

In San Diego County, almost half of householders lived in the home they own. Three out of seven housing units were rented. One in thirteen were unoccupied—meaning they are currently for sale or rent, are vacation rentals, or are unfit for habitation. The Region with the highest percentage of renters was Central Region, with almost three-fifths of housing units occupied as rentals. The Region with the highest percentage of owner-occupied units was the North Inland Region, with three-fifths of units owner-occupied (Figure 71).

Poverty is determined to be when a person or group of people lack human needs because they cannot afford them – including basic necessities such as clean water, adequate nutrition, health care, education, clothing, and shelter. Families or people with income below a certain limit are considered to be below the poverty level. Poverty level for a household is determined, in part, by the number of people in the household who must be supported by the combined household income.

In San Diego County, 1 in 7 people lived below the poverty line (Figure 72). It is generally accepted that in order to be able to afford basic necessities, an individual or household must be at or above 200% of the poverty level. With that standard, nearly 1 in 3 people was living without adequate financial resources.

Figure 72. Population Below Poverty Level, San Diego County, 2015.



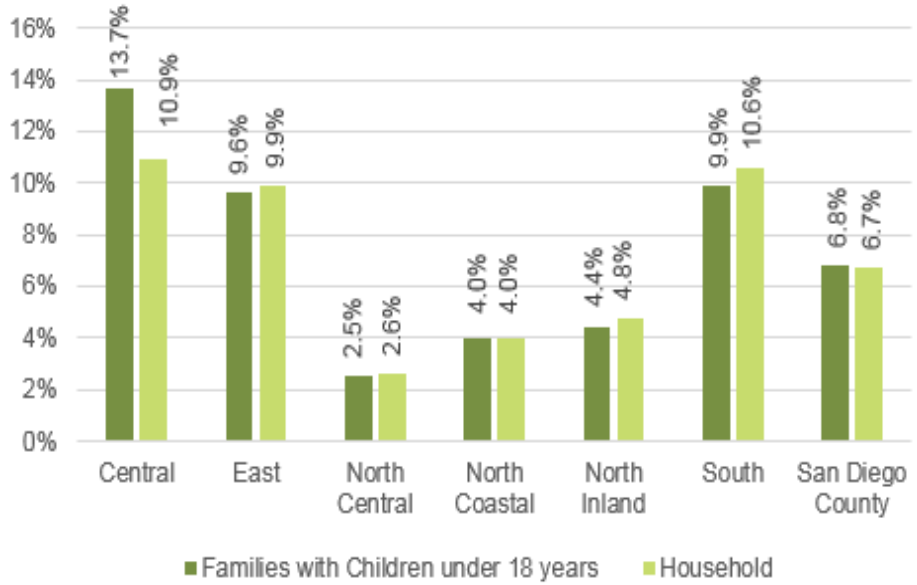
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B17024. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Socioeconomic status is defined as a composite measure that typically incorporates economic, social, and work status. Economic and social status is measured by income, and work status is measured by occupation; each status is considered an indicator, and these indicators are related but do not overlap.

Public Program Participation

Many San Diegans rely on public assistance to make ends meet. In 2015, 6.7% of households received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 6.8% received CalFresh benefits. The Region with the greatest percentage of families receiving benefits was Central Region at 13.7%. The Region with the greatest proportion of households receiving CalFresh benefits was also Central Region (10.9%), followed by South Region (10.6%; Figure 73).

Figure 73. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, San Diego County by HHSA Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Tables B22002, B22007, B17024. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Of the 3.2 million people living in San Diego County, 28.4% relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or Veterans Affairs health care coverage). Of those, 4.2% relied on Medicare alone, and 12.1% relied on Medi-Cal alone. In 2015, the Regions with the highest percentage of residents utilizing public health insurance coverage were the Central, East, and South Regions. San Diego County overall has a lower percentage of residents relying on public coverage than both California and the United States overall (Figure 74).

Figure 74. Public Health Insurance Coverage Status by HHSA Region, San Diego County, 2015.

Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2704. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Standard of Living Assessment

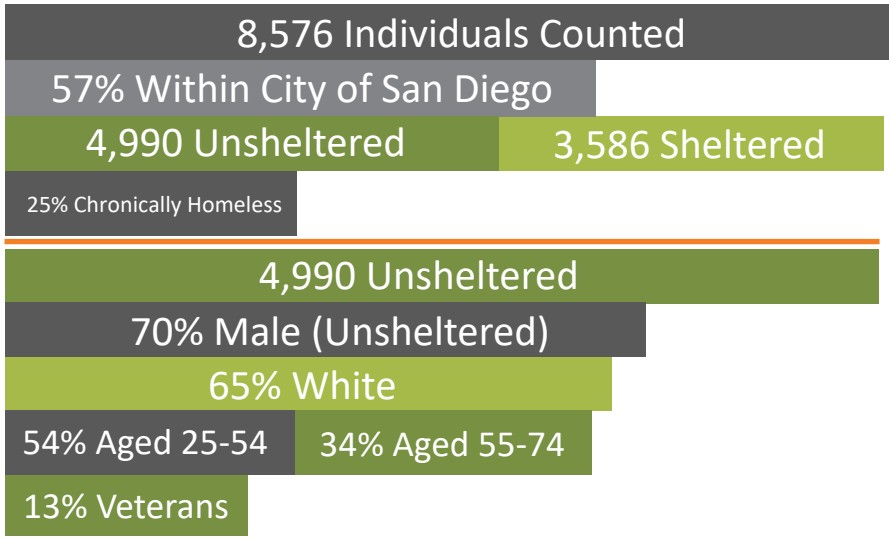
In this section, the results of an additional standard of living assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2018 WEALLCOUNT: San Diego's Annual Point-in-Time Count

On January 26th, 2018, 8,576 individuals were counted as homeless in San Diego County during San Diego County's annual WEALLCOUNT Homeless Point-In-Time count. Of those, 4,990 (58.2%) were unsheltered, and 3,586 (41.8%) were considered to be sheltered (spent the night in homeless shelter or program). About 57% of those counted were within the City of San Diego.

Of the unsheltered population (4,990), 70% were male, 65% were white, 54% were between the ages of 25-54, and 34% were aged 55-74. Of those counted unsheltered, 43% had a physical disability, chronic health condition, or mental health issue. Veterans made up approximately 13% of the unsheltered homeless population (Figure 75).

Figure 75. Characteristics of the Homeless Population in San Diego County, 2018.



Source: San Diego County Regional Task Force On The Homeless. 2018 WEALLCOUNT Annual Report. http://www.rtfhsd.org/wp-content/uploads/2017/07/comp-report-final.pdf. Prepared by: Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Of the counted homeless population (sheltered and unsheltered), 25% were chronically homeless as defined by the U.S. Department of Housing and Urban Development. To be chronically homeless means that an individual has experienced homelessness for a year or longer, or has experienced at least four episodes of homelessness in the past three years, and also has a diagnosed disability that prevents them from maintaining work or housing.

COMMUNITY

COMMUNITY

The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment. Conflict resolution programs are keeping youth out of the detention system, environmentally-conscious buildings and events are creating community pride, and community gardens are beautifying the environment and improving local access to healthy foods. Partners are training residents to be advocates for change in their own neighborhoods, and the community as a whole benefits as a result.

Live Well San Diego indicators that measure progress towards this area of influence include 6) Security: Crime Rate, 7) Physical Environment: Air Quality, and 8) Built Environment: Distance to Park. Living in a crime-free or low-crime area reduces stress and increases an individual's ability to go outside and interact with their environment, leading to better health outcomes. Many residents of San Diego County live in highly urban areas where there is not a lot of open space – having a park nearby provides an opportunity to be physically active and leads to reduced disease associated with sedentary lifestyle.

Live Well San Diego Indicator 6: Security (Crime Rate)

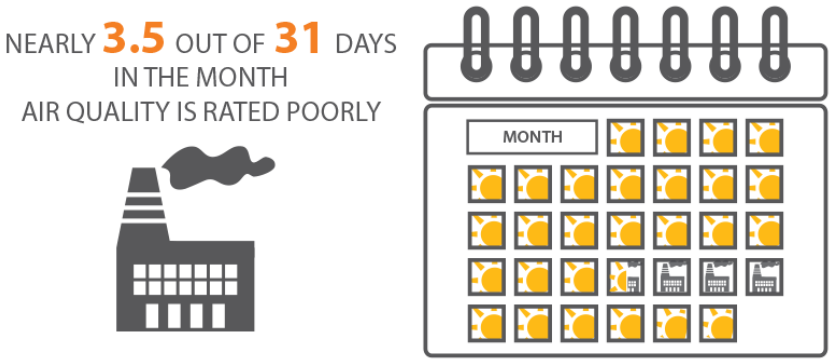
Security: Crime Rate is measured as the number of crimes per 100,000 people. Crime, including violent and property crimes, can have a significant impact on well-being of the population, and contributes to premature death and disability, poor mental health, and lost productivity.

California: 2,998.4 **United States: 2,837.0**

Source: 2016 Overall Crime rate per 100,000 population. Consists of Violent Crime: Murder and Non-negligent Manslaughter, Forcible Rape, Robbery, and Aggravated Assault AND Property Crime: Burglary, Larceny-Theft, and Motor Vehicle theft (Arson included). US Department of Justice - Federal Bureau of Investigation's Uniform Crime Reporting Statistics. 2016. Original Date: 8/22/2012. Accessed on: 9/2017.

Live Well San Diego Indicator 7: Physical Environment (Air Quality)

Physical environment: air quality is measured as the ratio of days that air quality is rated unhealthy. Air pollution affects more people than any other pollutant. Lower levels of air pollution in a Region correlate with better respiratory and cardiovascular health of the population.



California: **7.8%**

United States: **Data Not Available**

Source: 2016. San Diego, State and Nation from EPA AirData System. http://www.epa.gov/airdata/ad_rep_con.html. May include exceptional events. Accessed 8/2017.

Live Well San Diego Indicator 8: Built Environment (Distance to Park)

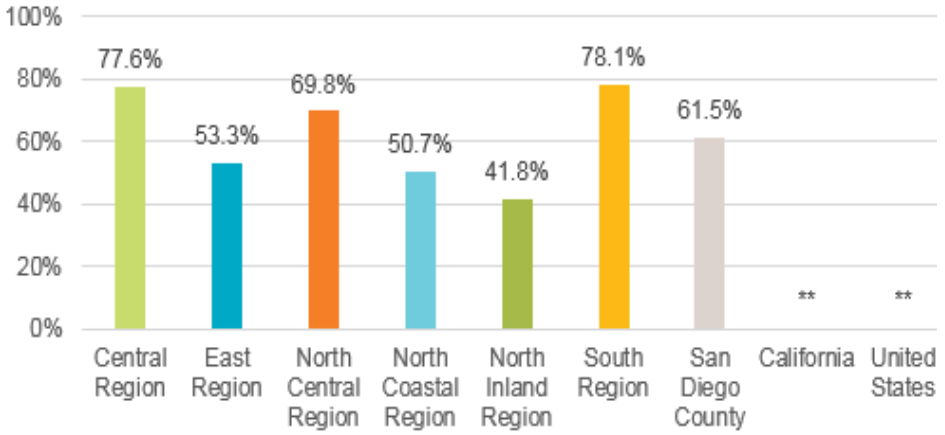
Built environment: distance to park is measured as the percentage of the population living within a half mile of a park. Access to parks and recreation services has been shown to have positive health impacts, including the physical, social, and mental aspects of health.

Almost 3 in 5 people lived within a quarter mile of a park or a community space. The Region with the highest percentage living within one-quarter mile of parks and community spaces was South, followed by Central. The Region with the lowest percentage was the North Inland Region (Figure 76).

California: **Data Not Available**

United States: **Data Not Available**

Figure 76. Percentage of Population Living Within One-Quarter Mile of a Park or Community Space by HHSA Region, 2015.



*** Data Not Available*

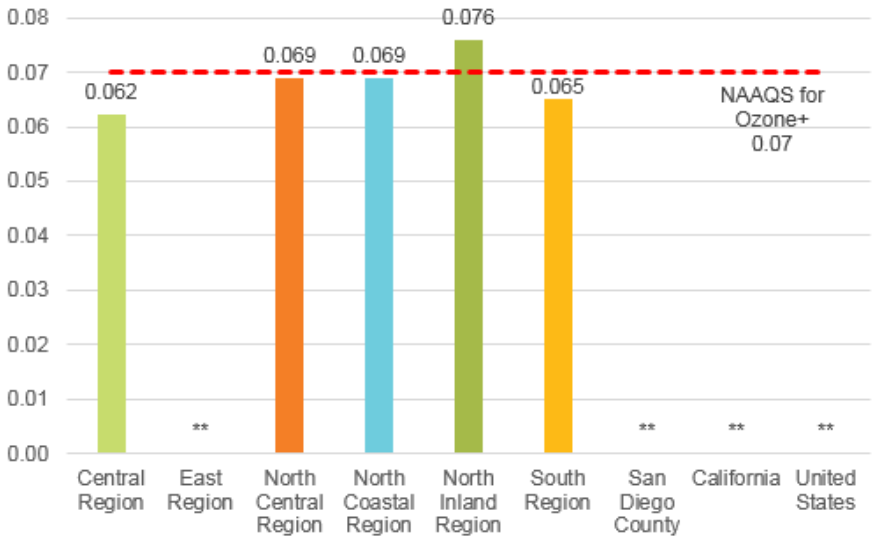
Source: Rate of recreational facilities (community spaces) per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). 2015 County Business Patterns data set. censtats.census.gov/. Original Date: 2/22/2013. Accessed on: 8/2017. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

Air Quality

Ozone—One type of pollutant that contributes to air quality is ozone. Higher temperatures increase ground-level ozone, a type of secondary air pollutant that occurs as a result of chemical reactions taking place at power plants, within motor vehicles, and ultimately creating smog and pollution. Ozone affects those with cardiovascular and respiratory difficulties, such as asthma, and contributes to related mortality, emergency department visits, and hospitalizations. Ozone concentrations are higher where there is heavy vehicle traffic, and coal-fired power plants and industrial processes occurring.

Figure 77. Ozone Concentration by HHSA Region, San Diego County, 2014-2016.



*** Data Not Available*
Note: 2014-2016 3-year average of the 4th high 8-hour ozone concentration. When the DV is less than or equal to the standard, then we are in attainment of the standard. The DV shows that Alpine and Escondido, representing North Inland Region, are the only areas of the County that does not meet the National Ambient Air Quality Standards (NAAQS) for ozone. Due to the closing of the Escondido monitoring station in 2015, the value for 2015 and 2016 is the same as 2014 when calculating the 2014-2016 design value. Additionally, the Otay Mesa site is now located at Donovan State Prison, therefore raising the values in South Region. Original Date: 4/17/2013. Accessed on: 8/2017.
+ United States Environmental Protection Agency. NAAQS table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 77 displays ozone concentration by HHSA Region. The Design Value, or DV, is a statistic describing the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS). If the DV for an area is less than the standard, then the area is in attainment of the standard.

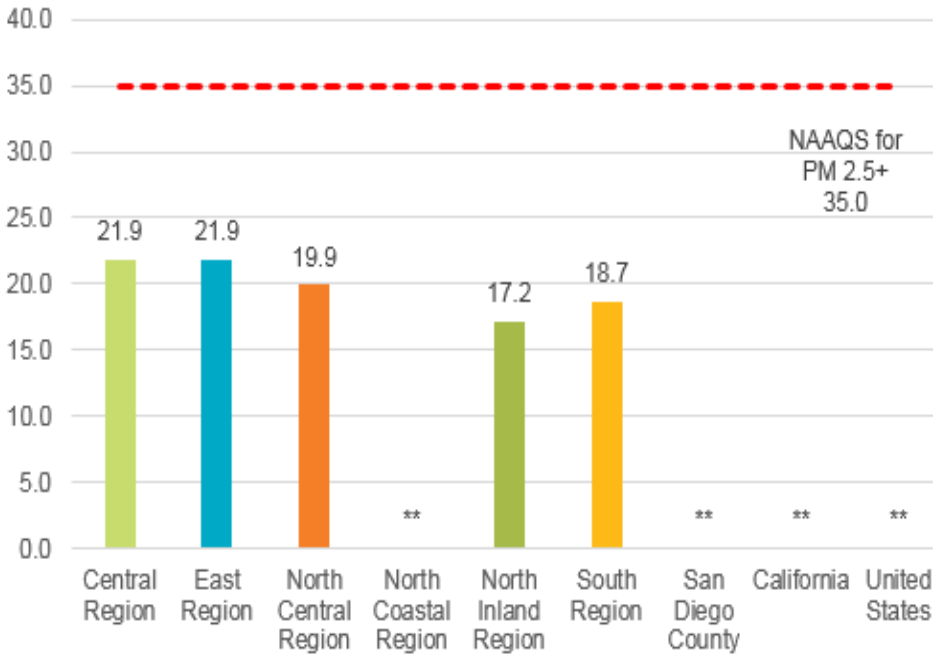
"Among the Regions for which there was ozone data available, North Inland Region was the only Region where the ozone concentration exceeded the national standard."

Among the Regions for which there was ozone data available, North Inland Region was the only Region where the ozone concentration exceeded the national standard. Both North Central and North Coastal Regions were barely in range, with averages of 0.069. The North Inland Region monitoring stations are located in Alpine and Escondido. No data was available for the East Region, San Diego County overall, California, or the United States.

PM 2.5 Concentration—PM 2.5, or particulate matter 2.5 microns or less in diameter, includes pollutants such as combustion particles, organic compounds, metals, and any other fine particulate matter that is capable of reaching deep into the lungs and causing cancers and other diseases. PM 2.5 levels are higher in areas where heavy equipment is used, burning activities occur, and industrial facilities are located (Figure 78, next page).

Amongst the geographies for which there were data available, the Regions with the highest average 24-hour PM 2.5 concentrations were Central and East Regions. The Region with the lowest PM 2.5 concentration was the North Inland Region.

Figure 78. PM 2.5 Concentration by HHSA Region, San Diego County, 2014-2016.



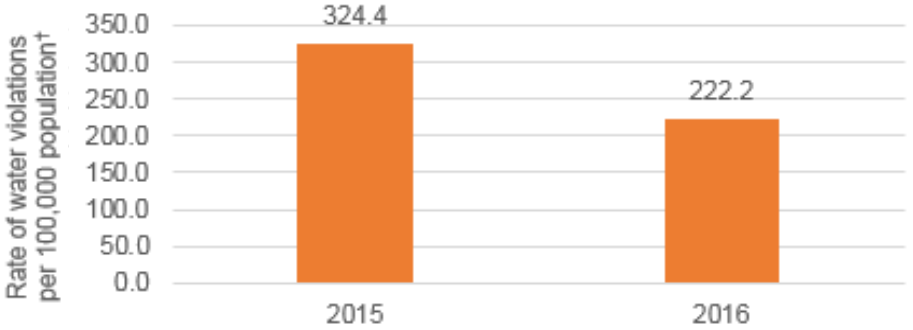
*** Data Not Available*
Source: 2014-2016 San Diego Air Pollution District Data. Particulate Matter 2.5—here we use a 3-year average of the 98th percentile of collected samples for a 24-hour standard. Not all regions are represented. Original date: 4/17/2013. Accessed on: 8/2016.
+United States Environmental Protection Agency (EPA). NAAQS Table. Hhttps://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Water Quality

Environmental health affects the health of the population. Climate change is part of environmental health, and is defined as major changes in the earth's temperature, rainfall, snow and wind patterns. Climate change affects many areas of life, including health, water resources, food production, agriculture, forestry, wildlife, and energy supply.

Water quality is measured by tracking water quality violations. The actual indicator is rate of violations per year for federally regulated drinking water contaminants per 100,000 people. In 2016, there were 222.2 water violations per 100,000 population in San Diego County (Figure 79). This was less than the previous year.

Figure 79. Water Quality, San Diego County, 2015-2016.



†Rate of total water violations per 100,000 population for federally regulated drinking water contaminants and other drinking water violations. Data is not comparable to data collected prior to 2013 as EPA has done quality assurance on their system and increased reporting in many states.
Source: 2015 EPA water violations from SDWISFED Drinking Water Data. Original Date: 1/26/2012. Accessed on: 8/2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Geography

Geography has come to the forefront of the discussion on health equity. The idea that "place matters" has become more commonplace in recent years. Together, there are 18 incorporated cities and towns, as well as several unincorporated communities. Several community types exist throughout the County – some more urban, some more rural. Data are collected and reported out by the 41 Subregional areas (SRAs) in San Diego County. San Diego County has an area of over 4,200 square miles and over 70 miles of coastline. Substantial differences in health indicators and health-related behaviors exist in the different areas of the County. More information on how geography affects health can be found in the report Identifying Health Disparities to Achieve Health Equity in San Diego County: Geography at HE_Geography_FINAL.pdf (sandiegocounty.gov).

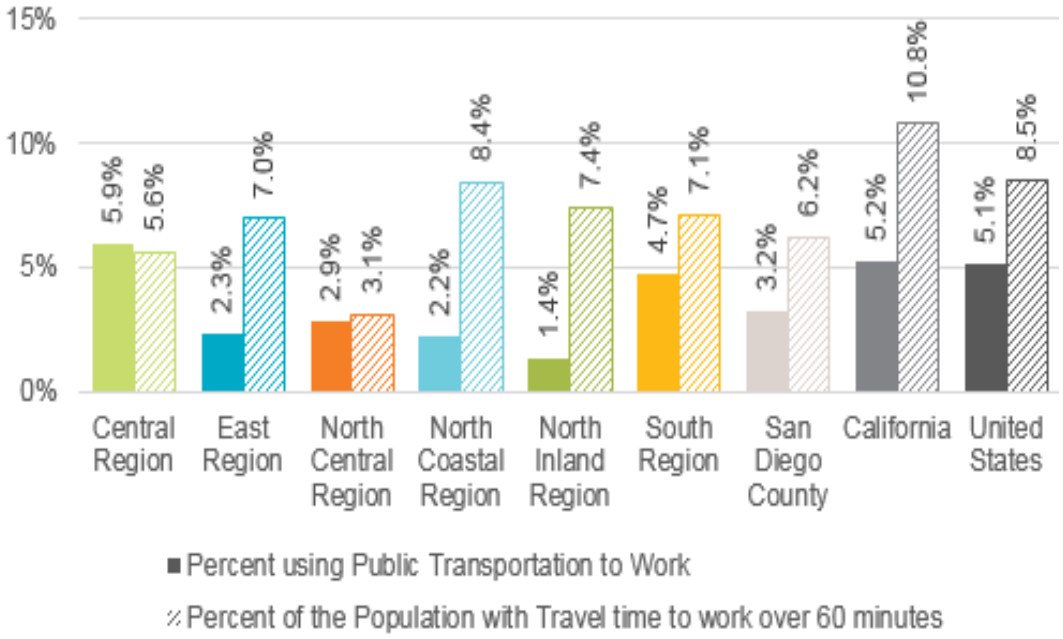
Transportation and Commute

Active transportation, or walking and using public transportation to get around, is related to the built environment, the individual's perception of safety, and the availability of public transit. This indicator measures the percent of population using public transportation to get to work. The Region with the highest percentage of residents using public transit to get to work was the Central Region (5.9%). The Region with the lowest percentage was the North Inland Region (1.4%) (Figure 80). The percentage of those using public transport in San Diego was lower than California and the United States.

It is also interesting to see how much of the population spend more than an hour commuting to work. Commute to work can be measured as the average travel time to work. Approximately 8.4% of North Coastal Region residents spend more than one hour commuting to work, which is the highest percentage of any one Region. Those living in the North Central Region were least likely to spend an hour or more commuting to work, with about 1 in 30 residents of working age spending an hour or more on their commute.

"Those living in the North Coastal Region spent more than one hour commuting to work, which is the highest percentage of any one Region."

Figure 80. Commute to Work by HHSA Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Tables DP03, B08012. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Community Assessments

In this section, the results of additional external community assessments are described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

California's Fourth Climate Change Assessment

California's Climate Change Assessments contribute to the scientific foundation for understanding local climate change vulnerability and informing resilience actions, while also directly informing State policies, plans, programs, and guidance, to promote effective and integrated action to safeguard California from climate change. In late 2017, a team of authors was solicited to prepare a Regional Report for the San Diego Region as part of the 4th Assessment. Several areas of major concern were identified, including heat, wildfire, and vector-borne illness.

Wildfire—The projected increase in wildfire risk directly relates to an increased health risk from the fires and the smoke produced by the fires. Smoke contains particulate matter, ozone, carbon monoxide, and nitrogen dioxide, all of which are associated with respiratory and cardiovascular negative heath impacts. Smoke can travel large distances from the fires; the health impacts of smoke is a vulnerability to all of San Diego County. Inland communities are most vulnerable to the impacts from wildfire, though the Region as a whole (including the coast) is at risk from smoke exposure and poor air quality resulting from fires.

Heat—The National Weather Service reports trends, and local climate-model projections suggest, that heat waves are becoming more common, stronger, longer lasting and, importantly, more humid in California.[1] The effect of a combination of hot temperatures and high humidity can have a greater impact in mortality (heat-related deaths) in coastal areas than inland areas.[2] Human health effects associated with extreme heat are expected to increase significantly, including heat-related illnesses and cardiovascular failure.[3] Heat will likely affect the entire region with coastal populations experiencing a higher level of vulnerability due to lack of air conditioning while inland populations will be vulnerable through exposure to dangerously hot temperatures. In a study conducted on the health effects of the 2007 fires in San Diego County, it was found that during the peak fire period, emergency department visits for respiratory conditions increased by 34% and visits for asthma by 112%.[4]

Vector—In general, climate change is expected to increase vector-borne diseases,[5] though the factors involved are complex and the incidence of disease will depend on both environmental and demographic factors. A potential precursor to changes in vector-borne disease is the recent massive expansion of invasive mosquito species, *Aedes aegypti* and *Aedes albopictus*, which have the potential to transmit infectious diseases such as chikungunya, dengue, and the Zika virus. Temperatures and pooling water are two critical factors in a mosquito's life cycle and, subsequently, their potential to spread disease. At warmer temperatures, mosquitos lay eggs more frequently, feed more frequently, and the incubation period of viruses they carry decreases, allowing mosquitos to transmit viruses more quickly after becoming infected.

American Lung Association in California: State of Tobacco Control 2018

The American Lung Association *State of Tobacco Control* national report bases ratings on tobacco control policies in effect and the national and federal levels as of January 2, 2017. Successes in 2016 include the tobacco tax increasing from $0.97 to $2.87, and the minimum age to purchase tobacco products increasing from 18 to 21.[†]

The purpose of this assessment is to evaluate tobacco control policies to prevent and reduce tobacco use; and limit exposure to secondhand smoke. Individual grades are given to the 18 cities in San Diego County, as well as unincorporated San Diego County. Grades are assigned for overall tobacco control as well as in three key areas: smoke-free outdoor air, smoke-free housing, and reducing sales of tobacco products (Table 17, next page).

---

[1] *Gershunov et al., 2009; Gershunov & Guirguis, 2012.*
[2] *Rupa Basu, 2009.*
[3] *Mora et al., 2017.*
[4] *Hutchinson JA, Vargo J, Milet M, French NHF, Billmire M, Johnson J, et al. (2018) The San Diego 2007 wildfires and Medi-Cal emergency department presentations, inpatient hospitalizations, and outpatient visits: An observational study of smoke exposure periods and a bidirectional case-crossover analysis. PLoS Med 15(7): e1002601. https://doi.org/10.1371/journal.pmed.1002601.*
[5] *Campbell-Lendrum et al., 2015.*
[†] *American Lung Association. State of Tobacco Control 2017. Executive Summary. http://www.lung.org/local-content/california/documents/state-of-tobacco-control/2017/2017-sotc-executive.pdf.*

Table 17. American Lung Association in California State of Tobacco Control 2018—California Local Grades: San Diego County.

San Diego County

	Carlsbad	Chula Vista	Coronado	Del Mar	El Cajon	Encinitas	Escondido	Imperial Beach	La Mesa	Lemon Grove	National City	Oceanside	Poway	San Diego	San Marcos	Santee	Solana Beach	Vista	San Diego County Unincorporated
Overall Tobacco Control Grade	D	D	D	D	B	D	D	F	F	F	D	D	F	D	C	F	B	C	F
TOTAL POINTS	2	2	4	4	10	2	2	1	1	1	2	3	1	4	5	0	8	5	1
Smokefree Outdoor Air	C	C	A	A	A	C	C	D	D	D	C	B	D	D	D	F	A	D	D
Dining	4	4	2	4	4	4	0	0	0	0	4	4	0	2	0	0	4	0	0
Entryways	0	0	4	4	4	0	2	0	0	0	0	4	0	0	0	0	4	0	0
Public Events	0	0	4	4	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0
Recreation Areas	3	4	4	4	4	4	4	4	3	4	4	3	3	3	3	0	4	4	4
Service Areas	2	2	4	2	4	2	2	2	2	2	2	2	2	2	2	2	4	2	2
Sidewalks	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Worksites	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL POINTS	9	10	19	20	22	10	8	6	5	6	10	14	5	7	5	2	20	6	6
Smokefree Housing	F	F	F	F	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F
Nonsmoking Apartments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonsmoking Condominiums	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonsmoking Common Areas	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL POINTS	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reducing Sales of Tobacco Products	F	F	F	F	A	F	F	F	F	F	F	F	F	B	A	F	A	A	F
Tobacco Retailer Licensing	0	0	0	0	4	0	0	0	0	0	0	0	0	3	4	0	4	4	0
TOTAL POINTS	0	0	0	0	4	0	0	0	0	0	0	0	0	3	4	0	4	4	0
Emerging Issues Bonus Points																			
Emerging Products Definition - *Secondhand Smoke*	1	0	0	1	1	1	0	1	1	1	0	1	1	0	1	0	1	1	1
Emerging Products Definition - *Licensing*	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0
Retailer Location Restrictions	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Sale of Tobacco Products in Pharmacies	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Flavored Tobacco Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Pack Size of Cigars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL POINTS	1	0	0	1	3	1	1	1	1	1	0	1	1	0	2	0	2	3	1

Overall Tobacco Control Grade
A: 11-12 D: 2-4
B: 8-10 F: 0-1
C: 5-7

Determined by grades and points from other three categories
A: 4 C: 2 F: 0
B: 3 D: 1

Smokefree Outdoor Air Grade
A: 18+ D: 3-7
B: 13-17 F: 0-2
C: 8-12

Smokefree Housing Grade
A: 10+ D: 1-3
B: 7-9 F: 0
C: 4-6

Reducing Sales of Tobacco Products Grade
A: 4 D: 1
B: 3 F: 0
C: 2

SOTC 2018
California Local Grades

Source: American Lung Association, State of Tobacco Control 2017—California Local Grades. http://www.lung.org/local-content/california/documents/state-of-tobacco-control/2018/counties/san-diego-countypdf.pdf. Accessed 02/2017.

Overall control grades ranged from B to F. The cities receiving a grade of "B" were El Cajon and Solana Beach. The cities with the worst tobacco control, receiving a grade of "F," were Imperial Beach, La Mesa, Lemon Grove, Poway, Santee and unincorporated areas.

The best cities for smoke-free outdoor air were Coronado, Del Mar, El Cajon, and Solana Beach, which received "A" grades, and the worst was Santee. Cities consistently ranked low (with a grade of "F") for smoke-free housing, but for one exception—the city of El Cajon, which received a grade of "C." Lastly, El Cajon, San Marcos, Solana Beach and Vista all received "A" grades for reducing sales of tobacco products.

"The best cities for smoke-free outdoor air were Coronado, Del Mar, El Cajon, and Solana Beach, which received "A" grades, and the worst was Santee."

2017 Youth Purchase Tobacco Survey

Vista Community Clinic (VCC), in partnership with CASA (Community Action Service & Advocacy), performed youth purchase tobacco surveys (YPTS) in three municipalities across San Diego County in 2017. The methods in each location were similar. Community Action Service and Advocacy (CASA), subcontracted to VCC, produced and distributed retailer Education Packets to managers or owners at every location licensed by the California Board of Equalization to sell tobacco products in the areas surveyed. On the day of the survey, teams of youth and adult supervisors traveled to businesses in each municipality, and the unaccompanied youth attempted to make a tobacco purchase. Data collected included whether the youth attempting the purchase was asked to show their identification, and whether the purchase was successful. In Lemon Grove, two different youth surveys were conducted to determine if results would be different if an older group of youth attempted to make tobacco purchases, compared to a younger group of youth. The results of the survey are presented in Table 18.

Table 18. Youth Purchase Tobacco Survey Results, San Diego County, 2017.

Geography	Mean Age of Youth Volunteers	Number of Retailers Surveyed	Successful Purchase Attempts
Lemon Grove—Younger Group (Youth 16.2-16.8)	16.5	25	8%
Lemon Grove—Older Group (Youth 20.7-20.8)	20.8	26	35%
National City (Youth 18-20)	**	52	25%
Escondido (Youth age range not reported)	15.9	84	1%

Note: In Lemon Grove, the first survey conducted included a group of youth who were younger, and a second survey was conducted six weeks later including a group of older youth, in order to assess adherence to the new law. Having the older group of youth conduct YPTS helps to show how businesses have adapted to the new minimum age requirement by examining differences in the successful purchases attempts between the two groups.
***Data not available.*
Source: Vista Community Clinic, Local Tobacco Control Interventions: Tobacco Retail Licensing, Youth Tobacco Purchase Surveys, Lemon Grove, National City, and Escondido, CA, 2017. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

For several sales in which the youth was able to make a tobacco purchase, the clerk did not ask for identification. In some instances, the clerk did ask for identification, or even swiped the underage identification for electronic confirmation, yet still completed the sale. Federal Law requires identification for tobacco purchases for any customer that appears to be under the age of 27. These sales to underage youth are sometimes occurring even when the clerks know they are selling to underage customers. Although Escondido did very well on this survey – only 1% of the 84 retailers made underage tobacco sales – the findings in other locations suggest much more needs to be done to prevent underage tobacco sales.

SOCIAL

The Social Area of Influence concerns residents helping one another. San Diegans help one another and contribute to their communities by volunteering to serve others who may be less fortunate, by contributing to charitable organizations, and by being politically active and voting in Local, State and Federal elections. Communities thrive when people get to know their neighbors and are invested in the well-being of the people they interact with every day. *Live Well San Diego* partners encourage community connections and engaged citizens. New residents are finding hope through refugee and survivor programs, foster youth and families are discovering resiliency through training and education, seniors are receiving comfort and nourishment through meal delivery services, and volunteers are gaining greater purpose by giving back to their neighbors. There are also vulnerable populations within the County who benefit from the help that others provide.

Vulnerable populations in San Diego include those who live below 200% poverty level who may also be experiencing food insecurity. Food insecurity refers to individuals and families who are unable to afford enough food on a regular basis. In turn, they may not have access to healthier foods essential for good nutrition, and this impacts the health and well-being of the population. Community involvement includes volunteering. Volunteering is important for numerous reasons; donated time benefits not only the health of the community, but the health of the volunteer themselves.

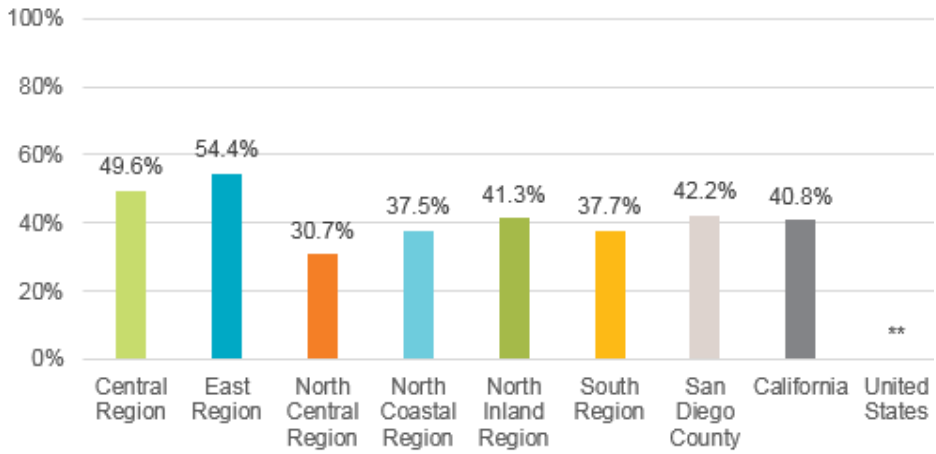
Live Well San Diego Indicator #9: Vulnerable Populations (Food Insecurity)

Food insecurity is measured as the percentage of the low income (income at or below 200% federal poverty level) population who have reported inability to purchase enough food on a regular basis. Food insecurity affects not only current health status, but also physical, mental, and social development.

Of those living below 200% Federal Poverty Level in San Diego County, residents in Central and East Regions were more likely to experience food insecurity than the other Regions, or the County overall. The percentage of food insecurity was slightly higher in San Diego County (42.2%) when compared to the State of California overall (40.8%) (Figure 81).

California: 40.8% **United States: N/A**

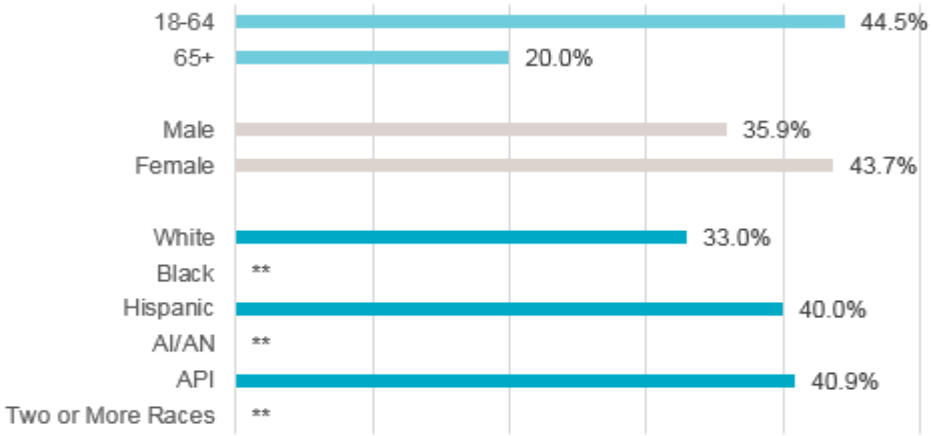
Figure 81. Food Insecurity (Population Below 200% FPL) by HHSA Region, 2014-2015.



*** Data Not Available.*
Note: Percent of adult population 200%FPL not able to afford food.
Source: 2014-2015 UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 9/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

When broken down by health equity lenses, low-income females were more likely than low-income males to experience food insecurity. For the low-income groups for which there were data available, Hispanic and Asian/Pacific Islander individuals were more likely to experience food insecurity than any other races/ethnicities. Data were not available for black, American Indian/Alaska Native, or two or more race groups due to small sample size, producing statistically unstable results. Those low-income adults ages 18-64 were also more likely to experience food insecurity than those low -income individuals aged 65 and over (Figure 82).

Figure 82. Food Insecurity by Lenses, 2013-2014.



*** Data Not Available.*
AI/AN = American Indian/Alaska Native; API = Asian/Pacific Islander.
Source: 2013-2014 Food Insecurity. Percent of adult population 200% FPL not able to afford food. UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #10: Community Involvement (Volunteerism)

Volunteerism is measured as the percentage of the population that volunteers. Volunteering creates a meaningful, positive impact on the community, and benefits the volunteers themselves.

NEARLY **1** IN **3** PEOPLE VOLUNTEERS AN AVERAGE OF **143** HOURS PER YEAR

California:	United States:
23.0%	24.9%

Source: Percent of residents who volunteer. Data from 2015 from Corporation for National and Community Service. Original Date: 1/24/2013. Accessed on: 6/2017.

Data are not available by Region, so the figure for San Diego County overall is provided. A higher percentage of individuals (about 30%) in San Diego County volunteered compared to the State and the Nation.

Supporting Indicators

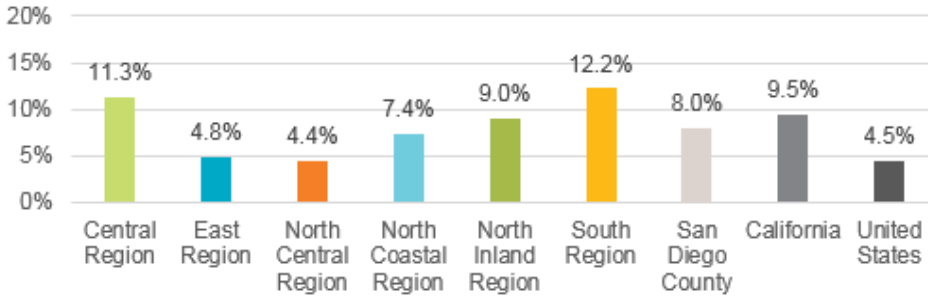
Linguistic Isolation

Linguistic isolation refers to those residents who are isolated because they are unable to communicate effectively in English. Those who cannot effectively communicate in English may have trouble talking to people who provide social services and medical care. They may also not hear or understand important information when there is an emergency – such as a wildfire or an accidental chemical release. As a result, those who do not communicate well in English may be less likely to get the health care or the safety information that they need.

A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over, who speaks a language other than English, speaks English "very well."

In San Diego County overall, about 1 in 12 households were linguistically isolated (see Figure 83). The Regions with the highest percentage of linguistically isolated households were South and Central Regions. Almost 1 in 8 households in the South Region were linguistically isolated. Similarly, over 1 in 9 households in the Central Region were considered linguistically isolated. The Region with the lowest percentage of linguistically isolated households was the North Central Region, with less than 1 in 20 households considered linguistically isolated.

Figure 83. Linguistic Isolation by HHSA Region, 2015.



Note: Percent of population considered linguistically isolated. A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who speak only English.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1602.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

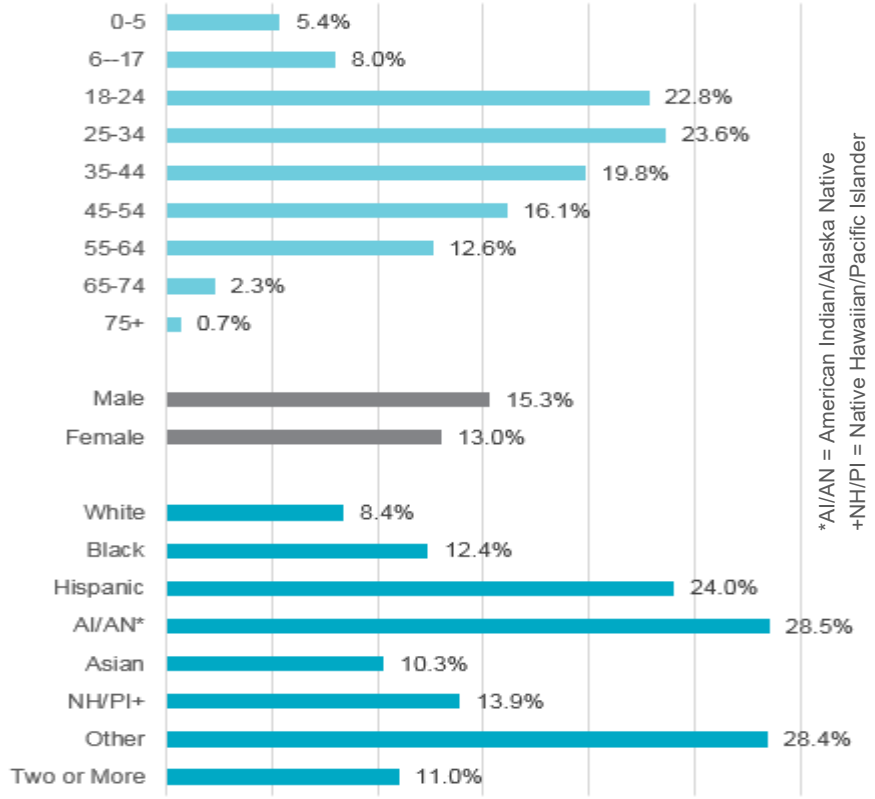
Health Insurance Status

An individual's ability to live well is influenced by their ability to access the health care system, for both urgent medical issues and preventive care. This indicator measures the lack of health insurance for the nonelderly adult population, or those aged 18 to 64. Children and the elderly often are more likely to be eligible for public health insurance programs, such as Medi-Cal and Medicare, than those adults who fall between the ages of 18 and 64.

Viewing health insurance status by health equity lenses is important because there may be differences in the indicator by age, gender, and race. Those between the ages of 18 and 34 were most likely to be uninsured. About 1 in 4 adults within those age groups were uninsured in 2015. Males were slightly more likely to be uninsured than females. Almost 1 in 3 of American Indian/Alaska Native residents lacked health insurance coverage. The "Other" Race/Ethnicity group was also more likely to be uninsured (28.4%). About 1 in 4 Hispanic residents also lacked health insurance coverage (24.0%; Figure 84).

The Region with the highest percentage of uninsured adults aged 18-64 was the Central Region, with more than 1 in 4 of its adults residents lacking health insurance

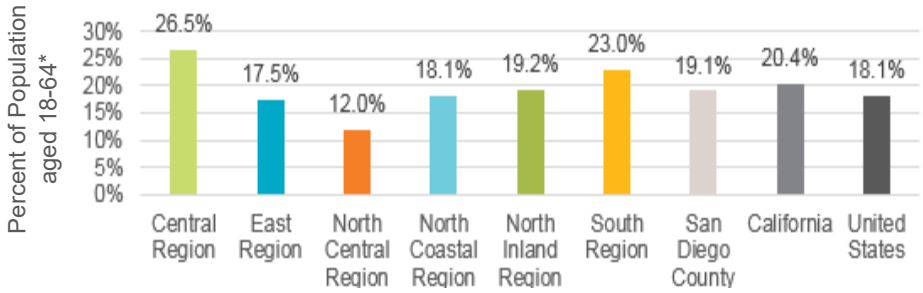
Figure 84. Lack of Health Insurance by Lenses, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2701.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

coverage. The Region with the lowest percentage of uninsured adult residents was the North Central Region, with just under 1 in every 8 adult residents lacking health insurance. Both Central and South Regions had higher percentages of uninsured adult residents than San Diego County, the State of California, and the United States overall (Figure 85).

Figure 85. Lack of Health Insurance (Adults Aged 18-64) by HHSA Region, 2015.



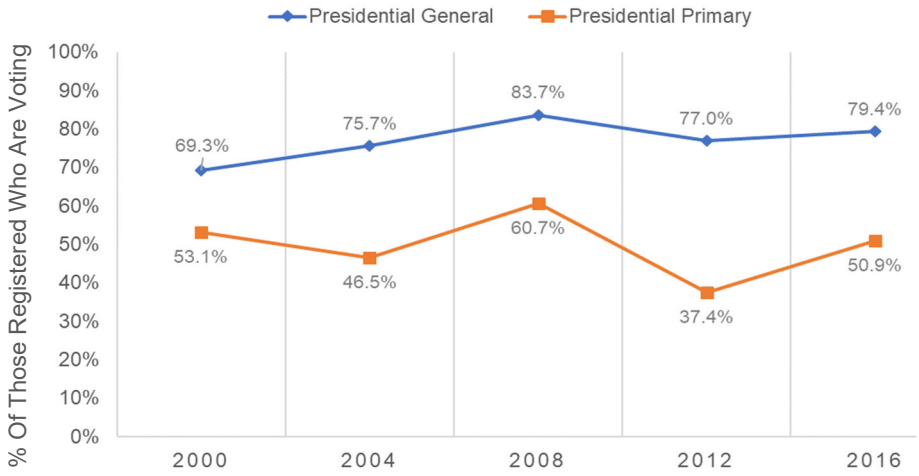
**Percent of population not currently covered by health insurance, ages 18-64.*
Note: Estimate uses data years 2011-2015, which includes data for several years before the Affordable Care Act was passed. The ACA had a significant effect on the ability for nonelderly adults (ages 18-64) to be able to obtain health insurance coverage. Estimate shown may be higher than actual percentage.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2701.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Voter Participation

Voter participation is the best means of measuring civic and political engagement. High voter turnout is desirable in a democracy because it increases the chance that the political system reflects the will of a large number of individuals. Educating children on the importance of voting, engaging them in the process, and leading by example will help build the foundation for future civic-minded citizens.

An important characteristic of active civic engagement is the commitment to participate and work for social changes that can improve the conditions of life and boost the chances of success for children, families and communities. Civic engagement can be a powerful process that moves people toward a greater belief about their capabilities to produce effects.

Figure 86. San Diego County Presidential General and Primary Election Turn Out (Ballots Cast), 2000-2016



Sources: County and State data from California Secretary of State, 2016 final presidential election results: Participation by County. U.S. data the U.S. Census Bureau Report: Voting and Registration in the Election of 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

In San Diego County, rates of voter participation have increased for the Presidential General election between 2000-2016. However, the rate of participation in the Presidential Primary election has slightly decreased since 2000 (Figure 86).

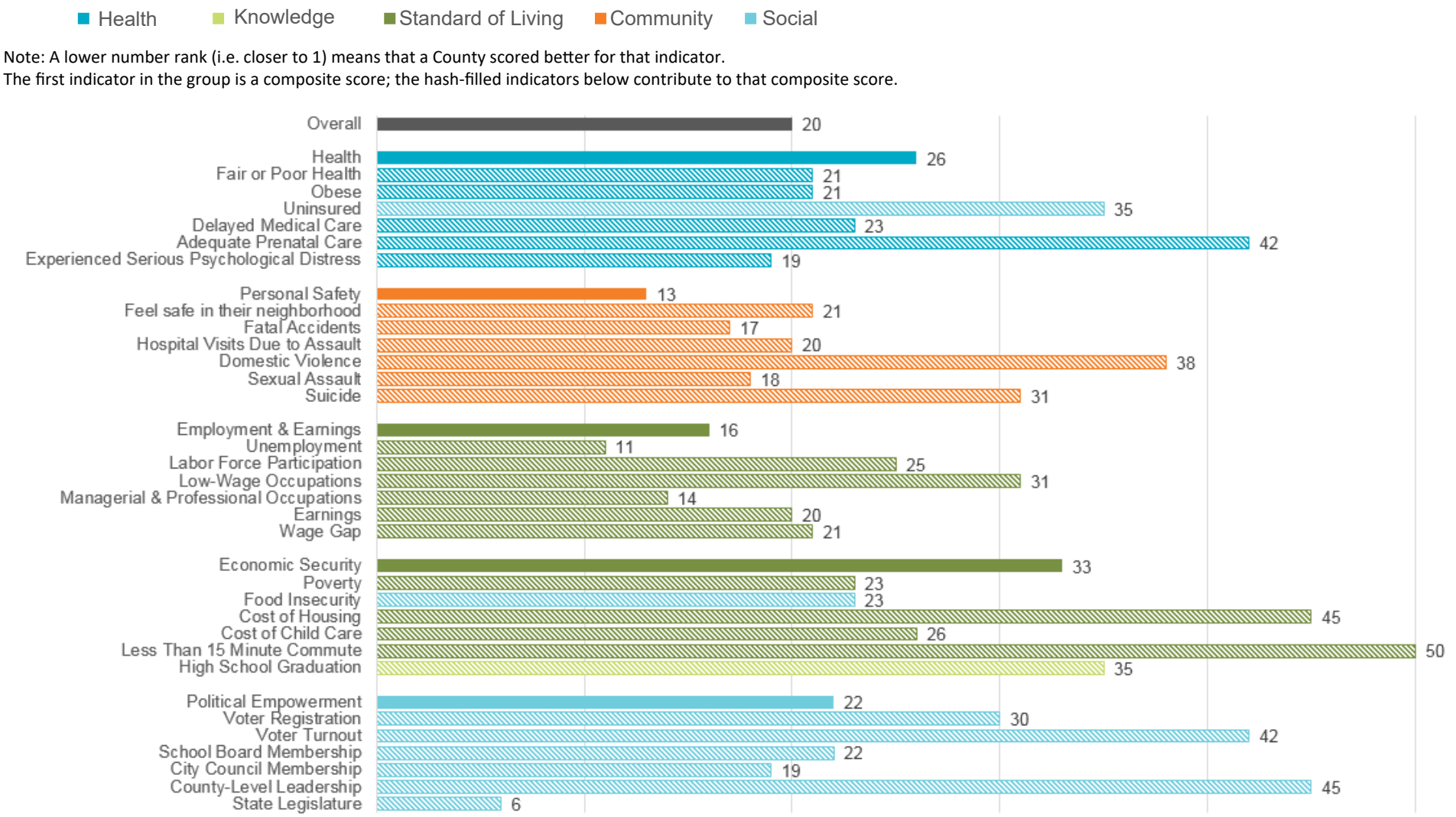
External Social Assessment

In this section, the results of an additional external social assessment are described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

California Women's Well-Being Index

When women thrive, their families and the communities in which they reside flourish. Despite decades of progress, women still face disparities in a number of issues, from health, to personal safety, to economic security. In 2015, there were 1,307,383 women over the age of 15 living in San Diego County. Of those, 59,354 were between the ages of 15 and 17.

Figure 87. San Diego Rankings from California Women's Well-Being Index, 2016.



Note: A lower number rank (i.e. closer to 1) means that a County scored better for that indicator.
The first indicator in the group is a composite score; the hash-filled indicators below contribute to that composite score.

Source: California Budget & Policy Center. California Women's Well-Being Index, Created in Partnership with the Women's Foundation of California. http://calbudgetcenter.org/resources/womens-well-being/.

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

SOCIAL

The California Women's Well-Being Index aims to score women's well-being in each of its 58 counties on a scale of 0 to 100, using a combination of standardized indicators. An overall score is calculated for each County, along with scores for personal safety, employment and earnings, economic security, political empowerment, and contributing indicator subgroups for all of the major categories. These scores determine the County's rank in this area, compared to the other 58 counties in California. A lower score (i.e. closer to 1) is considered to be a better score. The results of this analysis are presented in Figure 87.

Overall, San Diego County ranks 20th out of 58 counties in the State of California. Subcategories of the overall ranking include Health, Personal Safety, Employment & Earnings, Economic Security, and Political Empowerment. Rankings were the best (lowest) in the Personal Safety, Employment and Earnings, and the Political Empowerment categories. Each category, or composite score, is influenced by several measures falling underneath it.

Conclusion

This robust Community Health Assessment provides a broad view of the health status of San Diego County and its unique Regions and communities. Each indicator helps to inform policies and planning to further encourage a healthy, safe, and thriving Region. Demographics, morbidity and mortality statistics, and data for each area of influence provides an in-depth picture of each Region of San Diego, as well as the County as a whole. These indicators allow us to see where the various Regions of San Diego are thriving, and where they can improve. The included Regional documents provide more data for each Region, and have been used to inform the 2019-2021 Community Health Improvement Plans for both the Regions and San Diego County as a whole. As these plans are implemented, we hope to see each Region "move the needle" towards a healthier community.

For the most current data, be sure to visit:

Community Health Statistics (sandiegocounty.gov) and

Data & Results (livewellsd.org)

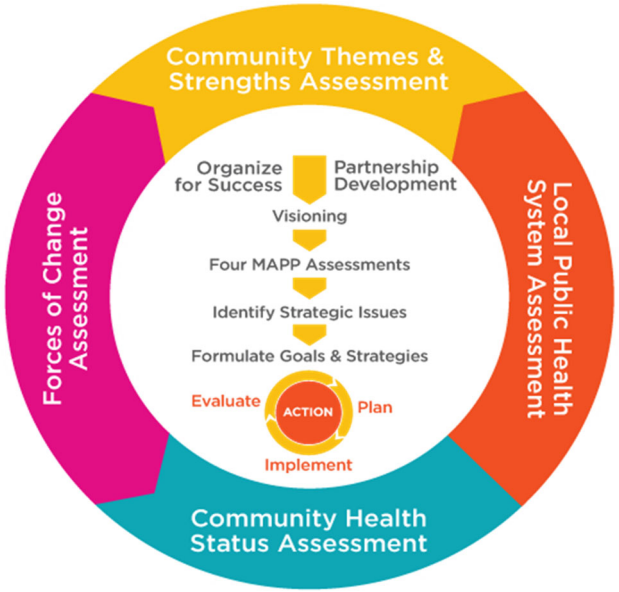
RESULTS OF MAPP ASSESSMENT

Community Health Status Assessment

Forces of Change Assessment

Community Themes & Strengths Assessment

Local Public Health Systems Assessment



LIVE WELL
SAN DIEGO

FORCES OF CHANGE

The Forces of Change Assessment focuses on identifying external forces, such as legislation, technology, and other impending changes that affect the context in which the community and its public health system operate. As part of the *Mobilizing for Action through Planning and Partnerships* (MAPP) process, regional -level data was collected from community partners who lived and worked within the Region they were evaluating. Shortly after the data presentations to the Regions in October and November of 2015, a community health assessment questionnaire was sent out via SurveyMonkey, an online survey tool. Participants who attended the data presentations, along with all other members of the community leadership teams, were given through January 2016 to complete the survey. The results of the forces of change question, in which respondents were asked to rank a pre-identified group of forces, are depicted in Table 19. A caveat with the data presented in this section is that sample sizes were relatively small, despite the survey being distributed to all community partners in all Regions. Only a small number responded. As a result, the data represented in the following figures may not accurately describe the distribution of opinions among all residents and partners in each Region.

All five Regional community leadership teams identified **Economic Stability** as a force of change within their Region. Economic stability includes issues such as unemployment, poverty, and homelessness. Three out of five teams ranked economic stability as the most important force of change occurring within their Region.

Four out of five leadership teams chose **Healthy Behaviors** as one of their top five forces of change. Each Region that chose this force ranked it differently, from first to fourth most important. Healthy Behaviors include issues such as poor dietary habits, lack of physical activity, tobacco use, and substance use.

Other commonly identified forces included **Social Environment** (exposure to community violence, lack of emotional support), **Health Care** (lack of access to preventive health care or disease management, lack of health insurance), **Education** (low literacy, low education levels, ineffective parent education), and **Cultural Issues** (lack of awareness, lack of cultural competency, and language barriers).

Public Health Services (PHS) senior staff also participated in an Advance at the Coronado Community Center. Participants all received worksheets and were asked to brainstorm individually on the future (2020) forces of change (factors, events and trends - global, National, Regional, and Local). Participants were then asked to identify associated opportunities and threats for population health and health equity, and for the department (PHS), and the results are described in the far right column of Table 19.

During their advance, PHS senior leaders identified several forces of change that could impact both the department and the community. **Climate change and related environmental disasters** was the most frequently cited force of change identified by approximately 58 participants. **Technology** was framed as a double-edged sword, simultaneously both a positive and a negative force. Additionally, with the increase in **aging population** and other vulnerable communities, there could be a divide in terms of those who are able to make use of, or have access to, technology and those who are not. Federal- and County-level **political shifts** were the most commonly referenced. Being situated near the busiest border crossing in the world, participants found that monitoring developments of **border issues** is important. What is interesting about this is the observation of how these events can directly and significantly impact on the population, health equity and the ability of the department to deliver services.

FORCES OF CHANGE

Table 19. Forces of Change Identified by HHSA Regional Community Leadership Team Members, 2016.

■ Health ■ Knowledge ■ Standard of Living ■ Community ■ Social

Central Region	East Region	North Central Region	North County Regions	South Region	Public Health Services*
Economic Stability[2]	Economic Stability[2]	Education[3]	Healthy Behaviors[4]	Economic Stability[2]	Climate Change and Related Disasters
Social Environment[9]	Healthy Behaviors[4]	Cultural[1]	Resources[8]	Education[3]	Technology
Neighborhood and Built Environment[7]	Health Care[5]	Economic Stability[2]	Economic Stability[2]	Healthy Behaviors[4]	Political Shifts: Federal and County
Resources[8]	Resources[8]	Healthy Behaviors[4]	Health Care[5]	Cultural[1]	Aging Population and Workforce
Education[3]	Social Environment[9]	Health Care[5]	Social Environment[9]	Social Environment[9]	Border Issues
Health Care[5]					

Note: Responses are listed from most to least popular. Some categories had the same number of responses in the top five, but due to small number of responses, differences were negligible.

1. *Cultural:* lack of awareness, lack of cultural competency, language barriers, etc.
2. *Economic Stability*: unemployment, poverty, homelessness, etc.
3. *Education:* low literacy, low education levels, ineffective parent education, etc.
4. *Healthy Behaviors*: poor dietary habits, lack of physical activity, tobacco use, substance use, etc.
5. *Health Care*: lack of access to preventive health care or disease management, lack of health insurance, etc.
6. *Legislation*: elections, policy changes, health care system reform, etc.
7. *Neighborhood and Built Environment:* limited access to parks, poor neighborhood walkability, poor air quality, lack of healthy food options, etc.
8. *Resources*: lack of funding, inadequate technology, shortage of health care professionals, etc.
9. *Social Environment*: exposure to community violence, lack of emotional support, etc.

**The top 5 Forces of Change identified by PHS were more specific and are listed as such.*

Sources: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey; 5-Year Forces of Change: Proposed Threats and Opportunities, administered to PHS Senior Staff on November 6th, 2015.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

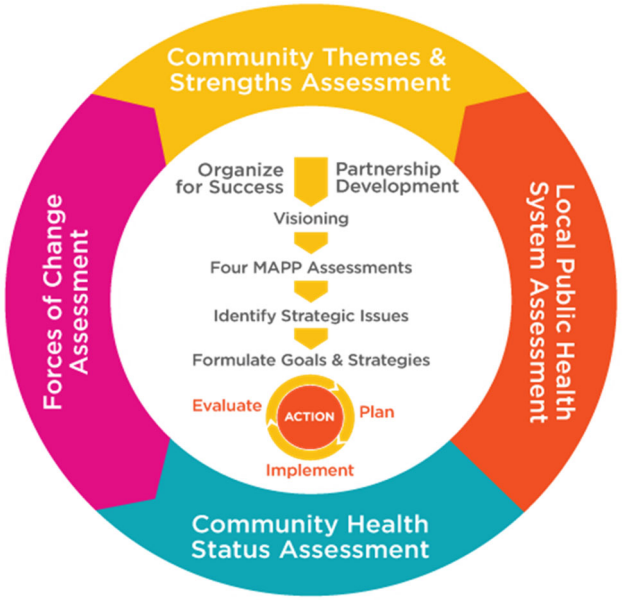
RESULTS OF MAPP ASSESSMENT

Community Health Status Assessment

Forces of Change Assessment

Community Themes & Strengths Assessment

Local Public Health Systems Assessment



LIVE WELL
SAN DIEGO

COMMUNITY THEMES AND STRENGTHS

This section summarizes the community assets and resources, as required by the Public Health Accreditation Board (Measure 1.1.12). This was accomplished using the *Mobilizing for Action through Planning and Partnerships* (MAPP) Themes and Strengths Assessment. According to National Association of County and City Health Officials (NACCHO), the Community Themes and Strengths Assessment provides a deep understanding of the issues that residents feel are important. This assessment identifies key community strengths and assets by answering the following questions: *"What is important in the community? How is quality of life perceived in the community? What assets are present in the community that can be used to improve community health?"*

Each of the Health and Human Services Agency (HHSA) Regions has unique community themes, strengths, and assets available based on their geography and demographics. In order to assess these, members of each Region's community leadership team were asked to complete a survey distributed via SurveyMonkey to collect thoughts on both Forces of Change and Community Themes and Strengths. The survey consisted of 15 questions total, of which 11 were designed to capture community themes and strengths.

A caveat with the data presented in this section is that sample sizes were relatively small, despite the survey being distributed to all community partners in all Regions. Only a small number responded. As a result, the data represented in the following figures may not accurately describe the distribution of opinions among all residents and partners in each Region.

Participants were asked to rank the five most important health problems in the community. Importance was defined as having the greatest impact on overall community health. Every Region rated **mental health issues** in the top five, along with **alcohol and drug use** (Table 20). Other important health issues included **obesity**, along with **asthma**, **diabetes**, **cancer**, and **heart disease**. In the table on the following page, health issues are grouped by category: behavioral health issues are within the grey box, chronic diseases are within the blue box, and other concerns or diseases (aging, sexually transmitted diseases, infectious diseases, and teenaged pregnancy) are within the white and brown boxes. Behavioral Health issues and chronic diseases were most commonly higher ranked. (see Table 21).

Participants were also asked to select which one of their previously identified health issues had the *least amount of resources* available to address the issue. All Regions listed **mental health issues** as having the least amount of available resources; it was the top response in all Regions except for East, in which it tied for second. All

Table 20. Health Problems Having the Least Amount of Resources by HHSA Region, 2016.

East Region:	North Central Region:	North County Regions:
• *Mental Health Issues* • *Aging Concerns* • *Alcohol and Drug Abuse* • *Diabetes* • *Obesity* • *High Blood Pressure*	• *Mental Health Issues* • *Aging Concerns* • *Alcohol and Drug Abuse* • *Cancer* • *Heart Disease* • *High Blood Pressure*	• *Mental Health Issues* • *Aging Concerns* • *Suicide* • *Alcohol and Drug Abuse* • *Unintentional Injury* • *Diabetes* • *Cancer* • *Lung Disease* • *Teenage Pregnancy* • *Asthma*
Central Region:	**South Region:**	
• *Mental Health Issues* • *Aging Concerns* • *Suicide*	• *Mental Health Issues* • *Aging Concerns* • *Obesity* • *Lung Disease* • *Teenage Pregnancy*	

Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey. Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

Regions also listed **aging concerns**, as either their second or third most common response. Other issues selected included **obesity**, **suicide**, **cancer**, **heart disease**, **unintentional injury**, and **teenage pregnancy**. Selected concerns are listed in the table above; some Regions selected more health concerns than others (Table 21). Overall, members of the community are concerned primarily with mental health issues, followed by chronic disease.

COMMUNITY THEMES AND STRENGTHS

Table 21. Most Important Health Problems by HHSA Region, 2016.

Region/ Rank	1	2	3	4	5	6	7	8	9	10
Central	Mental Health Issues	Alcohol/Drug Abuse	Other^	Obesity	High Blood Pressure	Asthma	Diabetes	Aging Concerns	Heart Disease	Infectious Disease
East	Asthma	Alcohol/Drug Abuse	Aging Concerns	Obesity	Mental Health Issues	Diabetes	Heart Disease	Cancer	Unintentional Injury	Suicide
North Central	Mental Health Issues	Aging Concerns	Alcohol/Drug Abuse	Heart Disease	High Blood Pressure	Obesity	Diabetes	Suicide	Cancer	Unintentional Injury
North County	Mental Health Issues	Obesity	Alcohol/Drug Abuse	Sexually Transmitted Diseases	Diabetes	Cancer	Asthma	Aging Concerns	Suicide	Teenage Pregnancy
South	Alcohol/Drug Abuse	Asthma	High Blood Pressure	Mental Health Issues	Obesity	Diabetes	Cancer	Aging Concerns	Teenage Pregnancy	Unintentional Injury

Blue = Chronic Disease *Grey = Behavioral Health Concerns* *Brown = Infectious Disease* *Orange = Safety/Community* *White = Social Issues*

^ "Other" refers to community violence, issues facing youth, and difficulty accessing health services.

"Aging Concerns" are captured here as Social Issues or "White."

Note: Sample sizes were small. As a result, the data represented in the following figures may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region. North County includes both the North Inland and North Coastal Regions.

Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.

COMMUNITY THEMES AND STRENGTHS

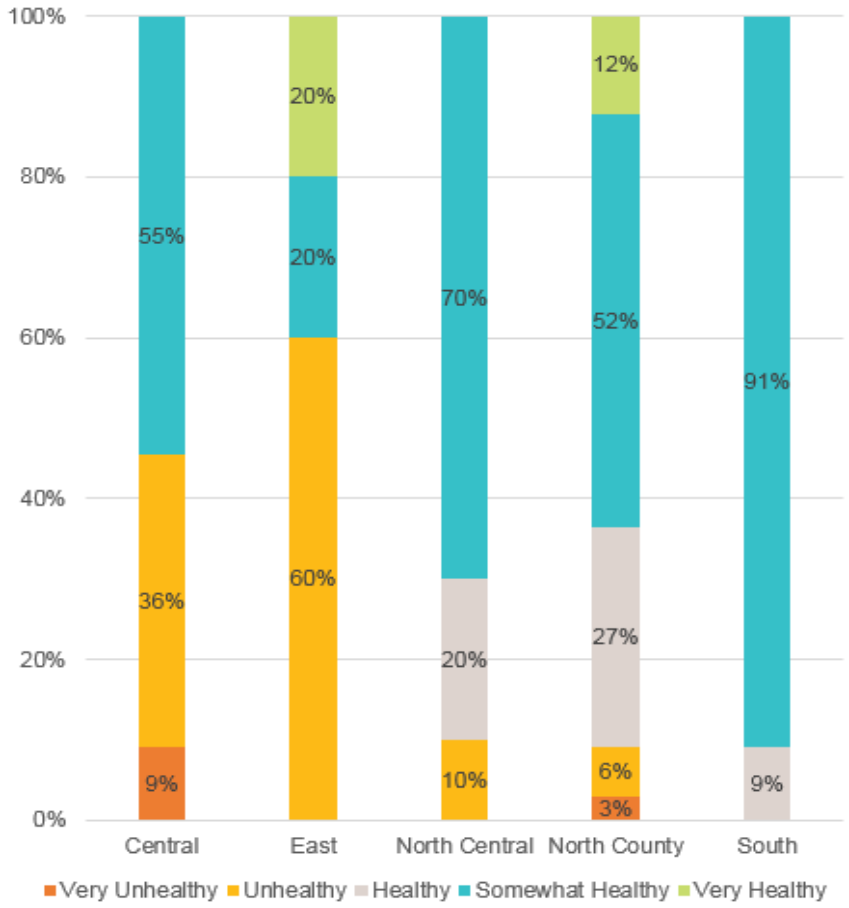
The next section asked participants to think about the attributes of a healthy community, such as features or attributes that promote both mental and physical well-being, and then rank their top five attributes that need the most improvement. The results are displayed in Table 22 on the following page. Every Region listed **affordable housing** as an important attribute that needed improvement within their top four. All Regions listed **good jobs and strong economy** within their top 4, with the exception of North Central Region. Each Region also listed **access to health care and other services** within their top five, with the exception of South Region. Other high-ranking attributes included low death and disease rates, community involvement, strong family life, and equity. The following table is color coded by *Live Well San Diego* component, with attributes of Building Better Health in blue, Living Safely in orange, and Thriving in green. Most of the higher ranked attributes fell under the area of Thriving.

Community Perceptions

In the second half of the survey, participants were asked to rate their community on healthiness, safety, age-friendliness, economic opportunity, accessibility of arts and culture, and volunteer or advocacy opportunities.

Most participants rated their communities as *somewhat healthy*. Central and East Regions, however, had a higher percentage of respondents who believed that their community was *unhealthy* (see Figure 88).

Figure 88. Community as a Healthy Place to Live or Work by HHSA Region, San Diego County, 2016.



Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

COMMUNITY THEMES AND STRENGTHS

Table 22. Attributes of a Healthy Community Needing the Most Improvement by HHSA Region, San Diego County, 2016.

■ Building Better Health ■ Living Safely ■ Thriving

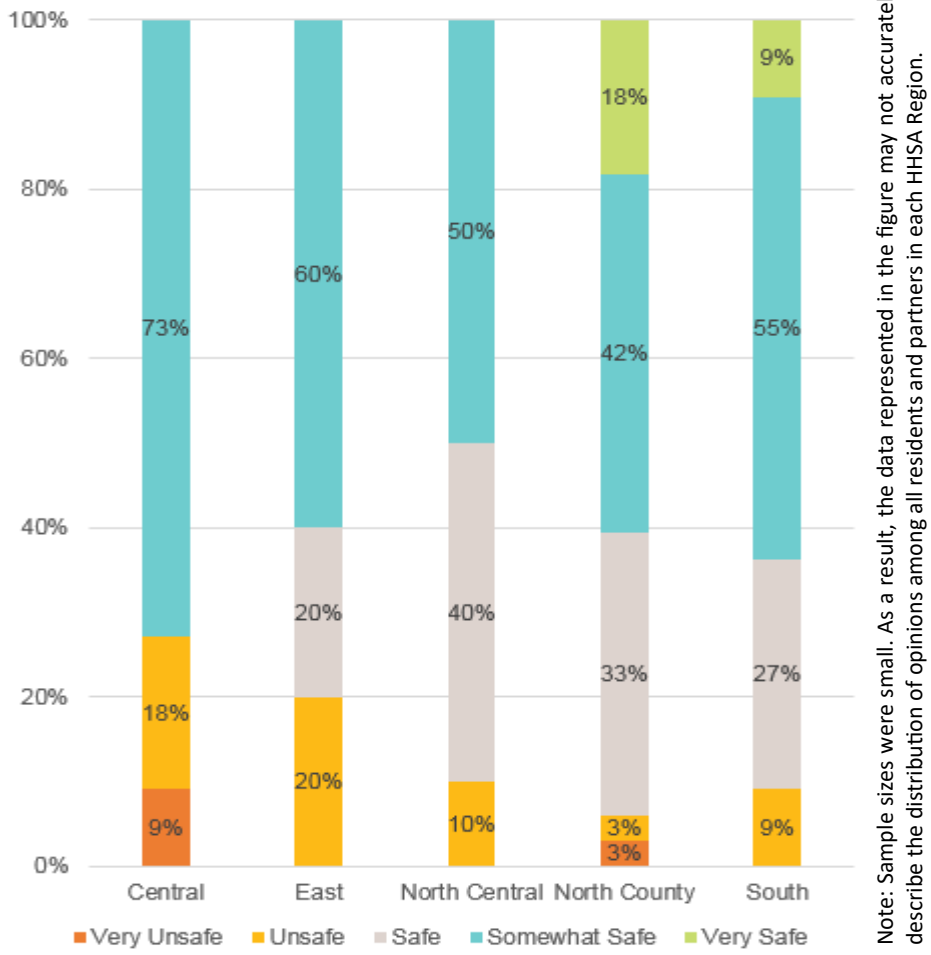
Rank	Central Region	East Region	North Central Region	North County Regions	South Region
1	Good jobs and strong economy	Good jobs and strong economy	Arts and cultural events	Access to health care and other services	Low death and disease rates
2	Affordable housing	Access to health care and other services	Access to health care and other services	Access to public transit	Walkable and bikeable communities
3	Equity	Low death and disease rates	Low crime/safe neighborhoods	Affordable housing	Affordable housing
4	Access to fresh fruit/ vegetables	Affordable housing	Affordable housing	Good jobs and strong economy	Good jobs and strong economy
5	Access to health care and other services	Community involvement	Strong family life	Strong family life	Low crime/safe neighborhoods
6	Community involvement	Low crime/safe neighborhoods	Clean environment	Low death and disease rates	Good Schools
7	Strong family life	Access to public transit	Community involvement	Access to fresh fruit/ vegetables	Access to health care and other services
8	Access to public transit	Strong family life	Equity	Community involvement	Access to fresh fruit/ vegetables
9	Low crime/safe neighborhoods	Access to fresh fruit/ vegetables	Low death and disease rates	Religious or spiritual values	Equity
10	Respect for diversity	Access to parks and recreation opportunities	Walkable and bikeable communities	Access to parks and recreation opportunities	Access to public transit

Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region. North County includes both the North Inland and North Coastal Regions.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

COMMUNITY THEMES AND STRENGTHS

Most participants rated their communities as a *somewhat safe* place to grow up and/or raise kids. Central Region, however, rated its community as more *unsafe*. The North County Regions had a higher percentage of respondents who rated their community as a *safe* or *very safe* place to grow up and/or raise kids (Figure 89).

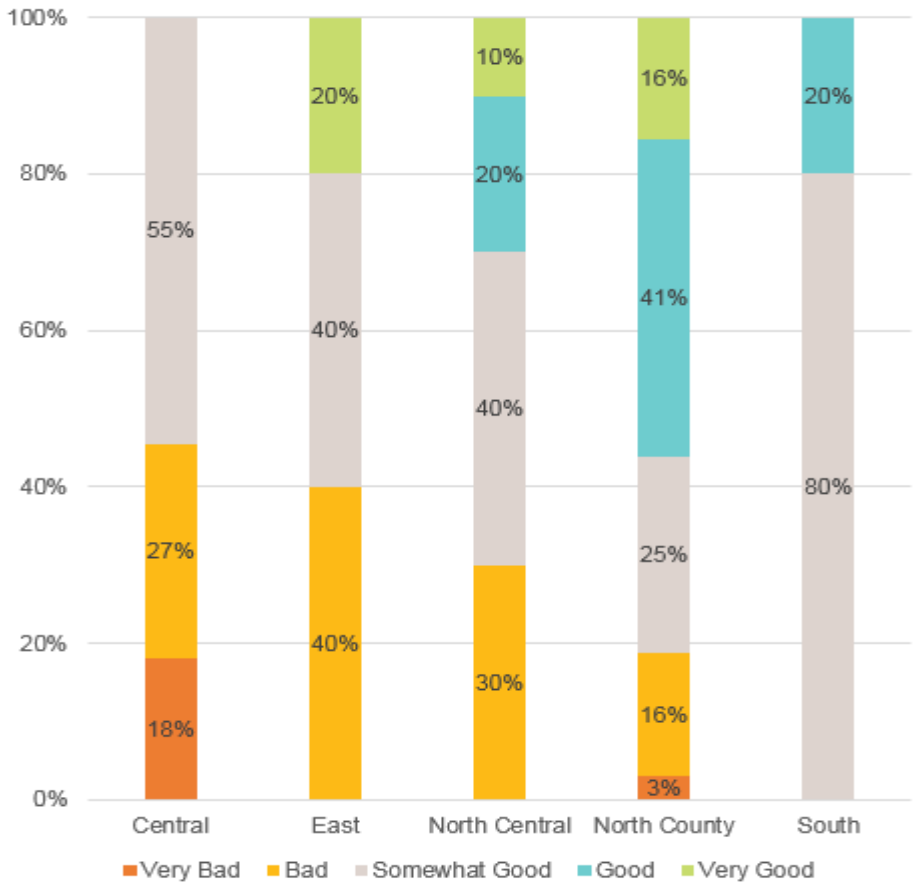
Figure 89. Community as a Safe Place to Grow Up or Raise Kids by HHSA Region, San Diego County, 2016.



Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.

Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey. Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

Figure 90. Community as a Good Place for Older Adults by HHSA Region, San Diego County, 2016.



Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

North County participants most commonly ranked their community as a *very good* or *good* place for older adults. Central and South had higher percentages of respondents who ranked their community as a *somewhat good* place for older adults. In North Central and East Regions, participants ranked their communities as a *somewhat good* or *bad* place for older adults (Figure 90).

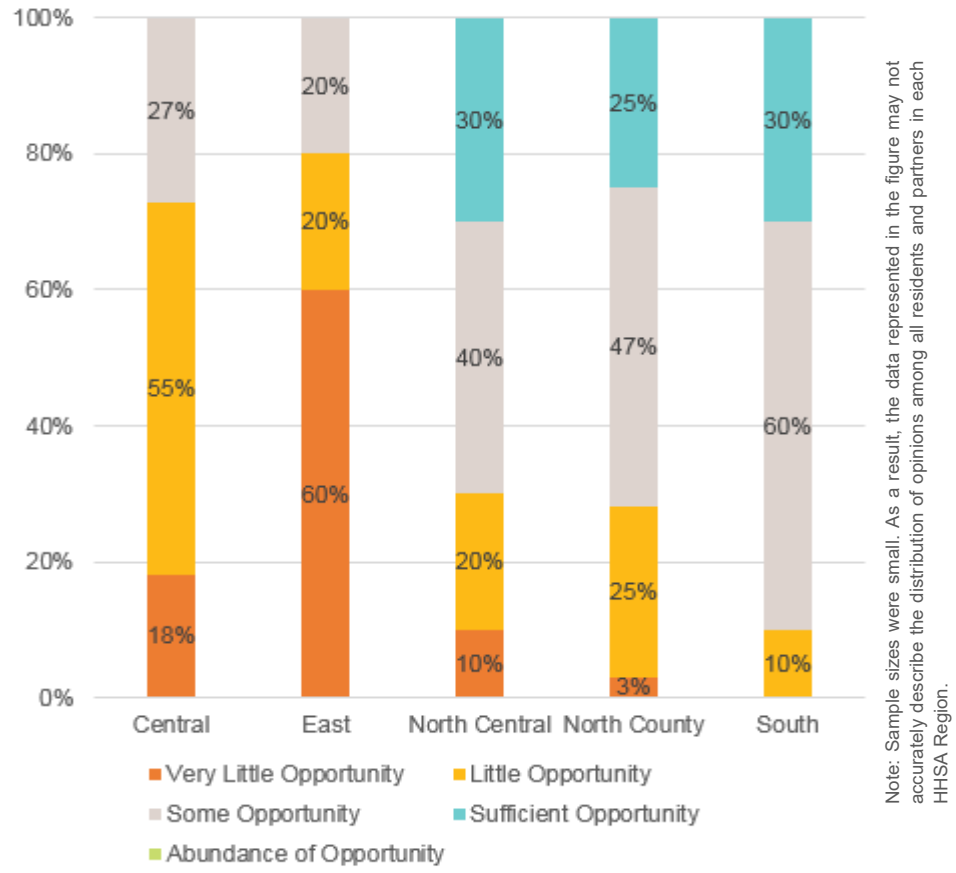
Figure 91. Suggestions to Improve Community for Older Adults, 2016.

Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

When asked what could be improved to make the community a better place for older adults, participants responded with several suggestions around three main themes**: public transit/transportation**, **affordable housing**, and **social/volunteer opportunities** for older adults.

The results of this question are presented in the word cloud (Figure 91), and are color coded; blue phrases have to do with the *Live Well San Diego* component of building better health, orange phrases refer to the living safely component, and green phrases refer to the thriving component. In order to make the community a better place for older adults, participants in all Regions agreed that the most work was needed on areas related to thriving, such as social interaction, volunteer opportunities, and availability of services and resources for older adults.

Figure 92. Availability of Economic Opportunity within Community by HHSA Region, San Diego County, 2016.

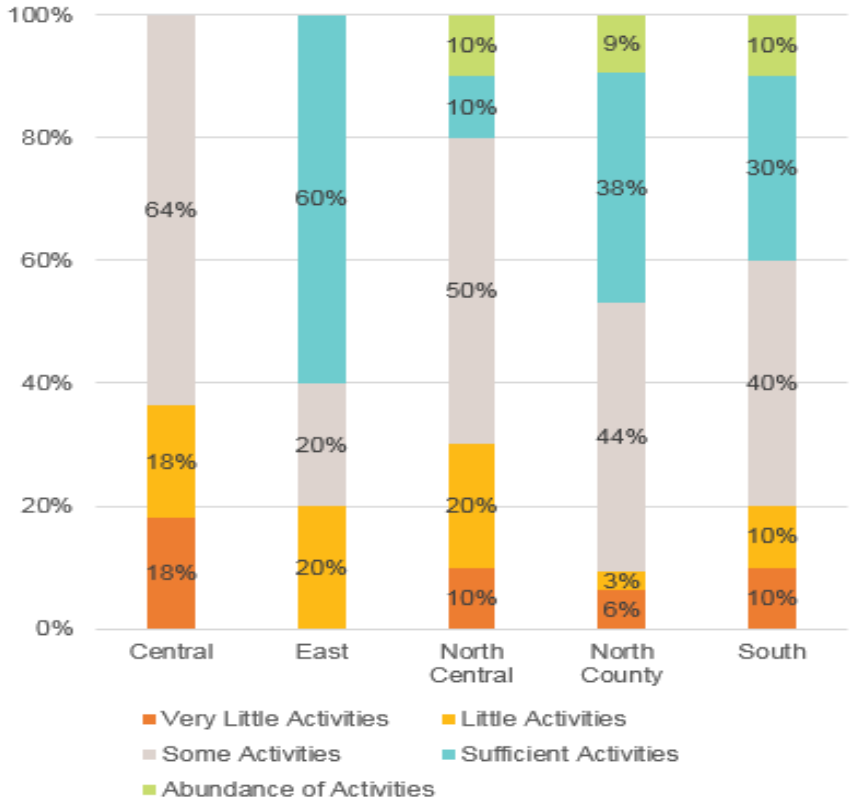


Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.

Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

With the exception of South Region, all other Regions had higher percentages of respondents who believed that there was *little* or *very little* economic opportunity within their Region, especially within the East Region (Figure 92 above).

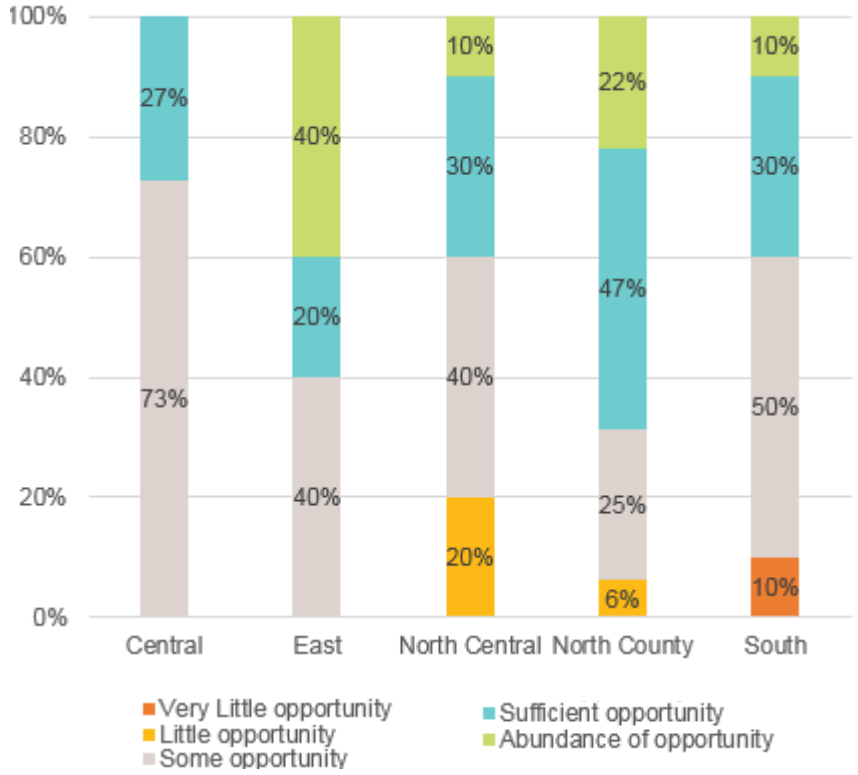
Figure 93. Availability of Arts, Culture, and Other Creative Activities within Community by HHSA Region, San Diego County, 2016.



Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

When asked if there were ways to participate in or experience the arts, culture, or other creative opportunities within their community, the majority of participants felt that there were either *sufficient* or *some activities* available (Figure 93).

Figure 94. Availability of Volunteer and Advocacy Opportunities within Community by HHSA Region, San Diego County, 2016.



Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

When asked if there were opportunities to volunteer and/or advocate for others within their community, the majority believed that there were *sufficient* or *some opportunities* available (Figure 94).

The last item on the questionnaire asked participants to think about action that could be taken to ensure all residents of their Region could be Healthy, Safe, and Thriving. This free response question garnered the answers depicted in the word cloud (Figure 95). The responses are color coded by *Live Well San Diego* component: blue for Building Better Health, orange for Living Safely, and green for Thriving.

Figure 95. Actions to Take to Strengthen Community so Everyone can be Healthy, Safe, and Thriving, San Diego County, 2016.

Note: Sample sizes were small. As a result, the data represented in the figure may not accurately describe the distribution of opinions among all residents and partners in each HHSA Region.
Source: 2016 CHA Survey, administered to County of San Diego, Health & Human Services Agency, Service Region Community Leadership Teams in January 2016, via SurveyMonkey.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, PHS Administration & Community Health Statistics Units, 2018.

COMMUNITY THEMES AND STRENGTHS

Community Strengths

The communities in San Diego County have an abundance of resources available—from community-based organizations, to faith-based organizations, to healthcare outlets such as hospitals and community clinics. Several grant-funded programs are also in place within the County, and legislation within the State influences the promotion of health behaviors to prevent chronic disease.

The following section describes assets within San Diego County that may be leveraged in order to improve the health and well-being of residents who live within the Region. This compilation of assets is broken down by Local, State, and National, and represent programs, legislation, and accompanying funding streams. Built on the list included in the previous CHA, this list is not all-encompassing, but does provide a snapshot of the resources available to, and within, the community.

As part of collective impact, government, business, philanthropy, non-profit organizations, and citizens are working together to achieve significant and lasting social change, to improve the health and well-being of residents of San Diego County. The collective impact approach is demonstrated through the collaborations listed below.

Live Well San Diego Assets

Live Well San Diego Community Leadership Teams

HHSA Regional community leadership teams began to form in 2010, and provide an avenue for members of the community and community-based organizations to get involved in promoting building better health, living safely and thriving within their Regions.

Live Well San Diego Recognized Partners

Live Well San Diego involves partner organizations in all sectors – from government, to business, to schools, to faith-based and community organizations – through a shared purpose. Working together allows for planning and implementation of innovative and creative projects to bring the *Live Well San Diego*'s vision of a Region that is Building Better Health, Living Safely and Thriving to life.

Healthiest Cities & Counties Challenge–Southeastern San Diego

The Healthiest Cities and Counties Challenge is a competition with a $1.5 million prize, challenging small and mid-sized U.S. cities and counties to develop practical, evidence-based strategies to improve measurable health outcomes and promote health and wellness, equity, and social interaction. Southeastern San Diego in the Central Region, a historically underserved community, was selected to participate in this challenge.

Communities of Excellence 2026 – South Region, San Diego County (COE 2026)

COE 2026 assists and supports communities to implement Baldrige-based communities of excellence framework, to achieve and sustain the highest quality of life for the people residing within that community.

The Alzheimer's Project

Under the umbrella of The Alzheimer's Project, our Region's top political leadership, research institutions, public universities, health care systems, caregiver groups and others are working as a team to help families, and to do nothing less than find a cure.

San Diego County Library (SDCL)

SDCL has served the community of San Diego County since opening its doors in 1913. With 33 branches and 2 bookmobiles, SDCL serves over one million residents across a 4,000-square-mile County. SDCL's mission is to inform, educate, inspire, and entertain. SDCL mobile libraries also host health events in rural areas, including the Kick the Flu summit. This program informs healthcare workers about the current flu season and vaccination, and offers vaccination clinics in rural areas.

Resident Leadership Academies (RLAs)

Resident Leadership Academies (RLAs) are multi-week training programs for San Diego County residents who want to learn how to improve their local communities. Training sessions focus on topics such as community leadership, crime prevention and safety, land use and active transportation, and healthy food systems. Residents learn skills and best practices to address the issues that most affect their communities, and they work alongside their neighbors to help improve quality of life where they live. Upon graduation, attendees have new knowledge and access to a support network to help them lead community improvement projects.

Live Well San Diego Healthy Works

Healthy Works: Paths to Healthy Living Programs, Policies & Initiatives began in 2010 as part of a two-year Community Transformation Grant received from the Centers for Disease Control and Prevention. Healthy Works continues today with the following programs (titles in blue) that are also among *Live Well San Diego* assets.

Healthy Cities, Healthy Residents (HCHR)

This project seeks to create healthy communities by supporting community-based organizations (CBOs), residents, and cities in working together to advance healthy and equitable planning, policies, and neighborhood environments.

The central goals of the project are:

- To increase CBO capacity to advance policies and to implement environmental changes, and
- To encourage cities to adopt policies and improve environments to prioritize health.

In partnership with CBOs, local coalitions, and cities, HHSA provides direct funding along with technical assistance in planning and development of policies that support active transportation, healthy food environments, and place making. Local HCHR coalitions are:

- Expanding their membership to include more residents and community stakeholders who will champion policy and environmental change in each of the three partnering cities.
- Training residents using the Resident Leadership Academy curriculum or similar leadership model.
- Conducting scans of their city's local policies and environmental assessments of their community.
- Working with their cities to develop community-driven policies on healthy food systems and active transportation/active living.
- Encouraging decision makers to adopt the policies and implement environmental changes.

Lactation Supportive Environments

The County of San Diego Health and Human Services Agency's (HHSA) Lactation Supportive Environments (LSE) project is implemented by University of California, San Diego–Center for Community Health and funded by First 5 San Diego. The LSE project focuses on increasing the initiation and duration of breastfeeding through lactation promotion, capacity building, policy implementation, systems enhancement, and environmental change strategies in worksites, school districts, childcare settings, and Community Healthcare Clinics (CHCs).

Nutrition Education and Obesity Prevention (NEOP) Program—CalFresh

The Supplemental Nutrition Assistance Program: Nutrition Education and Obesity Prevention Grant Program (NEOP) is a Federal and State partnership that supports nutrition education for persons eligible for the Supplemental Nutrition Assistance Program (SNAP). SNAP participants as well as those who are eligible (i.e., up to 185 percent Federal Poverty Level) receive education and resources to help them:

- Consume healthy foods and beverages,
- Reduce consumption of less healthy foods and beverages, and
- Increase physical activity.

Available through many avenues, such as faith-based programs, retail programs, school and worksite wellness programs, NEOP through Healthy Works collaborates with many locally contracted community partners to help make San Diego County a healthier place to live, work, learn, play and worship.

Prevention Initiative

The County of San Diego Health and Human Services Agency (HHSA) is leading the implementation of a $14 million federal grant, *Public Health Actions to Prevent Obesity, Diabetes, Heart Disease and Stroke*, locally known as Healthy Works: Prevention Initiative. Launched in 2014, this four-year initiative, focused in the City of San Diego, is funded by the Centers for Disease Control and Prevention (CDC) National Center for Chronic Disease Prevention and Health Promotion.

The goal of the Healthy Works: Prevention Initiative is to support implementation of general and specific population approaches to prevent obesity, diabetes, heart disease, and stroke, as well as reduce adult health disparities. Specific populations being addressed include residents experiencing racial, ethnic, or socioeconomic disparities with uncontrolled high blood pressure or at high risk for Type 2 diabetes.

The County of San Diego HHSA is working with several locally contracted partners to execute the Healthy Works: Prevention Initiative:

- Arboreta Group, LLC
- Be There San Diego Initiative
- City of San Diego
- Civilian, Inc.
- University of California, San Diego Center for Community Health

CalBRACE: California Building Resilience Against Climate Effects

Launched in 2014, this initiative is funded by the Centers for Disease Control and Prevention (CDC). A central goal of CalBRACE is to enhance California Department of Public Health's capacity to address climate and health issues and to provide Local Health Departments (LHD) with resources and technical assistance to build their climate adaptation capacity and enhance resilience at the Local and Regional levels.

As part of the CalBRACE-LHD partnership, HHSA will provide unique local knowledge and perspective to assist CDPH in developing a California climate and health risk profile, conducting an assessment of population vulnerability and burden of disease and injury, and creating other work products.

CalBRACE activities include:

- Compiling information on localized climate projections over the next decades,
- Developing local vulnerability assessments and projections of the added burden of disease and injury due to climate change, and
- Identifying effective strategies for preparedness and resilience.

University of California San Diego (UCSD) Scripps Institute of Oceanography

Research led by the UCSD Scripps Institute of Oceanography resulted in the Regional Report for San Diego, part of the California's Fourth Climate Change Assessment (Fourth Assessment), which advances actionable science that serves the growing needs of State and Local-level decision-makers from a variety of sectors.

This cutting-edge research initiative is comprised of a wide-ranging body of technical reports, including rigorous, comprehensive climate change scenarios at a scale suitable for illuminating regional vulnerabilities and localized adaptation strategies in California. It also includes datasets and tools that improve integration of observed and projected knowledge about climate change into decision making; and recommendations and information to directly inform vulnerability assessments and adaptation strategies for California's energy sector, water resources and management, oceans and coasts, forests, wildfires, agriculture, biodiversity and habitat, and public health.

Housing Programs

Project One For All

Project One For All (POFA) grew out of Project 25, an effort to house and provide care for the 25 most chronic homeless users of Emergency Medical Services. POFA is a "housing first" model which does not require those served to be drug free or sober before entering housing. The goal is to house 1,250 homeless individuals with serious mental illness throughout the County.

County of San Diego Housing and Community Development Services (HCDS) Affordable Housing Strategy

This program is adding capacity for low-income residents: 261 total units for low to moderate income clients, POFA clients, and veterans. The program includes a landlord incentive program, with rewards such as a monetary leasing bonus of $500, damage claim reimbursement up to $5,000, a security deposit up to 2 times the rent, application expenses up to $25, and a landlord liaison (full-time dedicated staff) as incentive to rent to people utilizing this County program.

The program also includes:

- Housing trust fund of $25 million,
- Innovation fund ($500,000),
- County surplus property, and
- Federal entitlement grant programs.

Community Health Improvement Partners (CHIP) Programs, Policies, and Initiatives

CHIP was established in 1995 in order to address critical community health issues through collaboration, education, advocacy, policy change, and environmental change, to ultimately reduce health disparities within the San Diego area.

San Diego County Childhood Obesity Initiative (COI)

The Childhood Obesity Action Plan (COAP) is the guiding document for COI activities, and also serves to guide the broader community in working to reduce and prevent childhood obesity in San Diego County by creating environments and policies that support healthy eating and active living. The COI, begun in 2006, has adopted a collective impact model to create, support, and mobilize partners from multiple domains (i.e., sectors); provide leadership and vision; provide education and advocacy; and coordinate and sustain countywide efforts in the prevention and reduction of childhood obesity.

To assure effective implementation of the strategies outlined in the COAP, partners from the following domains collaborate to fulfill the COI mission:

- Government
- Healthcare
- Schools and After-School
- Early Childhood
- Community
- Media
- Business

The COI has established active workgroups in each domain to develop, leverage, and replicate best practices and resources throughout San Diego County and shape a healthy future for children.

Sodium Reduction Initiative

The County of San Diego Health and Human Services Agency (HHSA) led implementation of a $500,000 federal grant, *Sodium Reduction in Communities Program*, locally known as the Healthy Works: Sodium Reduction Initiative. The two-year initiative (2014-2016) was funded by the Centers for Disease Control and Prevention (CDC). The initiative was then renewed for a five-year project (2016-2021).

The Sodium Reduction Initiative focused on increasing the number of healthy, low-sodium choices for meals sold in County of San Diego worksite cafeterias, and served to seniors, psychiatric hospital patients, juvenile and adult detainees, and children in foster care group homes.

The Sodium Reduction Initiative's goal to reduce sodium in meals by 5% in each of the two years of the program was met and exceeded through a combination of changes to procurement procedures, food preparation practices, and promotion. The four venues targeted for sodium reduction activities were administered by the following County groups and departments: HHSA (Aging & Independence Services and Behavioral Health Services), Public Safety Group (San Diego County Sheriff's Department), and Finance and General Government Group (Department of General Services). Food service operators participating in the Sodium Reduction Initiative included:

- City of Vista (contractor for senior meal site)
- CulinArt (lease-holder at County Operations Center worksite cafeteria)
- Food Management Associates (contractor for County of San Diego Psychiatric Hospital)
- San Diego County Sheriff's Food Services

Tobacco Control Resource Program

In 1990, the HHSA Tobacco Control Resource Program (TCRP) was established to offer tobacco prevention, education, and quit-smoking programs. The program was made possible by the passage of Proposition 99 in 1988, which increased the tax on cigarettes by 25 cents per pack. Part of these tobacco tax monies is directed toward statewide health education to inform Californians about the health hazards of tobacco use and exposure to tobacco smoke. The TCRP works to:

- Reduce tobacco promoting influences,
- Reduce exposure to secondhand smoke,
- Reduce access to tobacco products, and
- Promote tobacco cessation.

Community Health Improvement Partners (CHIP) Food Systems

CHIP's Food Systems Initiative works to create a healthy, sustainable, and just food system. In collaboration with many San Diego County institutions, food and farm businesses, food systems advocates, and community partners, we are helping grow the good food movement in San Diego County. CHIP's Food Systems Department focuses on three key areas:

1. *Farm-to-Institution*: Working with San Diego County schools, hospitals, local government, farmers, produce distributors, good food businesses, and community partners to bring more good food to hundred of thousands of people across San Diego County.
2. *Food Systems Research:* Conducting innovative food systems research with and for food and farm businesses, nonprofits, local governments, social enterprises, and foundations working to improve the food system.
3. *Food Justice:* Highlighting and addressing systemic inequality in the food system, strategically contributing to food justice initiatives as an ally wherever possible.

Lemon Grove HEAL Zone

The Lemon Grove HEAL Zone is a community collaborative funded by Kaiser Permanente and convened by Community Health Improvement Partners (CHIP). This program aims to help residents to lead healthier lives through environmental changes that are sustained by policies and enhanced by education and promotion.

Racial and Ethnic Approaches to Community Health (REACH) Chula Vista

As part of the Childhood Obesity Initiative, the REACH project is funded through the CDC, and supports effective implementation of existing policy, systems, and environmental improvements, and offers opportunities for the western Chula Vista community to take comprehensive action to address risk factors contributing the most common and debilitating chronic conditions including poor nutrition and physical inactivity. Project activities focus on improving access to healthy foods and beverages and opportunities for physical activity.

Health Literacy San Diego (HLSD)

HLSD is a joint effort between CHIP and the San Diego Council on Literacy aimed to improve communication between residents and healthcare providers by addressing literacy issues such as literacy abilities, language barriers, and cultural differences. This initiative includes the formation of the Health Literacy San Diego taskforce, made up of experts from both the literacy and healthcare sectors.

Independent Living Association (ILA)

The ILA is a collaborative community effort to support those who own Independent Living facilities (homes or complexes that provide housing for adults with mental illness and other disabling health conditions), those who live within these facilities, and the community, by promoting high-quality facilities. They are also a resource to turn to for objective, unbiased information about independent living facilities in San Diego County.

San Diego Suicide Prevention Council (SPC)

This committee is a collaborative, community-wide effort focused on realizing a vision of zero suicides in San Diego County. The mission is to prevent suicide and its devastating consequences. With continued support from the County of San Diego, the SPC provides oversight, guidance, and collective support to implement the recommendations of the Suicide Prevention Action Plan.

Community Health Improvement Partners (CHIP) Public Policy Committee

This is a forum for CHIP and its partners to discuss legislative issues, track key issues, identify problems and propose solutions regarding five priority issues: access to healthcare, social determinants of health, obesity, mental/behavioral health, and violence and injury prevention.

Resident Leadership Academies (RLAs)

The Community Health Improvement Partners were instrumental partners in coordinating the training and providing technical assistance for RLA graduates. RLAs were first developed in 2011 using Communities Putting Prevention to Work funds, and are now funded with Community Action Partnership (CAP) funds. After a successful pilot in San Diego County, the RLA program expanded to other cities. As a result, RLAs had trained 719 resident leaders in over 56 academies from 2011-2019.

Behavioral Health Work Team

Through collaboration among a broad array of community partners, the CHIP Behavioral Work Team will contribute to the improvement of mental health services and reduction of stigma by:

- Keeping track of community behavioral health issues and needs,
- Developing or stimulating development of projects to meet community needs, and
- Supporting existing, effective behavioral health programs.

Other Local Programs, Policies & Initiatives

2-1-1 San Diego

A resource within the community to bring organizations together to help people efficiently access appropriate service, and provide vital data and trend information for proactive community planning.

Safe Routes to School – HHSA, SANDAG, Rady Children's Hospital-San Diego, Circulate San Diego

Safe Routes to School is an international movement that has taken hold in communities throughout the United States. The goal is to increase the number of children who walk or bicycle to school by funding projects that remove the barriers that currently prevent them from doing so through education and encouragement programs aimed at children, parents, and members of the community. Those barriers include lack of infrastructure, unsafe infrastructure, and lack of programs that promote walking and bicycling.

San Diego Food System Alliance

Currently, the Alliance consists of more than 30 members representing a diverse cross section of the food system, including (but not limited to): distribution, health, food security, philanthropy, production, education/ research and government. The Alliance is not an independent organization, but rather a collaborative of organizations and individuals utilizing a collective impact model to affect positive change in the Region's local food system.

Smoke-Free San Diego

This program declares all indoor and outdoor common areas smoke-free; adopts a policy declaring non-consensual exposure to secondhand smoke as a nuisance in the City of San Diego; and formed the Tobacco-Free Communities Coalition.

Healthy Chula Vista Initiative

Primary goal: to provide residents with tools to lead a healthier lifestyle. The City, in partnership with a variety of agencies throughout the community, intends to respond to identified barriers to healthy living options in the City and collaborates on events and efforts to promote health and well-being in the community. Policy will be guided by the Healthy Chula Vista Advisory Commission which was formed in March 2016.

Regional Taskforce on the Homeless

The Regional Taskforce on the Homeless is an integrated array of stakeholders committed to preventing and alleviating homelessness in San Diego. They provide essential data and insights on the issue of homelessness, informing policy and driving system design and performance.

San Diego Military Family Collaborative (SDMFC)

From six organizations in 2010, the SDMFC grew by word of mouth and today comprises more than 400 representatives from over 100 unique public, private, faith -based, military, and governmental organizations. Social Advocates for Youth, San Diego provides fiscal oversight and staffing support. Together as a community, in partnership with active duty, reservists, veterans, and their families, San Diego will give military men and women the just response deserving of their sacrifice and service.

San Diego Health Connect

This health information utility-based nonprofit continues to be a partnership of health care providers, clinics, hospitals, emergency medical services, and public health organizations. San Diego Health Connect securely connects hospitals, health systems, patients, private health information exchanges (HIEs) and other healthcare stakeholders—so that they can share important health information.

San Diego Food Bank

The Jacobs & Cushman San Diego Food Bank and our North County Food Bank chapter comprise the largest hunger-relief organization in San Diego County. Last year, the Food Bank distributed 26 million pounds of food, and the Food Bank serves, on average, 370,000 people per month in San Diego County.

State Programs, Policies, Initiatives and Legislation

Proposition 63 Mental Health Services Act (MHSA; Passed 2004)

Effective January 1, 2005; continues to provide State funding to counties for expanded and innovative mental health programs; provides housing, program planning, community services, and workforce education and training for clients and families.

It's Up to Us Campaign (Local; Part of MHSA)

It's Up to Us is a multimedia campaign designed to empower San Diegans to talk openly about mental illness, to recognize symptoms of suicide and mental health challenges, and to use local resources and seek help.

Senate Bill (SB) 75 (Passed 2016)

Expanded Medi-Cal access to undocumented children in the State of California.

Assembly Bill 109 Public Safety Realignment (Passed 2011)

The County of San Diego Board of Supervisors approved a request to contract with a community organization in order to provide services needed by offenders that reintegrates them into the community.

SB 678 Community Corrections Partnership (Passed 2009)

SB 678 provides funds to probation departments to be used to reduce the number of adult probationers revoked from probation and sentenced to prison. Funds will come from savings realized by the California Department of Corrections and Rehabilitation (CDCR) through cost avoidance. Reduction in revocations to prison must come through the use of evidence-based practices.

SB 7 (Passed 2016)

Raises legal age to purchase tobacco from 18 to 21.

Proposition 56 (Passed 2017)

Additional $2 tax on tobacco products to fund tobacco cessation and smoking prevention programs.

National Programs, Policies, Initiatives, and Legislation

Affordable Care Act

The Affordable Care Act (ACA), signed into law in 2010, improved health insurance affordability, expanded eligibility for Medi-Cal, funded new public health care programs, and encouraged innovation in the health care delivery system nationwide. Changes impacted San Diego County residents who were previously uninsured, could not afford health insurance, or were not previously eligible for Medi-Cal. Changes to the delivery system and the availability of Federal and State funds for safety-net providers also improved access to, and quality of, care received within the County through pilot programs and health care innovation at the State and local level. A main goal of the ACA was to expand health care access and coverage to nonelderly "childless" adults, a demographic that previously did not meet eligibility requirements for Medi-Cal and may not have had access to health coverage, otherwise. From pre-ACA implementation of the Low Income Health Program, under the Medicaid §1115 waiver, and the subsequent transition of these individuals to Medi-Cal, almost 300,000 nonelderly low-income adults in San Diego have been enrolled in Medi-Cal and gained access to health care services.

Affordable Care Act: Medi-Cal 2020 Waiver

California's Section 1115 Medicaid Waiver Renewal, entitled Medi-Cal 2020, was approved by the Centers for Medicare and Medicaid Services (CMS) on December 30, 2015. In San Diego, Medi-Cal 2020 is supporting continued improvement in the quality of care, access, and efficiency of health care services for the almost 800,000 Medi-Cal beneficiaries in San Diego County and funding the Whole Person Wellness (WPW) Pilot focused on integrating services for Medi-Cal beneficiaries who are homeless or at risk of homelessness and have serious mental illness, substance use disorder, and/or multiple chronic physical conditions.

Supplemental Nutrition Assistance Program Education (SNAP-Ed)

Now called CalFresh in California, this is an entitlement program that provides monthly benefits to assist low-income households in purchasing the food they need to maintain adequate nutritional levels. In general, these benefits are for any food or food product intended for human consumption.

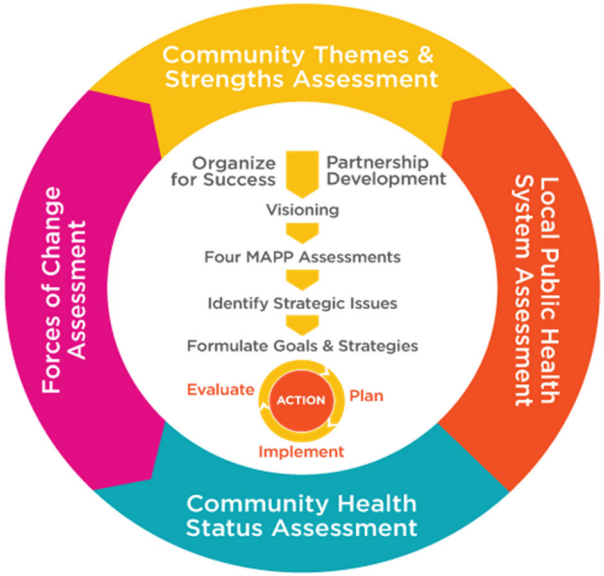
RESULTS OF MAPP ASSESSMENT

Community Health Status Assessment

Forces of Change Assessment

Community Themes & Strengths Assessment

Local Public Health Systems Assessment



LIVE WELL
SAN DIEGO

LOCAL PUBLIC HEALTH SYSTEMS ASSESSMENT

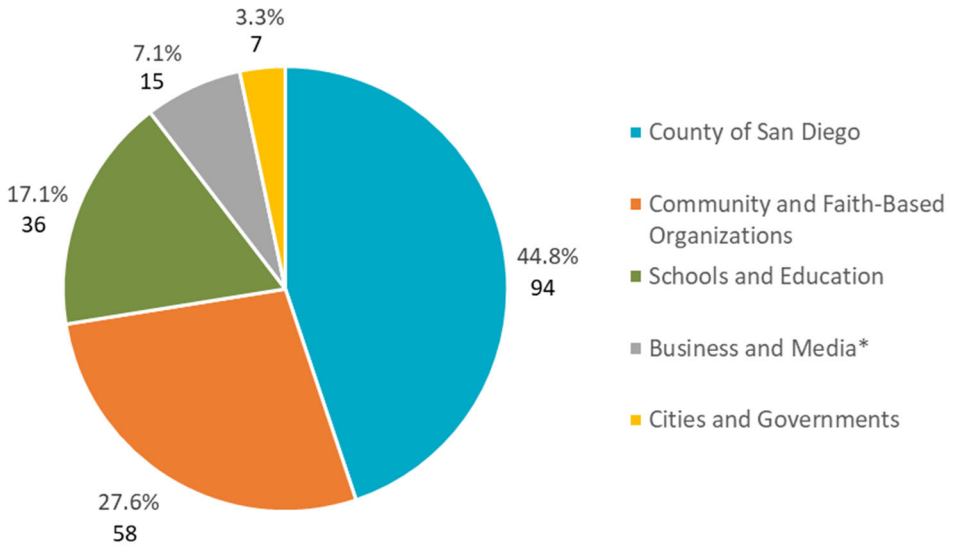
The National Public Health Performance Standards Program (NPHPSP) created the Local Public Health System Assessment (LPHSA) Instrument, which is based on the framework of the 10 Essential Public Health Services. This instrument is used by the local health department to assess the status of the entire local public health system. A public health system includes all public, private, and voluntary entities that contribute to the delivery of the Essential Public Health Services within a given jurisdiction. The LPHSA answers the questions: *"What are the components, activities, competencies, and capacities of our local public health system? How are the Essential Services being provided to our community?"*

The workshop was held on September 23, 2016, at the Marina Village Conference Center. This was the third time the County of San Diego Health and Human Services Agency (HHSA) conducted the LPHSA. The main goal of the workshop was to bring key partners from the local public health system together to complete the LPHSA and fulfill key National Public Health Accreditation standards.

Figure 96. The Ten Essential Public Health Services.

Source: Centers for Disease Control and Prevention (CDC). The Public Health System and the 10 Essential Public Health Services. https://www.cdc.gov/stltpublichealth/publichealthservices/essentialhealthservices.html. Accessed July 24, 2018.

Figure 97. Local Public Health Systems Assessment Participation by Sector, San Diego County, September 2016.



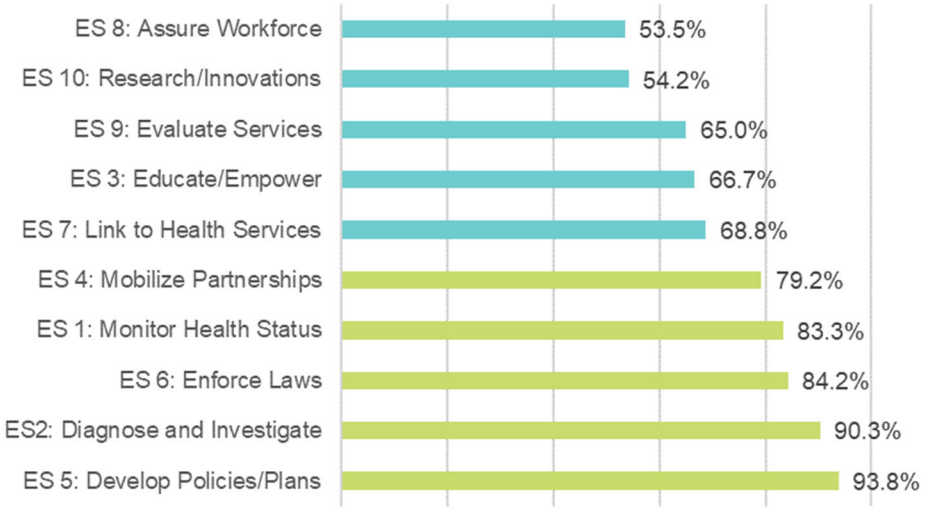
**These are predominantly health providers: hospitals (n=7) and clinics/health centers (n=7). Prepared by; County of San Diego, Health and Human Services Agency, Public Health Services Administration, 2018.*

The typical two–day format was re–designed into a full–day workshop with five morning and five afternoon concurrent sessions; each focused on one Essential Service. This was done to make it easier for County employees and members of the local public health system to participate. Workshop materials were developed using the LPHSA tool and other resource materials found on the Centers for Disease Control and Prevention website.

In total, 210 people participated in the LPHSA workshop. On the day of the event, participants were asked to complete a participant profile inquiring about their demographic information, their sector, and the Region(s) in which they provide services, to ensure adequate representation across the Local Public Health System. Figure 96 displays the breakdown of participants by sector as it aligns to *Live Well San Diego* partners.

LOCAL PUBLIC HEALTH SYSTEMS ASSESSMENT

Figure 98. Essential Services Scores, September 2016.



Color Code (% of Activity Met)
Optimal Activity (76-100%)
Significant Activity (51-75%)
Moderate Activity (26-50%)
Minimal Activity (1-25%)
No Activity (0%)

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services Administration, 2018.

Participants signed up for workshop groups based on each participant's area of expertise. Participants were encouraged to attend two sessions—one in the morning and one in the afternoon.

While in their respective Essential Service Area groups, participants were asked to independently assign a rating, on a scale of one to five, to each question. At the conclusion of the workshop, all ratings were collected and responses were entered and analyzed to obtain a mean rating for each essential service assessed. The average scores and comments provided were incorporated into one combined report for all 10 Essential Services (ES). Figure 98 shows a summary of the results for each ES and the highlighted sections represent the one to five scoring scale.

The LPHSA shows that five essential services are ranked the highest with optimal activity, including: develop policies/plans (5), at 94%; diagnose and investigate (2), at 90%; enforce laws (6), at 84%; monitor health status (1), at 83%; and mobilize partnerships (4), at 79%.

Based on results from the breakout sessions and discussion notes, there are a few key takeaways from the LPHSA Workshop. The strengths and weaknesses of the system are summarized on the following page.

- **Accessing Services:** The LPHS is strong at identifying populations in need of services. However, people are not always able to access the services they need. This provides an opportunity for the system to improve health literacy and strategize about ways to help community members navigate the health system.
- **Collaboration:** There is a strong sense of collaboration across the LPHS in terms of organizing coalitions and implementing programs. However, there is a need to improve collaboration between community–based organizations, County government and universities on research to develop innovative solutions to public health challenges.
- **Community Voice:** Many felt the community voice was missing from this discussion. There is an opportunity to engage community members in the LPHS to a greater degree.
- **Data Sharing:** Many groups discussed the importance of sharing data and information across the LPHS. There is an opportunity to increase data sharing and consider using similar data platforms.
- **Improving Communication:** Although many elements of the LPHSA 10 Essential Services are being addressed in some capacity within the LPHS, there is a need to improve communication to partners in the LPHS and the community as a whole.
- **Improvement from 2012:** Scores increased for all, but one, Essential Service compared to the 2012 LPHSA. Strengths and weakness by Essential Service are described on the following page. Scores from the previous assessment compared to the current assessment are presented in Table 23.

LOCAL PUBLIC HEALTH SYSTEMS ASSESMENT

Table 23. Essential Public Health Services Scores from 2012 and 2016 Local Public Health System Assessments.

Essential Public Health Services	2012 Scores	2016 Scores
ES 1: Monitor Health Status	72%	83%
ES 2: Diagnose and Investigate	69%	90%
ES 3: Educate/Empower	50%	67%
ES 4: Mobilize Partnerships	47%	79%
ES 5: Develop Policies/Plans	69%	94%
ES 6: Enforce Laws	69%	84%
ES 7: Link to Health Services	65%	69%
ES 8: Assure Workforce	52%	54%
ES 9: Evaluate Services	67%	65%
ES 10: Research/Innovations	50%	54%

Scoring Categories
Optimal Activity (76-100%)
Significant Activity (51-75%)
Moderate Activity (26-50%)
Minimal Activity (1-25%)
No Activity (0%)

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services Administration, 2018.

- **Strengths**: The LPHS is strong at monitoring health status, diagnosing and investigating health issues, developing policies and plans, and enforcing laws. The LPHS is also strong in mobilizing community partnerships, in which the greatest improvement, between 2012 (47%) and 2016 (79%), was realized. This could be a reflection of more partners embracing the *Live Well San Diego* vision, and other factors that encourage greater collaboration.
- **Weaknesses**: Partners across the LPHS should work together to improve scores for Essential Public Health Services that, while higher than in 2012, are still relatively low in 2016. These include linking to/providing care; informing, educating, empowering people; and evaluating services. Scores were the lowest in 2016 for research (54%), and assuring a competent workforce (54%). Improving these scores is important to the future of public health in San Diego County which depends on researching innovative solutions to health problems and a competent public health and personal health care workforce.

For more information on LPHSA methods, participants, and results, please refer to the full report located here: https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/documents/Local_Public_Health_System_Assessment.pdf.

SUMMARY

LIVE WELL
SAN DIEGO

SUMMARY

Summary

Public Health Services continues to adhere to the Mobilizing for Action through Planning and Partnerships (MAPP) model, as during the first cycle. This second cycle includes a broader set of data in order to better capture social determinants of health, distribution of a survey to stakeholders and community members to assess forces of change and community themes and strengths. It was utilized to collect community voice, and the County coordinated with the hospital association.

According to the National Association of County and City Health Officials (NACCHO), the ideal Community Health Assessment should use both qualitative and quantitative methods to collect and analyze data, in a systematic way, to understand the health within a specific community. It is important to recognize that issues affecting health and well-being vary – by place, by demographic, by income level, etc.

This CHA includes the results of each of the four MAPP assessments for the County overall, including robust profiles by Region. It is a reference for community members, stakeholders, and community organizations when they are looking to information to support designing and implementing programs or interventions within the community.

The Community Health Status Assessments have described the health and well-being of the community by social determinants of health, to further identify where the most work is needed, and what populations are disproportionately affected within a certain disease or issue. The data has also been broken down and presented at the Subregional level, which in some cases, is small enough to approximate a neighborhood.

The Forces of Change and Community Themes and Strengths were identified using the voice of the community, and compared to those identified by senior leaders in Public Health. Aligning key issues raised by each community with resources available to its leaders informs and enables effective policy and program management.

Understanding the strengths and weaknesses in our Local Public Health System is important when planning for improvement for the future - so those who work within the system can support positive change in the community.

Acknowledgements

We would like to thank the following people and organizations for their contribution to this assessment:

- County of San Diego, Health and Human Services Agency, Public Health Services Administration staff (for data analysis and writing)
- County of San Diego, Health and Human Services Agency, Public Health Services, HIV, STD, and Hepatitis Branch
- County of San Diego, Health and Human Services Agency, Public Health Services, Epidemiology and Immunization Services Branch
- County of San Diego, Health and Human Services Agency, Public Health Services, Tuberculosis Control and Refugee Health
- Regional Directors and Community Engagement Teams
- Regional Community Leadership Team Members
- Hospital Association of San Diego and Imperial Counties

The results of the Community Health Assessment (CHA) were used to inform the Community Health Improvement Plan (CHIP) for San Diego County and the Community Enrichment Plans (CEPs) for each of the six regions (link to the CHIP is https://www.livewellsd.org/content/dam/livewell/community-action/2019-21-LWSD-CHIP-Regional-CEP.pdf). The Community Health Statistics Unit presented findings specific to each Region, which provided the basis for the regional Community Leadership Teams to identify local issues to address in their CEPs. The Regional Community Leadership Teams worked through this process to create a three-year plan for their regions to address specific priorities in the Healthy, Safe, and Thriving components of *Live Well San Diego*. These data- driven goals and objectives included topics such as mental health access and awareness, healthy eating and physical activity, and community involvement. Metrics to measure the progress on these goals were also identified, and will be tracked over the three year period covered by this plan. The priorities identified for each Region are listed below.

Summary of Priorities for Action in Regional Community Enrichment Plans

Two tables appear on the following pages capturing the Regional CEP priorities in a slightly different fashion. The first Table 24 is organized by Regional CEP Priority, reflecting the language adopted by the individual Leadership Team. The second Table 25 shows the *Live Well San Diego* Strategic Framework, including the themes within each component, and then it is indicated if the Regional CEP has a Priority that is the same or similar to that theme.

SUMMARY

What is Common Across Plans

All of the CEPs have something in common and this is the breadth of the priorities adopted. These priorities go well beyond what would fall under the Building Better Health component of *Live Well San Diego*. These priorities fall equally in number in the Living Safely component and the Thriving component. This not only responds to the community data, information and survey feedback gathering through the MAPP assessments, it reflects what the Leadership Teams find to be compelling. These leaders recognize that to live well means that addressing social determinants of health is imperative. It reinforces what leaders have always known: social-economic status and related factors affect everything else and without addressing these factors, the potential of residents and the community in which they live cannot be fully realized.

As Table 24, organized by CEP priorities, shows, these priorities capture issues such as crime prevention, housing, transportation, workforce development, and economic vitality. These were not common priorities compared to the first CHIPs.

Both tables reveal that, within every Regional CEP, there is a priority in every *Live Well San* Diego component, with only one exception (South Region). As Table 25, organized by *Live Well San Di*ego Strategic Framework shows, the Leadership Teams are working across all of the *Live Well San Diego* themes.

The CEPs are a culmination of this MAPP cycle, reflecting data- and community-informed three-year plans. These plans seek to improve the health and well-being of our Regions through alignment with the *Live Well* vision of a healthy, safe, and thriving San Diego County.

SUMMARY

Table 24. Priorities of Regional Community Enrichment Plans (CEPs) by Live Well San Diego Component – FY 2019-2021

COVERAGE OF *LIVE WELL SAN DIEGO* COMPONENT BY REGIONAL PRIORITY			
Region	**BUILDING BETTER HEALTH**	**LIVING SAFELY**	**THRIVING**
Central	• Health—Access to Quality **Care** • Health—Support Healthy **Eating**	• Community—Improve **Trauma** Informed Systems • Community—Reduce **Crime**	• Social—Enhance **Civic** Life
East	• **Aging** Communities • **Behavioral** Health Wellness • **Child and Family** Wellness	• **Aging** Communities • **Behavioral** Health Wellness	• **Aging** Communities • **Child and Family** Wellness
North Central	• **Behavioral** Health • **Physical** Activity and **Environmental** Change • Preventive **Care**	• **Behavioral** Health • **Physical** Activity and **Environmental** Change	• **Physical** Activity and **Environmental** Change
North County Regions	• **Behavioral** Health/Mental Health Services • **Nutrition** • **Physical** Activity	• **Crime** • **Disaster** Preparedness • Illegal Access to **Substances and Alcohol** • Unintentional **Injuries**	• **Education** and Workforce Development • **Housing** • **Transportation**
South	• Health—Preventing **Chronic** Disease		• Knowledge—Improving **School** Attendance • Standard of Living—Promoting **Economic** Vitality

Note: Some priorities appear across multiple components because goals within the priority align with different components. Only one grey area denoted because Regional Community Enrichment Plan does not have priority that aligns directly with the individual Theme for Live Well San Diego. However, in this case, South Region has priorities that ultimately should contribute to safer communities (see explanation above).

Source: County of San Diego, Health and Human Services Agency. Prepared by PHS Administration staff based on Regional Community Enrichment Plans 2019-21.

SUMMARY

Table 25. *Live Well San Diego* Themes by Regional Community Enrichment Plan Priorities – FY 2019-2021

Live Well San Diego Community Health Improvement Plan Aligned to the Strategic Framework and Regional Priorities - FY 2019-2021						
Part of Strategic Framework it Fits		Central	East	North Central	North County	South
Building Better Health						
	Improve Access to Quality Care	✦	✦	✦	✦	
	Increase Physical Activity		✦	✦	✦	
	Support Healthy Eating	✦		✦	✦	
	Stop Tobacco and Other Drug Use			✦	✦	✦
Living Safely						
	Protect Residents from Crime and Abuse	✦	✦		✦	
	Increase Neighborhood Safety	✦	✦	✦	✦	
	Create Communities that are Resilient from Disaster and Emergencies				✦	
Thriving						
	Improve Built and Natural Environment		✦	✦	✦	
	Increase Life Enrichment	✦	✦	✦		✦
	Increase Prosperity, Education, and the Economy	✦	✦		✦	✦

APPENDIX

LIVE WELL
SAN DIEGO

Table of Contents

Community Health Assessment Survey.....129

Regional Community Health Assessments.....136

- Central Region.....137
- East Region.....175
- North Central Region.....215
- North County Regions.....256
- South Region.....311

LIVE WELL
SAN DIEGO

Community Health Assessment Survey

APPENDIX

Q1: What is your sector? (Check all that apply)

- ☐ Agriculture
- ☐ Business
- ☐ City planning
- ☐ Community organization
- ☐ Education
- ☐ Elected official
- ☐ Faith-based
- ☐ Foundations
- ☐ Government
- ☐ Health/long term care
- ☐ Media
- ☐ Military
- ☐ Native American tribes
- ☐ Parks and recreation
- ☐ Public Safety
- ☐ Resident
- ☐ Social services
- ☐ Substance abuse
- ☐ Transportation
- ☐ Other (Please specify)

Q2: In this survey, "community" refers to where you work or live. If you are a resident of this Region, please check the community in which you live. If you are a service provider within this Region, please check the community or communities which you serve. Note: Respond to ALL survey questions that follow with this community in mind. If you indicate more than one, respond to all questions with these communities in mind.

- ☐ Central Region
  - ☐ Entire Region
  - ☐ Central San Diego
  - ☐ Mid-City
  - ☐ Southeastern San Diego
  - ☐ Other (specify community)
- ☐ East Region
  - ☐ Entire Region
  - ☐ Alpine
  - ☐ El Cajon
  - ☐ Harbison Crest
  - ☐ Jamul
  - ☐ La Mesa
  - ☐ Laguna-Pine Valley
  - ☐ Lakeside
  - ☐ Lemon Grove
  - ☐ Mountain Empire
  - ☐ Santee
  - ☐ Spring Valley
  - ☐ Other (specify community)
- ☐ North Central Region
  - ☐ Entire Region
  - ☐ Coastal
  - ☐ Del Mar-Mira Mesa
  - ☐ Eliot-Navajo
  - ☐ Kearny Mesa
  - ☐ Miramar
  - ☐ Peninsula

- ☐ University
- ☐ Other (specify community)

☐ North County Regions

- ☐ Entire Region
- ☐ Anza-Borrego Springs
- ☐ Carlsbad
- ☐ Escondido
- ☐ Fallbrook (Bonsall)
- ☐ North San Diego (Rancho Santa Fe, Rancho Bernardo, 4S Ranch, Black Mountain Ranch, Carmel Mountain Ranch, Rancho Peñasquitos)
- ☐ Oceanside
- ☐ Palomar-Julian (Palomar Mountain, Julian, Warner Springs)
- ☐ Pauma (Pala, Pauma Valley)
- ☐ Pendleton
- ☐ Poway
- ☐ Ramona
- ☐ San Dieguito (Encinitas, Solana beach, Rancho Santa Fe, Cardiff by the sea)
- ☐ San Marcos
- ☐ Valley Center
- ☐ Vista
- ☐ Other (specify community)

☐ South Region

- ☐ Entire Region
- ☐ Chula Vista (West)
- ☐ Coronado
- ☐ National City
- ☐ South Bay (Imperial Beach, San Ysidro, Otay Mesa, Nestor Mesa)
- ☐ Sweetwater (Eastlake, Bonita)
- ☐ Other (specify community)

Q3: In the following list, what do you think are the 5 most important HEALTH PROBLEMS in your community (those problems that have the greatest impact on overall community health)? Note: Select the 5 PROBLEMS that you believe are most important, and as you select these problems, rank each in order of importance from 1 to 5: 1 is of highest importance. (Be sure to respond with the same "community" or "communities" in mind as your response to question 2.)

- ☐ Aging concerns (e.g. arthritis, falls, Alzheimer's, etc.)
- ☐ Alcohol/Drug abuse
- ☐ Asthma
- ☐ Cancer
- ☐ Diabetes
- ☐ Heart Disease
- ☐ High blood pressure
- ☐ Infectious diseases (hepatitis, TB, etc.)
- ☐ Mental health issues
- ☐ Obesity
- ☐ Sexually-transmitted disease (HIV, STD)
- ☐ Stroke
- ☐ Suicide
- ☐ Teenage pregnancy
- ☐ Unintentional Injury
- ☐ Other (please specify and give a ranking)

Q4: Of the top 5 HEALTH PROBLEMS that you selected above, specify which ONE health problem has the least amount of RESOURCES available to help address the problem. Note: When selecting from the drop down below, be sure it is one of the 5 HEALTH PROBLEMS you identified above.

- ☐ Aging concerns (e.g. arthritis, falls, Alzheimer's, etc.)
- ☐ Alcohol/Drug abuse
- ☐ Asthma

- ☐ Cancer
- ☐ Diabetes
- ☐ Heart Disease
- ☐ High blood pressure
- ☐ Infectious diseases (hepatitis, TB, etc.)
- ☐ Mental health issues
- ☐ Obesity
- ☐ Sexually-transmitted disease (HIV, STD)
- ☐ Stroke
- ☐ Suicide
- ☐ Teenage pregnancy
- ☐ Unintentional Injury
- ☐ Other (please specify and give a ranking)

Q5: FORCES refer to those influences that have an impact on the overall health of a community. In the list below, please rate (lowest to highest) each FORCE in terms of its impact on the overall health of your community.

- ☐ Cultural (e.g., lack of awareness, lack of cultural competency, language barriers)
- ☐ Economic stability (e.g., unemployment, poverty, homelessness)
- ☐ Education (e.g., low literacy, low education levels, ineffective patient education)
- ☐ Healthy behaviors (e.g., poor dietary habits, lack of physical activity, tobacco use, substance use)
- ☐ Health care (e.g., lack of access to preventive health care or disease management, lack of health insurance)
- ☐ Legislation (e.g., elections, policy changes, health care system reform)
- ☐ Neighborhood and built environment (e.g., limited access to parks, poor neighborhood walkability, poor air quality, lack of healthy food options)
- ☐ Resources (e.g., lack of funding, inadequate technology, shortage of health care professionals)
- ☐ Social environment (e.g., exposure to community violence, lack of emotional support)
- ☐ Other (please specify and give a rating)

Q6: In the list below, please rank (lowest need to highest need) each FORCE in terms of the need for more RESOURCES to address the negative impacts on the overall health of your community.

- ☐ Cultural (e.g., lack of awareness, lack of cultural competency, language barriers)
- ☐ Economic stability (e.g., unemployment, poverty, homelessness)
- ☐ Education (e.g., low literacy, low education levels, ineffective patient education)
- ☐ Healthy behaviors (e.g., poor dietary habits, lack of physical activity, tobacco use, substance use)
- ☐ Health care (e.g., lack of access to preventive health care or disease management, lack of health insurance)
- ☐ Legislation (e.g., elections, policy changes, health care system reform)
- ☐ Neighborhood and built environment (e.g., limited access to parks, poor neighborhood walkability, poor air quality, lack of healthy food options)
- ☐ Resources (e.g., lack of funding, inadequate technology, shortage of health care professionals)
- ☐ Social environment (e.g., exposure to community violence, lack of emotional support)
- ☐ Other (please specify and give a rating)

Q7: A HEALTHY COMMUNITY has attributes or features that contribute to the physical and mental well-being of residents. Which 5 attributes do you feel need the most improvement in your community? Note: Select the 5 ATTRIBUTES that you believe need the most improvement, and as you select these features, rank each in order of importance from 1 to 5: 1 is of highest importance.

- ☐ Access to fresh fruits/vegetables
- ☐ Access to health care and other services
- ☐ Access to parks and recreation opportunities
- ☐ Access to public transit
- ☐ Affordable housing
- ☐ Arts and cultural events
- ☐ Clean environment
- ☐ Community involvement
- ☐ Equity
- ☐ Good jobs and strong economy
- ☐ Good schools
- ☐ Low crime / safe neighborhoods
- ☐ Low death and disease rates
- ☐ Low level of child abuse
- ☐ Religious or spiritual values
- ☐ Respect for diversity
- ☐ Strong family life
- ☐ Walkable and bikeable communities
- ☐ Other (please specify and give a rating)

Q8: How would you rate your community environment as a healthy place to live or work? Reminder: Be sure to respond with the same "community" or "communities" in mind as your response to question 2.

- ☐ Very healthy
- ☐ Healthy
- ☐ Somewhat healthy
- ☐ Unhealthy
- ☐ Very unhealthy

Q9: How would you rate your community as a safe place to grow up or to raise children? Note: Consider low crime, safe routes to schools, strong school system, well lighted streets, places for families to congregate.

- ☐ Very safe
- ☐ Safe
- ☐ Somewhat safe
- ☐ Unsafe
- ☐ Very unsafe

Q10: Is your community a good place for older adults (age 55+)? Note: Consider age friendly housing, transportation, access to food, medical services, and opportunities for socializing, adult day care, and social services, etc.

- ☐ Very good
- ☐ Good
- ☐ Somewhat good
- ☐ Bad
- ☐ Very bad

Q11: What would make it a better community for older adults (age 55+)?

Q12: Is there economic opportunity in your community? Note: Consider locally owned and operated businesses, jobs with career growth, job training/higher education opportunities, affordable housing, reasonable commutes, etc.)

- ☐ Abundance of opportunities
- ☐ Sufficient opportunities
- ☐ Some opportunities

- ☐ Little opportunity
- ☐ Very little opportunity

Q13: Are there ways to either participate in, or experience, the arts, culture and other creative activities in your community?

- ☐ Abundance of activities
- ☐ Sufficient activities
- ☐ Some activities
- ☐ Little activities
- ☐ Very little activities

Q14: Are there ways to become a volunteer, advocate for community improvement, or in some other way become involved?

- ☐ Abundance of opportunities
- ☐ Sufficient opportunities
- ☐ Some opportunities
- ☐ Little opportunity
- ☐ Very little opportunity

Q15: What do you believe would be the most important action or actions (no more than 3) that should be taken to help strengthen your community so that everyone can be healthy, safe, and thriving?

- ☐ Action #1
- ☐ Action #2
- ☐ Action #3

Q16: Is there anything else you would like to share with us?

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

Regional Community Health Assessments

Central Region
Community Health Assessment

TABLE OF CONTENTS

Central Region Community Leadership Team 4

Introduction 6

Community Health Status Assessment

Demographics.....7

Morbidity and Mortality.....9

Community Health Status Assessment by Area of Influence.....17

Health.....18

Knowledge.....22

Standard of Living.....24

Community.....31

Social.....36

COMMUNITY LEADERSHIP TEAM MEMBERS

Co-Chairs:

Barbara Jiménez, Director of Regional Operations, HHSA-Central & South Regions, County of San Diego
Adolfo Gonzales, Chief, Probation, County of San Diego
Barry Pollard, Executive Director, Urban Collaborative Project

Some members are also *Live Well San Diego* Recognized Partners which is indicated with an asterisk (*).

COMMUNITY LEADERSHIP TEAM MEMBERS BY SECTORS

Businesses:

- Sirius Fitness*
- Northgate Gonzalez Markets*

Cities & Governments:

- City of San Diego *
- County of San Diego, HHSA (multiple departments)

Community and Faith-Based Organizations:

- Be There San Diego*
- San Diego Black Nurses Association*
- La Maestra Family Health Center*
- National Conflict Resolution Center*
- Logan Heights CDC*
- Project New Village*
- The Urban Collaborative Project*
- SAY San Diego*
- UCSD Center for Community Health
- Multicultural Health Foundation*
- Project AWARE*
- Second Chance*
- Paving Great Futures*
- Community Health Improvement Partners*
- Family Health Centers of San Diego*
- San Ysidro Health Center*
- YMCA*
- Harmonium Inc.*
- Inner City Athletic Club*
- Mental Health America
- Shakti Rising
- Youth Empowerment*
- National Conflict Resolution Center*
- Fern Street Community Arts*
- Barrio Logan College Institute*
- Bayview Baptist Church*
- Planned Parenthood*
- San Diego Hunger Coalition*
- Urban Collaborative Project*
- United Women of East Africa*
- Project Concern International*
- Union of Pan Asian Communities
- RISE San Diego*
- American Heart Association and American Stroke Association*
- Home Start Inc.*
- San Diego Workforce Partnership*
- Urban Corps of San Diego County*
- Urbanlife Ministries San Diego*
- Kitchens for Good*
- Chicano Federation of San Diego County*
- Urban League*

Schools & Education

- San Diego Unified School District

Other Valued Members

- Cultural Brokers Program
- Project Save Our Children
- Urban Beats
- Black American Political Association of California
- Alliant University
- New Harvest Christian Fellowship
- San Diego Police Department
- Sons & Daughters of Guam Club, Inc

CENTRAL REGION (2015)

Demographics

Over **2** in **5** residents (42.9%) were Hispanic.

Another **1** in **9** residents (11.3%) were black.

Standard of Living

$51,889

Central Region had the **lowest median household income** of all the HHSA Regions.

Nearly **2** in **3** households in Central Region were **renter-occupied**, the highest of all the HHSA Regions.

10.9%

of households within the Central Region relied on **CalFresh benefits**,

compared to 6.7% within the County overall.

Nearly **1** in **3** residents (32.8%) relied on **public health Insurance coverage**, compared to 28.4% within the County overall.

Community

Over **3** in **4** residents of Central Region (77.6%) lived within a **quarter mile of a park**, more than the County overall.

Health

Nearly half

of all new HIV diagnoses within the County from 2010-2014 were in the **Central Region.**

Social

1 in **2** low-income residents (49.6%) experienced **food insecurity** in Central Region, compared to 42.2% within the County overall.

1 in **4** (26.5%) adult residents (18-64 years) were **uninsured** in Central Region, compared to 19.1% within the County overall.

Knowledge

7 in **9** residents (78.5%)

graduated from high school, compared to 85.5% in the County overall.

INTRODUCTION

Introduction

Formation of Leadership Team

The *Live Well San Diego* Central Region Community Leadership Team was formed in June 2010 to help guide planning for health and safety priorities in the Region and to foster information sharing and connectivity among group members. This collaboration includes community leaders, stakeholders and residents who are actively working together in the HHSA Central Region to fulfill the vision of *Live Well San Diego* to create a Region that is Building Better Health, Living Safely and Thriving.

Formation of Regions

In 1998, due to the size and diversity of the County, a new Regional service delivery system was created, enabling Regional general managers (now called Regional Directors) to better acquaint themselves with their individual communities, and develop partnerships to meet the unique needs of each one. In six HHSA Regions, staff provide services in an integrated fashion, close to families and communities, in collaboration with other public and private sector providers.

Community Leadership Team Structure and Planning Process

The Central Region Leadership Team is comprised of several members representing 25 community-based organizations. The entire team meets bi-monthly, and supports four workgroups that meet monthly (except Ad Hoc, which meets as needed):

- Health
- Safety and Built Environment
- Thriving
- Ad Hoc

As part of their planning process for the second Mobilizing for Action through Planning and Partnerships (MAPP) cycle,[†] the Central Region Leadership Team held a community forum in May of 2016 to gather information on needed improvements to the community. The Central Region *Live Well San Diego* Community Forum focused on three areas: Engaging Community/Diversity and Inclusion, Strengthening Services, and Serving for results. The ideas shared during this forum helped to guide priority setting within the Region. The Central Region Leadership Team is also the leadership body overseeing the implementation of national initiatives within the Region, as described below.

The Healthiest Cities and Counties Challenge is a $1.5 million prize competition, challenging small and mid-sized U.S. cities and counties to develop practical, evidence-based strategies to improve measurable health outcomes and promote health and wellness, equity, and social interaction. Southeastern San Diego, within the Central Region, a historically underserved community, was selected to participate in this challenge, and received a $10,000 grant to start addressing the issue of safety within the area.

The San Diego Promise Zone encompasses several neighborhoods within the Central Region. The Promise Zone is a 10-year federal designation focused on streamlining resources across agencies, and delivering comprehensive support to local government, organizations and agencies to improve the health and well-being of those residents living within the Promise Zone. The *Live Well Neighborhoods* pilot has been launched in the same area as the Promise Zone. The pilot invests in resident-driven cradle to college and career outcomes for Southeastern San Diego neighborhoods.

[†] For information on the planning process during the first MAPP cycle, please refer to the 2014 *Live Well San Diego* Community Health Improvement Plan at CHIP_Final-10-22-14.pdf (livewellsd.org).

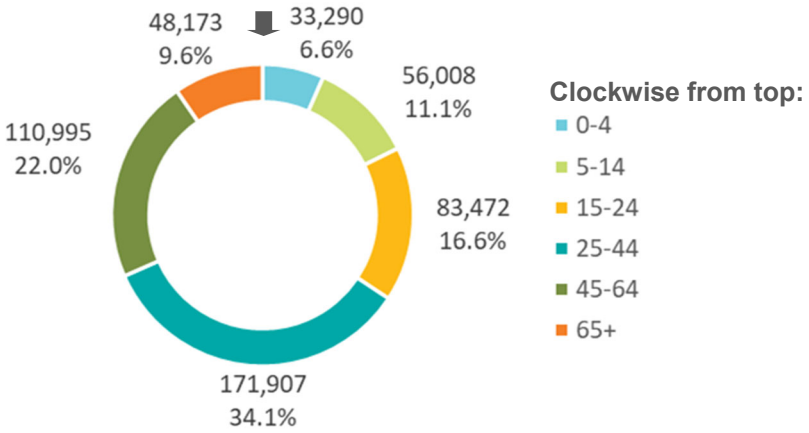
Community Health Status Assessments

Demographics

The Central Region of San Diego County is located on the San Diego Bay, and includes downtown San Diego and outlying urban communities. These communities include North Park, College Area, Encanto, Paradise Hills, Barrio Logan, Hillcrest, Mission Hills, and University Heights. In 2015, 503,845 people resided in this densely populated Region, representing 15.6% of the San Diego County population.

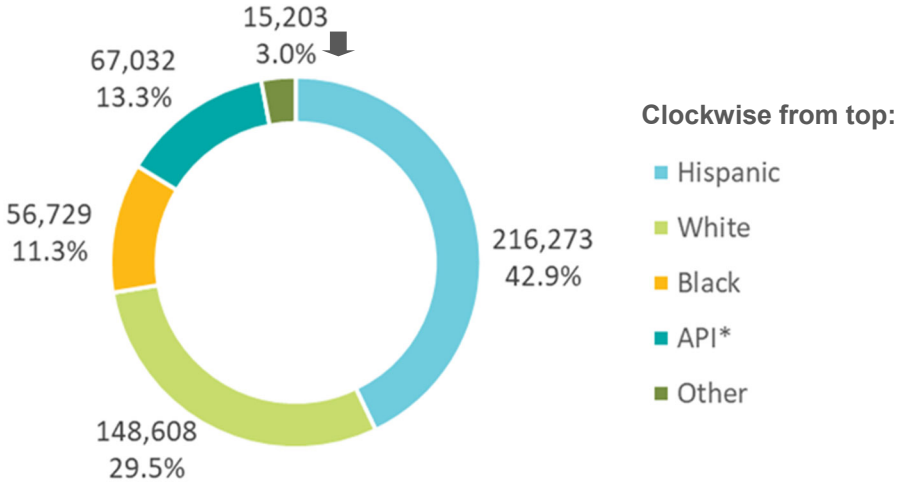
According to the U.S. Census Bureau's American Community Survey, the majority of residents were between the ages of 25-44 (1 in 3), followed by those aged 45-64 (1 in 5; Figure 1). The population was 51.0% male and 49.0% female.

Figure 1. Population by Age Group, Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 2. Population by Race/Ethnicity, Central Region, 2015.

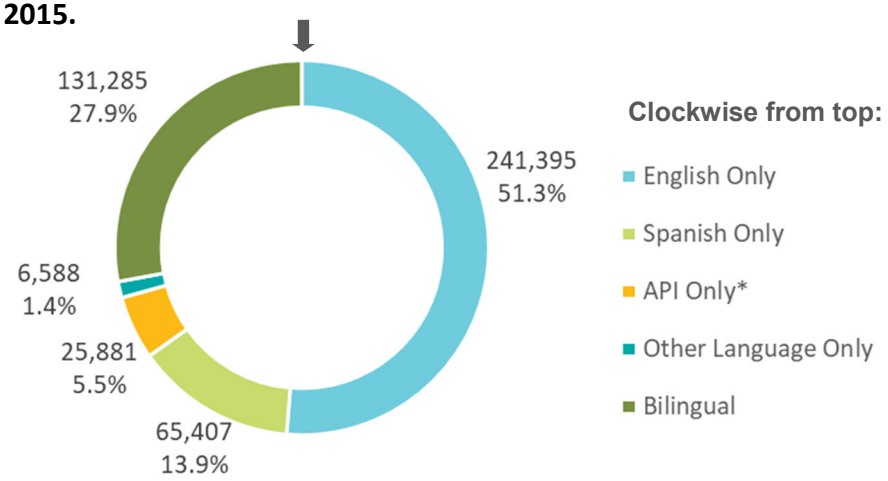


**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B03002.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Almost 3 in 7 of Central Region residents were Hispanic. Nearly one-third were white. More than one-ninth were black, more than one-eighth were Asian or Pacific Islander, and the remaining residents were another race or ethnicity (Figure 2).

DEMOGRAPHICS

Figure 3. Population by Language Spoken at Home, Central Region, 2015.

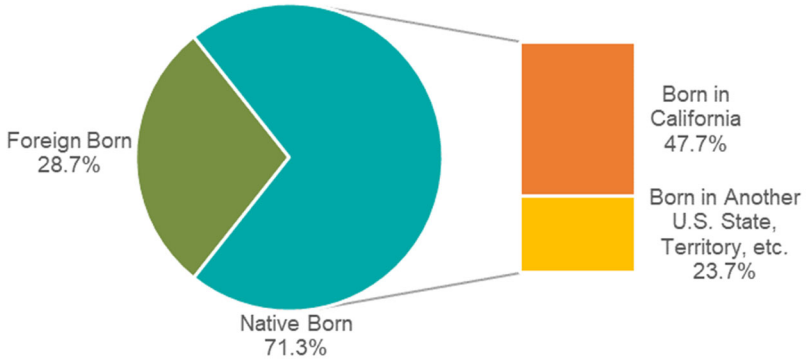


API refers to Asian or Pacific Island languages.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Over one-half the population aged 5 years and older were English-only speakers. Almost one-seventh were Spanish-only speakers, and over 1 in 4 were bilingual (Figure 3).

Note: This word cloud is a representation of the diversity of languages spoken in San Diego County. Not all languages spoken are represented.

Figure 4. Population by Nativity and Place of Birth, Central Region, 2015.



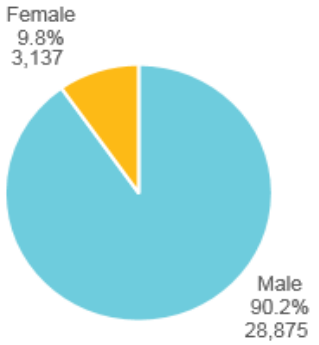
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B06001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Over 1 in 4 people living in Central Region were foreign born. Of those who were born in the United States, 2 in 3 were born in California (Figure 4).

Figure 5. Veterans in the Population, Central Region, 2015.

8.3%

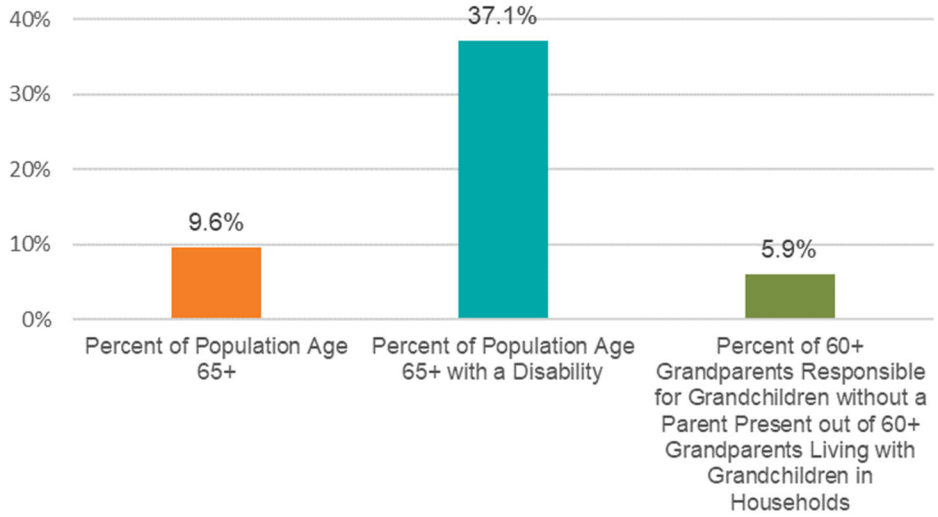
of Central Region Residents 18+ were Veterans.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S2101.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Approximately 1 in 12 Central Region residents was a veteran. Of those residents who were veterans, 1 in 10 were female (Figure 5). Almost 1 out of 10 Central Region residents were seniors (over the age of 65). Of those over the age of 65, more than 1 in 3 had some kind of a disability (hearing, vision, cognitive, or self-care). Approximately 1 in 20 residents over the age of 60 in the Central Region were solely responsible for raising a grandchild (no parent is present in the household; Figure 6).

Figure 6. Characteristics of Older Adult Population, Central Region, 2015



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

Morbidity and Mortality

According to the Centers for Disease Control and Prevention, morbidity is defined as any departure, subjective or objective, from a state of physiological or psychological well-being, encompassing disease, injury, and disability. Mortality refers to death.

In this section, conditions contributing to the greatest amount of morbidity and mortality are discussed. First, the 3-4-50 concept is introduced and explained, with data relevant to each indicator presented. Next, the leading causes of death by Region and County overall are presented, in contrast to those for the State of California and United States as a whole. Lastly, prevention quality indicators, measures formulated and defined by the U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality are presented. These indicators describe the rate of hospitalizations for conditions or complications that could have been prevented with adequate primary or outpatient care.

The purpose of this section is to describe what conditions are contributing the most to the morbidity and mortality of people living in San Diego County.

3-4-50

Introduction

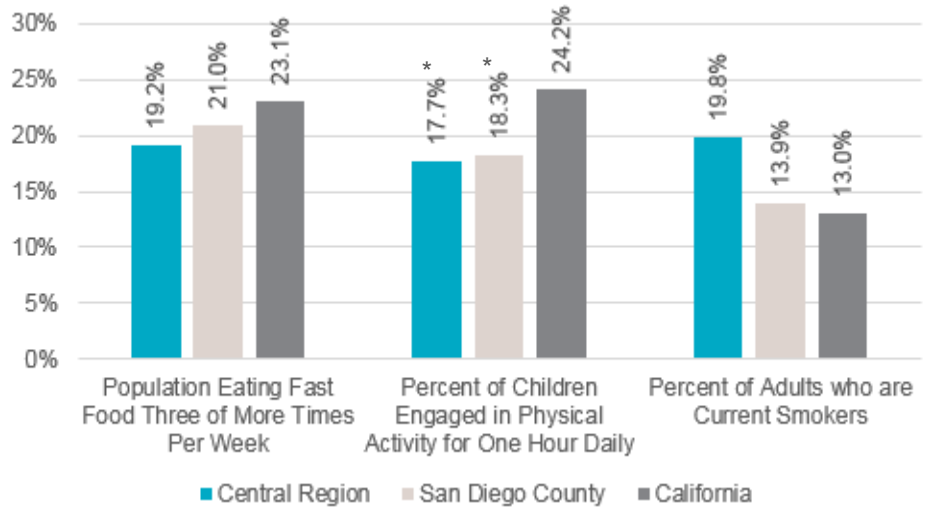
Chronic diseases are now among the leading causes of death and disability worldwide. This reflects an improvement in the prevention and treatment of infectious diseases as well as significant changes in dietary habits, physical activity levels, and tobacco use in the population.[1] Three behaviors (poor diet, physical inactivity, and tobacco use) contribute to four chronic diseases (cancer, heart disease and stroke, type 2 diabetes, and lung diseases such as asthma) that result in over 50 percent of all deaths worldwide. This is the foundation of the 3-4-50 concept.[2] The influence of these three unhealthy behaviors may be seen in San Diego County as these four chronic diseases are among the most common causes of death and disability in our region.

The information discussed on the following pages is specific to Central Region and its Sub Regional Areas (SRAs). For a more detailed explanation, please see the 3-4-50 section in the countywide document (Page 31), or the 3-4-50 reports located here: https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_health_statistics/3-4-50.html.

Three Behaviors

Diet, which is ultimately a personal choice, is one of the factors that can contribute to obesity. The physical environment, including lack of sidewalks and adequate lighting, poses challenges to walking. Smoking is the leading factor contributing to lung cancer and chronic obstructive pulmonary disease (COPD) deaths in the United States. Exposure to second-hand smoke increases risk of heart disease and lung cancer in adults, as well as asthma attacks and respiratory infections in children.

Figure 7. Measures of Three Behaviors (Poor Diet, Physical Inactivity, and Smoking) Contributing to 3-4-50 Deaths, Central Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

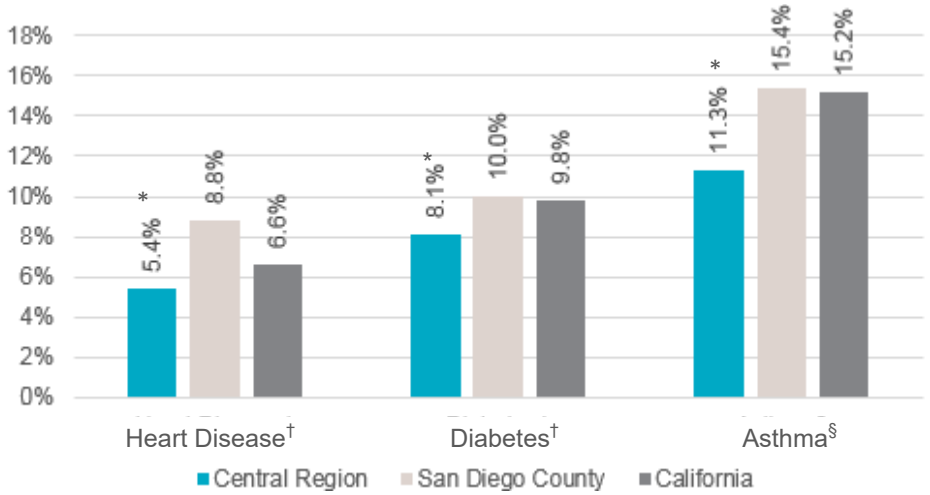
In 2015 (Figure 7):

- Nearly 1 in 5 residents aged 2 and over ate fast food three or more times per week in Central Region. This was lower than the County and the State overall.
- Nearly 1 in 4 children aged 2-11 in the State of California engaged in physical activity for one hour daily.
- Nearly 1 in 5 adults in Central Region were current smokers. This was significantly higher than the nearly 1 in 7 adult smokers in the County and the State overall.

Four Diseases

Cancer is a term used to describe a group of diseases in which abnormal cells divide without control and invade other tissues.[3] Heart disease refers to any acute or chronic condition that involves the heart or its blood vessels: the muscle itself, valves, blood flow, and beating rhythm.[4] Stroke is a distinct type of cardiovascular disease, also called cerebrovascular disease. Specifically, stroke is a disease that affects the arteries leading to and within the brain.[5] Diabetes mellitus is a serious disease in which the levels of blood glucose, or blood sugar, are above normal.[6] Asthma is a chronic inflammatory disease of the respiratory system which causes the airways of the lungs to constrict and become inflamed in response to certain triggers. Chronic Obstructive Pulmonary Disease (COPD) is a disease that makes it hard to breathe.[7]

Figure 8. Ever Diagnosed with a Disease Contributing to 3-4-50 Deaths, Central Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
† Adults aged 18 and over.
§ Residents aged 1 year and over.
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 8 provides an estimate of the percent of adult residents who may have been suffering from heart disease and diabetes. Estimates of asthma prevalence are for residents aged 1 and over. Estimates of cancer prevalence are not available through the same data source, and are therefore not comparable and not included in this analysis.

In 2015:

- 1 in 20 adult residents of Central Region had ever been told they had heart disease. This was lower than the County and the State overall.
- 1 in 10 adult residents of San Diego County had ever been told they had diabetes. This was slightly higher than the State overall.
- Nearly 1 in 9 residents of Central Region, over the age of 1 year old, had ever been diagnosed with asthma. This was lower than the County and the State overall.

Over 50% of Deaths

Three behaviors—poor diet, physical inactivity and tobacco use—contribute to four major chronic diseases - cancer, heart disease, type 2 diabetes, and pulmonary disease - which are responsible for more than 50% of deaths worldwide. In San Diego County, in 2016, 53% of deaths were due to these chronic diseases. In Central Region, in 2016, 53% of deaths were due to 3-4-50 diseases (Table 1).

Compared to the County overall, Central Region had an equal percentage of deaths due to 3-4-50 diseases. The SRA with the highest 3-4-50 percentage in 2016 was Southeastern San Diego, at 58%. The SRA with the lowest percentage was Central San Diego, at 50%. The percentages for Central Region and its SRAs decreased from 2000 to 2016 (Figure 9).

Summary

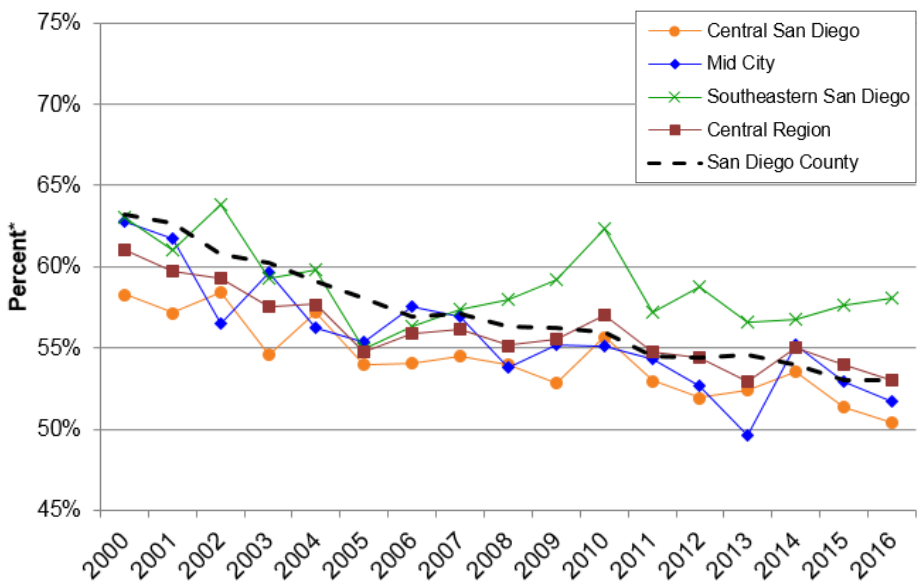
Overall, the percentage of deaths due to 3-4-50 diseases decreased within the Central Region, and within the County overall. While relatively low percentages of San Diegans residing in Central Region were participating in the risk behaviors that lead to deaths from one of the 3-4-50 diseases, more work is needed to continue to lower the percentage of deaths due to chronic disease. Addressing 3-4-50 behaviors and diseases ultimately helps Central Region residents, and all San Diegans, to live well.

Table 1. 3-4-50 Death[†] Percentages* Among San Diego County Residents—Central Region, 2000-2016.

Geography	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Central San Diego	58%	57%	58%	55%	57%	54%	54%	54%	54%	53%	56%	53%	52%	52%	54%	51%	50%
Mid-City	63%	62%	57%	60%	56%	55%	58%	57%	54%	55%	55%	54%	53%	50%	55%	53%	52%
Southeastern San Diego	63%	61%	64%	59%	60%	55%	56%	57%	58%	59%	62%	57%	59%	57%	57%	58%	58%
Central Region	61%	60%	59%	58%	58%	55%	56%	56%	55%	56%	57%	55%	54%	53%	55%	54%	53%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

[†]3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
[§]Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 9. 3-4-50 Death† Percentages* Among San Diego County Residents—Central Region, 2000-2016.



†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
§Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

References

1. World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).
2. 3Four50, www.3four50.com (Accessed July 2, 2010).
3. National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).
4. Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).
5. American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015).
6. American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).
7. Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).

Leading Causes of Death

Introduction

The leading causes of death are mortality statistics useful for showing the relative burden of cause-specific mortality. The top 10 most common rankable causes of death are determined in San Diego County each year, based on rankable categories and reported underlying cause of death. Rankings show the most frequently occurring causes of death out of those rankable. It is important to note that rankings do not in any way depict risk of dying from one condition or another. Mortality rates for a specific cause of death may increase or decrease, but the ranking may not change over time.

Rankable causes of death are categories determined based on recommendations from the 1951 Public Health Conference on Records and Statistics. The original list had 64 selected causes of death; the list used for the 2015 rankings only had 51 categories. For more information on the categories and the conditions they encompass, please visit https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf.

Analysis

Table 2 shows the 2015 Leading Causes of Death in Central Region, San Diego County, the State of California, and the United States as a whole. In Central Region in 2015, Diseases of the Heart were the leading causes of death (in comparison to #2 for the County overall), followed by Malignant Neoplasms. Compared to the County overall, accidents and unintentional injury were ranked higher in Central Region (#3 in Central Region; #5 in San Diego County), and Alzheimer's was ranked lower (#5 in Central Region; #3 in San Diego County).

MORBIDITY AND MORTALITY

Summary

Overall, the most common causes of death in 2015 were Malignant Neoplasms and Diseases of the Heart, ranking either first or second within each Health and Human Services Agency (HHSA) Region, the County overall, the State of California, and the nation. Diseases ranked 1 and 2 made up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 were within 5% of one another for San Diego County and each of the six HHSA Regions. Alzheimer's disease deaths were more common in California, the County, and the HHSA Regions than in the United States overall.

Table 2. Leading Causes of Death[1,2] Among San Diego County Residents, Central Region, 2015.

Rank	Central Region	San Diego County	California	United States
1	Diseases of the Heart	Malignant Neoplasms	Diseases of the Heart	Diseases of the Heart
2	Malignant Neoplasms	Diseases of the Heart	Malignant Neoplasms	Malignant Neoplasms
3	Accidents/Unintentional Injuries	Alzheimer's Disease	Alzheimer's Disease	Chronic Lower Respiratory Diseases
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Accidents/Unintentional Injuries
5	Alzheimer's Disease	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
6	Diabetes Mellitus	Chronic Lower Respiratory Diseases	Accidents/Unintentional Injuries	Alzheimer's Disease
7	Chronic Lower Respiratory	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
8	Chronic Liver Disease and Cirrhosis	Intentional Self-Harm (Suicide)	Influenza and Pneumonia	Influenza and Pneumonia
9	Intentional Self-Harm (Suicide)	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Nephritis, Nephrotic Syndrome and Nephrosis
10	Essential Hypertension And Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)

Note: Diseases ranked 1 and 2 made up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 were within 5% of one another for San Diego County and each of the six HHSA Regions.

[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the San Diego County population in 2015.

[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System, 2015.

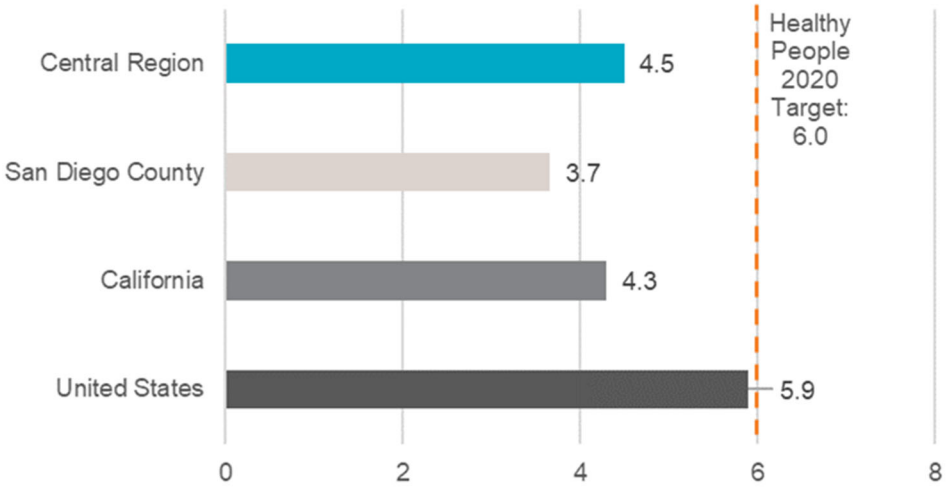
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

MORBIDITY AND MORTALITY

Infant Mortality

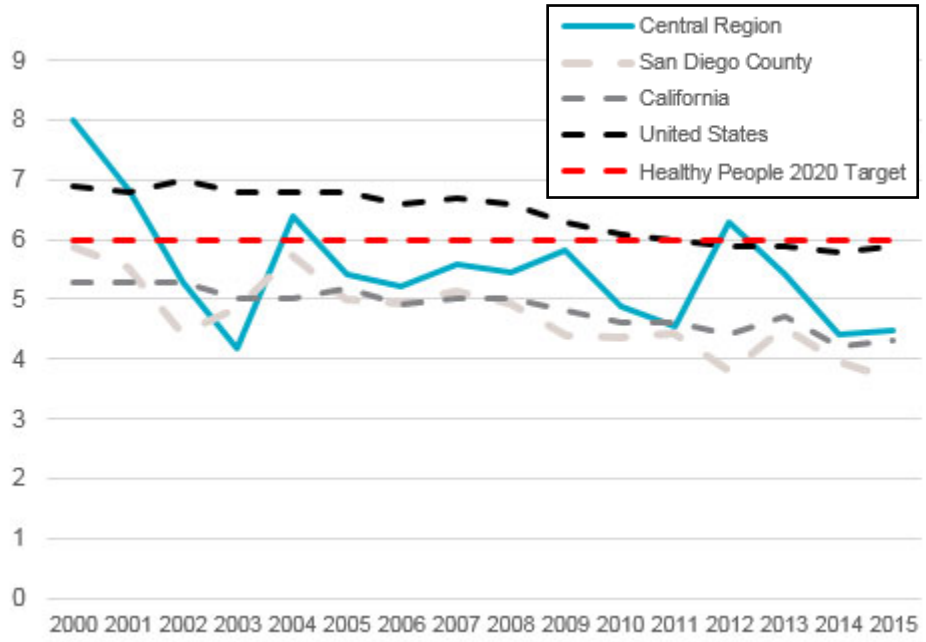
The Centers for Disease Control and Prevention (CDC) defines infant mortality as the death of an infant before his or her first birthday, while defining the rate of infant mortality as the number of those infant deaths per 1,000 live births in the same year.[1] It is common practice to consider the infant mortality rate (IMR) as a representative indicator of population health.[2] It is theorized that using IMR as an indicator might mirror other factors of population health such as social well-being, rates of illness and disease, economic development, general living conditions and others.[3] It has also been used as a proxy measure for access and quality of pre-term and post-term medical care, for both the mother and infant.[4] In 2016, the top three causes of infant mortality in the United States were congenital malformations, low birth weight and Sudden Infant Death Syndrome.[2] The infant mortality rate in Central Region in 2015 was 4.5 deaths per 1,000 live births, which was below the Healthy People 2020 Target. This was slightly higher than the County overall (3.7 deaths per 1,000 live births). The infant mortality rate in Central Region in 2015 was also higher than the State of California (4.3 deaths per 1,000 live births), but lower than the United States as a whole (5.9 deaths per 1,000 live births). (Figures 10 and 11)

Figure 10. Overall Infant Mortality Rate, Central Region Comparison, 2015.



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

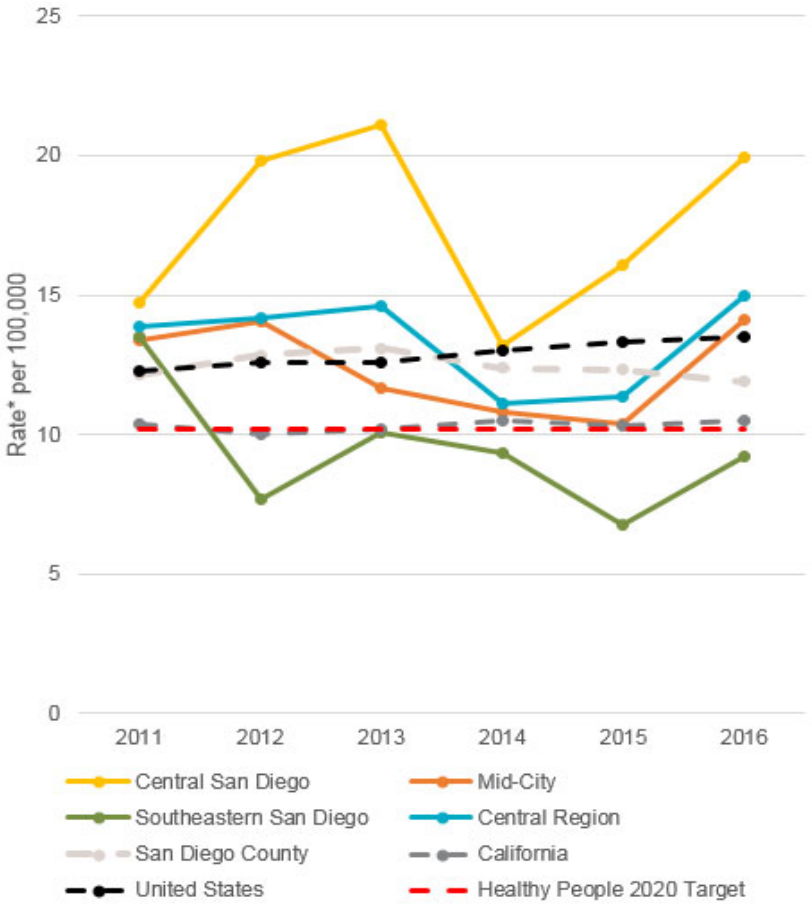
Figure 11. Overall Infant Mortality Rate, Central Region Comparison, 2000-2015.



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

1. Centers for Disease Control and Prevention (CDC). Infant Mortality. Reproductive Health. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Published 2017.
2. Kochanek KD, Murphy SL, Xu J, Arias E. Mortality in the United States, 2016. NCHS Data Brief. doi:10.1056/NEJM184002260220306
3. Reidpath DD. Infant mortality rate as an indicator of population health. *J Epidemiol Community Heal*. 2003;57(5):344-346. doi:10.1136/jech.57.5.344
4. Fry-Johnson YW, Levine R, Rowley D, Agboto V, Rust G. United States black:white infant mortality disparities are not inevitable: Identification of community resilience independent of socioeconomic status. *Ethn Dis*. 2010;20(1 SUPPL.1):1-10.

Figure 12. Suicide,* Central Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014 -2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Suicide

In 2016, Central Region had a higher suicide rate than San Diego County overall, the State of California, the United States as a whole, and was over the Healthy People target (10.2 per 100,000 population). In the Central San Diego SRA, the suicide rate was highest compared to the other SRAs. The rates in both Mid-City and Southeastern San Diego were lower compared to the Central San Diego SRA (Table 3). Between 2011-2016, rates in Central San Diego and Mid-City SRAs increased, while the rate in Southeastern San Diego decreased. The rate in Central Region also increased between 2011-2016 (Figure 12). Central Region, Central San Diego, and Mid-City all had suicide death rates higher than the Healthy People 2020 Target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicides by the year 2020).

Table 3. Suicide,* Central Region, 2016.

Geography	2016 Suicide Death Rate*
Central San Diego	19.9
Mid-City	14.1
Southeastern San Diego	9.2
Central Region	15.0
San Diego County	11.9
California	10.5
United States	13.5
Healthy People 2020 Target	10.2

**All rates are age-adjusted; rate per 100,000.*
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Unintentional Injury

Unintentional injuries include any accident that results in cutting or piercing of the skin, drowning or submersion, falls, or motor vehicle accidents. Nationally, more than 3 million people are hospitalized, 27 million people are treated in emergency departments and released, and over 192,000 die as a result of violence and unintentional injuries each year. The cost of both fatal and nonfatal injury in the U.S. in 2013 was $671 billion, in both medical and work loss costs, according to the CDC.

In 2016, all SRAs within Central Region, and Central Region as a whole, had rates of unintentional injury death above San Diego County and below California and the United States overall (Table 4). The rate of unintentional injury death in San Diego County, Central Region, and all the SRAs within Central Region was below the Healthy People 2020 target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce unintentional injury death by the year 2020), even though the rate was higher than the County as a whole. The SRA with the highest unintentional injury death rate was Central San Diego; the lowest was Mid-City.

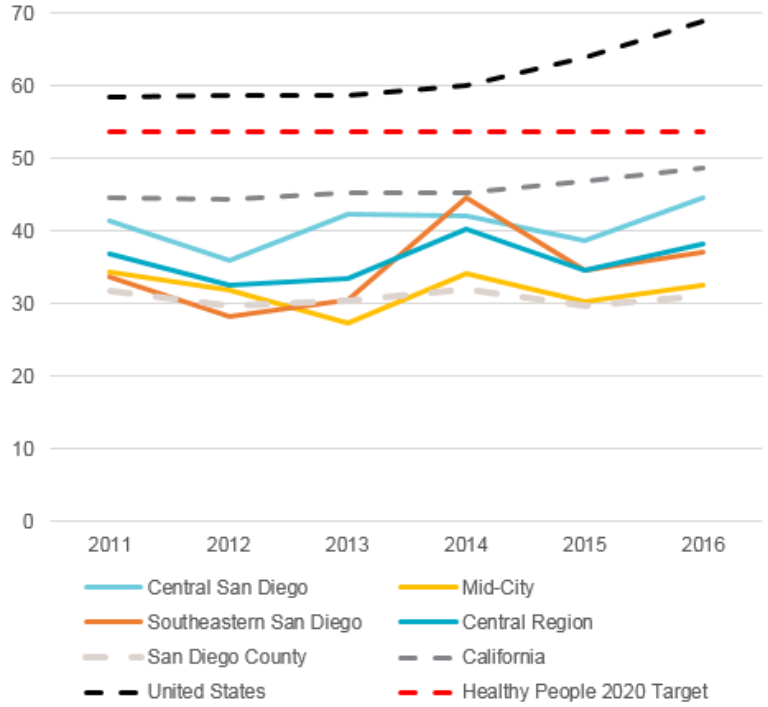
Table 4. Unintentional Injury Death Rate*, Central Region, 2016.

Geography	2016 Unintentional Injury Death Rate*
Central San Diego	44.5
Mid-City	32.5
Southeastern San Diego	37.2
Central Region	38.2
San Diego County	31.1
California	48.6
United States	69.0
Healthy People 2020 Target	53.7

**All rates are age-adjusted; rate per 100,000.*
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Between 2011-2016, the unintentional injury death rate increased in Central San Diego, Southeastern San Diego, and Central Region overall. The Mid-City SRA experienced a decrease between 2011-2016 in the unintentional injury death rate (Figure 13).

Figure 13. Unintentional Injury Death Rate*, Central Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

AREAS OF INFLUENCE

LWSD Areas of Influence and Indicators

Areas of Influence

The following pages show data by Area of Influence, or factors that influence quality of life. The *Live Well San Diego* Areas of Influence and Indicator Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Table 5).

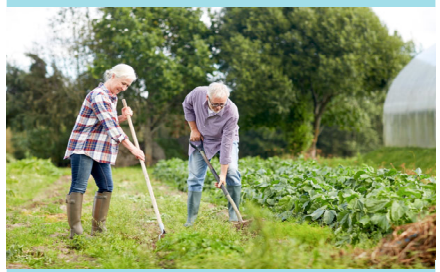
Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to live well.

Table 5. Indicators by Area of Influence.

Areas of Influence	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community Involvement



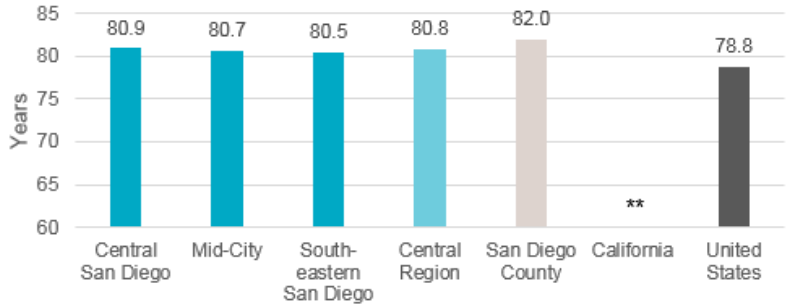
HEALTH

Area of Influence: Health

HEALTH

The health of an individual influences their ability to "live well." Improving health and supporting healthy choices is essential to Building Better Health in San Diego County. Two of the Top 10 indicators measuring progress for *Live Well San Diego* fall under the Health area of influence. The first, life expectancy, refers to the measure of length of life expected at birth, and describes the overall health status of a population. The second, quality of life, describes the percent of the population that is sufficiently healthy and able to live independently. Other measures that contribute to quality of life include disability status and health insurance coverage. An individual's disability status can create barriers to education, employment, and ability to live independently, thus influencing their quality of life. Access to care – both preventive medicine services and treatment for disease – is essential to a high quality of life. Both disability status and access to care influence a person's health and therefore influence their quality of life.

Figure 14. Life Expectancy at Birth, Central Region by Subregional Area, 2015.



***Data not available.*
Source: Life Expectancy; U.S. and State data from the United States Centers for Disease Control and Prevention, FastStats. County and Regional data prepared by the County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2015. Accessed: 09/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #1: Life Expectancy

Life expectancy at birth is measured as the average number of years a baby born today is expected to live if current mortality patterns continue throughout his or her lifetime.

In 2015, life expectancy in Central Region was 80.8 years, which was lower than San Diego County overall, and higher than the United States as a whole (Figure 14).

AVERAGE LIFE EXPECTANCY FOR A BABY BORN TODAY

80.8 YEARS

CENTRAL REGION

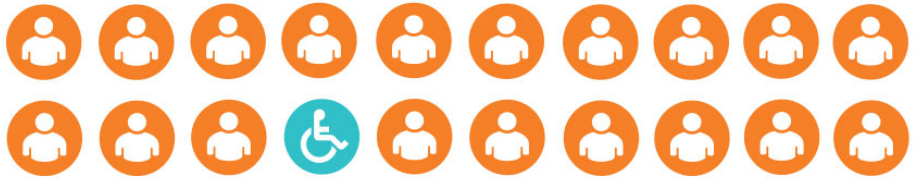
San Diego County: 82.0 Years

California: **

United States: 78.8 Years

Live Well San Diego Indicator #2: Quality of Life

Quality of life is measured as the percentage of the population sufficiently healthy to live independently. The ability to live independently has a positive impact on physical, mental, emotional, and social well-being.



19 IN **20** PEOPLE ARE HEALTHY ENOUGH TO LIVE INDEPENDENTLY*

**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*

CENTRAL REGION: 95.1%

San Diego County:	California:	United States:
94.8%	95.4%	95.6%

In 2015, 19 out of 20 people in Central Region were healthy enough to live independently (meaning the individual did not have any physical, mental, or emotional condition that impacted their ability to live independently).

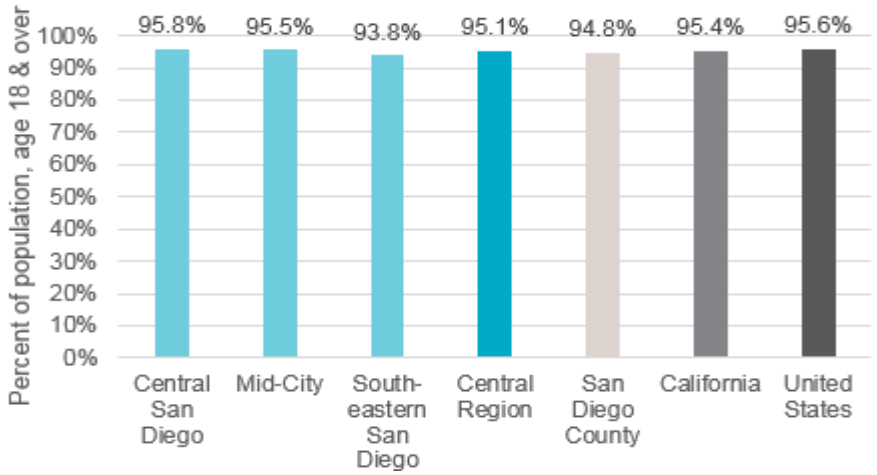
The percentage of people who were able to live independently was similar across Central Region, its SRAs, San Diego County, California, and the United States as a whole (Figure 15).

Supporting Indicators

Disability Status

Disability is defined as a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business.

Figure 15. Quality of Life (Ability to Live Independently), Central Region, 2015



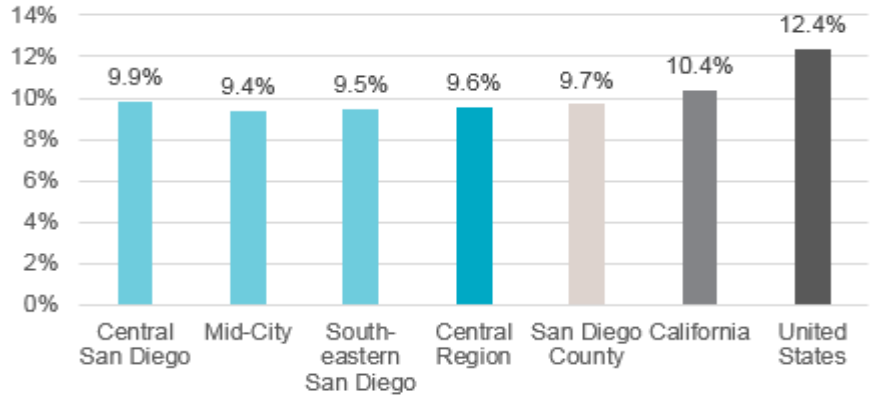
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Disability also contributes to an individual's ability to live independently. In 2015, 46,759 residents in Central Region reported having a disability.

In Central Region and its SRAs, approximately 1 in 10 residents had a disability. Central Region and its SRAs had a similar proportion of residents with a disability than the County overall. Central Region and its SRAs all had percentages of residents with a disability lower than California and the United States overall (Figure 16).

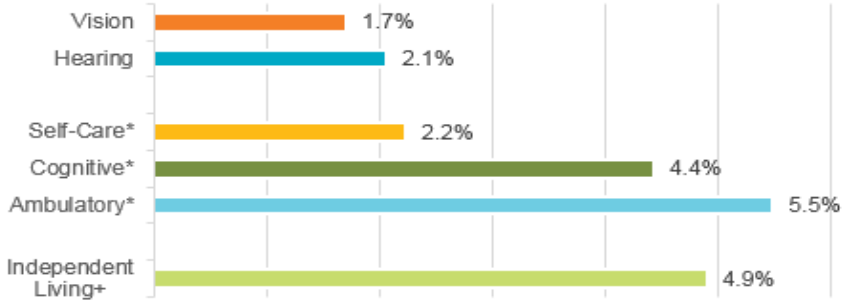
As shown in Figure 17, the most prevalent type of disability among adults in Central Region was ambulatory, meaning the person had serious difficulty walking or climbing stairs. The second most prevalent type of disability among adults in the Region was cognitive, meaning residents had serious difficulty concentrating, remembering, or making decisions due to a physical, mental, or emotional condition.

Figure 16. Disability Status by Subregional Area, Central Region, 2015



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 17. Disability Status by Type, Central Region, 2015.



Note: Percentage represents fraction out of total residents reporting disabilities (46,759). Percentages do not add to 100% because an individual may report having more than one kind of disability or difficulty.
**Cognitive, Ambulatory, and Self-Care excludes population under 5 years.*
+Independent living disabilities only calculated for 18+ population.
Source: U.S. Census Bureau 2011-2015, American Community Survey 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

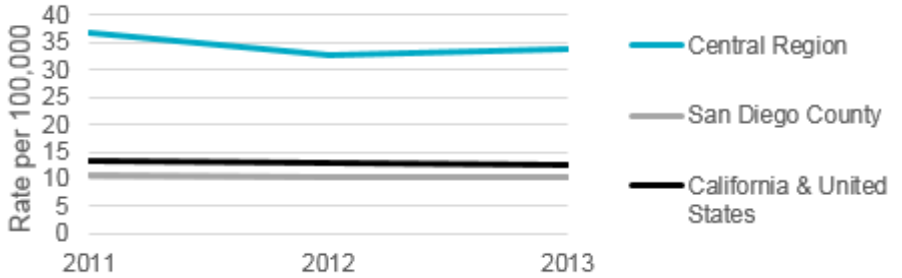
Internal Health Assessment

In this section, the results of additional internal and external health assessments are described. The purpose of this section is to help paint a more complete picture of the health of San Diego County residents.

HIV/AIDS Assessment

Human Immunodeficiency Virus, or HIV, is a virus that weakens a person's immune system by destroying important cells that fights disease and infection. Acquired Immunodeficiency Syndrome, or AIDS, refers to an advanced HIV infection, and is diagnosed when immune cell counts drop below a certain threshold, or when a person with an HIV infection acquires another opportunistic infection due to their severely weakened immune system.

Figure 18. HIV Incidence, Central Region, 2011-2013.

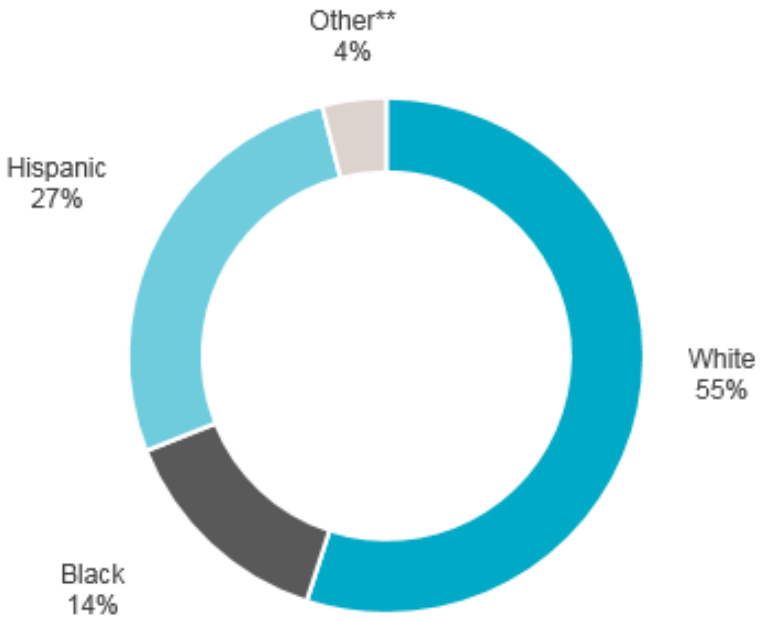


Note: California and United States have nearly identical incidence rates and are represented by one line.
United States Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention. HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf. Accessed 12/2017.
California Source: California Department of Public Health, Center for Infectious Diseases, Office of AIDS, Sacramento, California. California HIV Surveillance Report—2015. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California%20HIV%20Surveillance%20Report%20-%202015%20(Final%20Version%20Submitted%20for%20Approval).pdf. Accessed December 2017.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Since 2011, the incidence rates (new diagnoses) of HIV have declined in Central Region. In 2013, the rate at which new cases of HIV were diagnosed was 33.7 cases per 100,000 people (Figure 18). The HIV incidence rate in Central Region from 2011-2013 was consistently higher than the rate in San Diego County, California, and the United States.

Between 2010-2014, there were 2,438 new HIV diagnoses in the County, 46% of which were in the Central Region. Of those newly diagnosed cases during that time period, 7% were female.

Figure 19. Persons Living with HIV/AIDS, by Race/Ethnicity, Central Region, 2010-2014.



***Includes Asian/Pacific Islander, Native American, and Unknown.*
Note: Percentages may not total to 100% due to rounding.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), HIV Epidemiology report 2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Of persons living with HIV/AIDS in the Central Region between 2010-2014, 55% were white, 14% were black, 27% were Hispanic, and an additional 4% were either Asian/Pacific Islander, Native American, or their race/ethnicity was unknown (Figure 19).

External Health Assessment

Oral Health Assessment

Assembly Bill 1433 requires schools to distribute the Oral Health Assessment (OHA) Form to parents who are registering their child in public school, in either kindergarten or first grade. The form collects general demographic information about the student from the parent, and information about dental caries and decay from a licensed dental professional. Schools must collect the Oral Health Assessment Forms by May 31 of the school year and are responsible to report totals to their district. All Regions are required to collect this data.

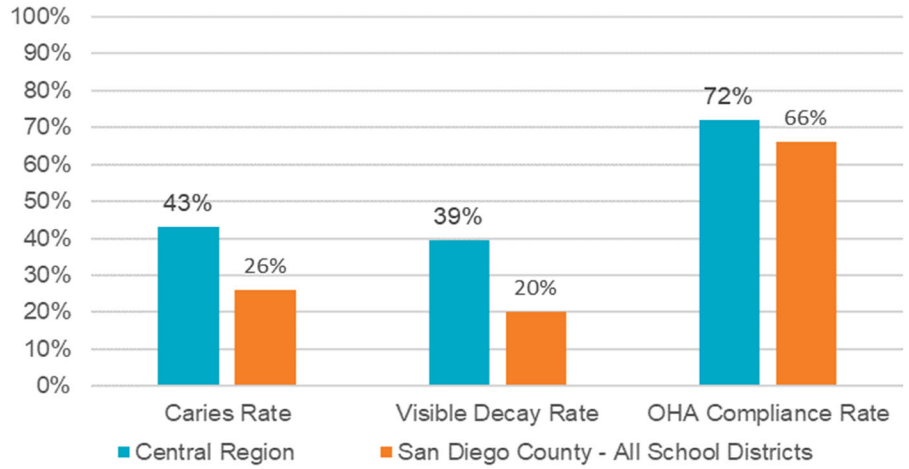
The summary report submitted by each district contains information about the number and percentage of children with an OHA on file, which is also called the compliance rate, for the current school year. Once reports are submitted to the local Child Health and Disability Prevention (CHDP) Program, data are analyzed. Although the following results provide insight on current oral health issues among school children, findings should be interpreted with caution because of potential data accuracy and reporting issues. All school districts are required to participate.

In Central Region, all participating schools were part of the San Diego Unified School District. Overall, out of 506 eligible kindergartners and first graders in Central Region during the 2017-2018 school year, 365 (72%) participated in the oral health assessment (Figure 20). Approximately 43% (158) were experiencing dental caries. Of those who participated, 39% (144) were experiencing dental decay.

Compared to the County overall, participating students in the Central Region had higher rates of dental caries (43%; County 26%). Participating students in the Central Region also had higher rates of decay (39%; County 20%) than the County overall. The compliance (participation) rate in Central Region was higher than the County overall (72%; County 65%).

KNOWLEDGE

Figure 20. Oral Health Assessment (OHA) Results, Central Region, 2017-2018.



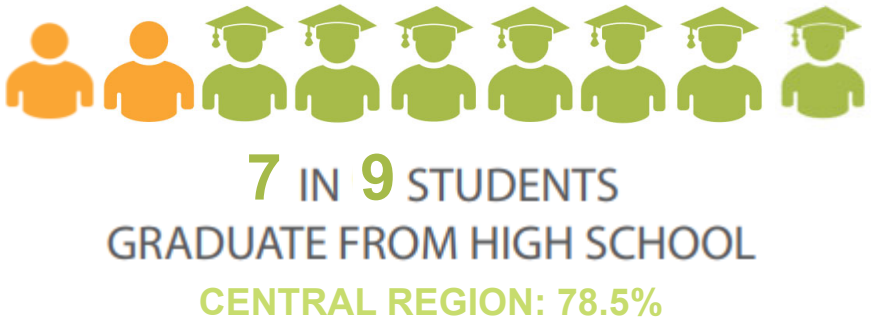
Note: In geographies where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.
Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

Area of Influence: Knowledge

Knowledge and access to education play an important part in the ability of an individual to "live well." Learning throughout the lifetime, for all individuals, impacts their health status. Education is measured by looking at the percentage of the population aged 25+ that currently has a high school diploma or GED. Graduation from high school is required for individuals to either further their education by going on to college, or in most cases, to get a job. Both of these factors influence the health of an individual.

Live Well San Diego Indicator #3: Education

Education is measured as the percentage of the population with a high school diploma or equivalent. Education has a beneficial influence on a variety of economic, social and psychological factors which impact the health and well-being of a population.



San Diego County:	California:	United States
85.5%	81.8%	86.7%

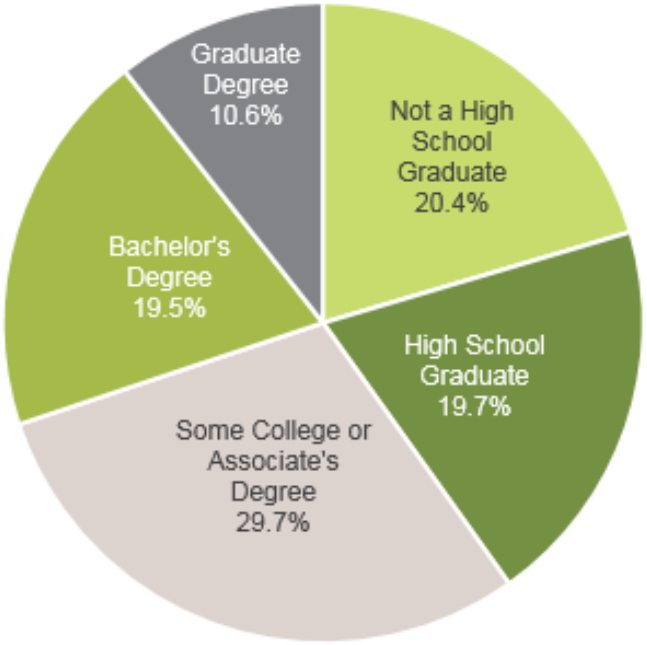
In Central Region, 78.5% of adults aged 25 and over had a high school diploma or equivalent. This estimate is lower than the County as a whole, California, and the United States overall in 2015 (Figure 22). The SRA with the highest percentage of high school graduates was Central San Diego, where 85.5% of residents reported having a high school diploma or equivalent. The SRA with the lowest percentage was Southeastern San Diego, where only 72.3% of residents had a high school diploma or equivalent.

Supporting Indicators

Overall Educational Attainment

About three-fifths of Central Region residents had at least some college education, with three-tenths having some college or an associates degree, one-fifth having a bachelors degree, and one-tenth having a graduate degree (Figure 21).

Figure 21. Overall Educational Attainment, Central Region, 2015.

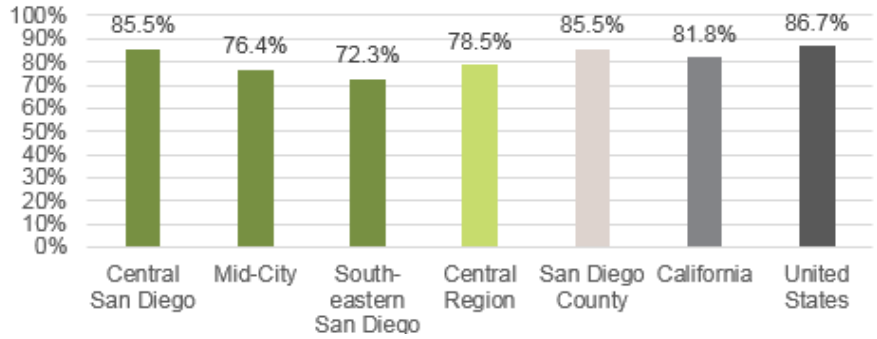


Note: "Educational Attainment" refers to the percent of population 25 years and older at the listed education level.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

School Enrollment

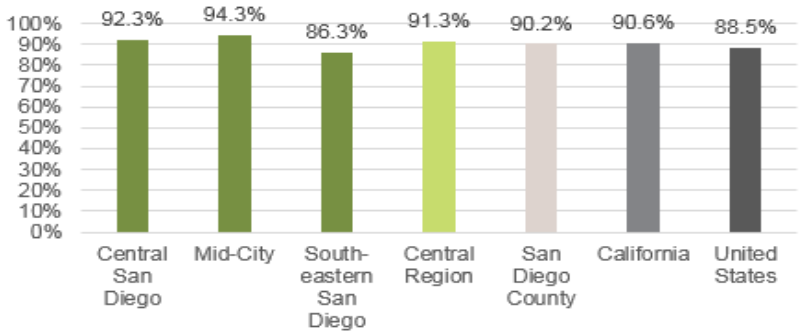
In 2015, 91.3% of school-aged residents (aged 3-24 years) were enrolled in school in the Central Region. This figure was higher than enrollment in San Diego County (90.2%), California (90.6%), and the United States as a whole (88.5%; Figure 23). The SRA with the highest school enrollment percentage was Mid-City. The SRA with the lowest school enrollment percentage was Southeastern San Diego.

Figure 22. Education, Central Region by Subregional Area, 2015.



"Education" refers to percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau 2011-2015, American Community Survey 5-Year Estimates, Table S1501. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 23. School Enrollment, Central Region by Subregional Area, 2015.



"School enrollment" refers to enrollment in regular school, either public or private, which includes nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree for ages 3-24 years.
Source: U.S. Census Bureau 2011-2015, American Community Survey 5-Year estimates, Table S1401. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Area of Influence: Standard of Living

The Standard of Living Area of Influence concerns residents having enough resources to live a quality life. Important indicators include unemployment rate because having a steady job and making enough money to live a quality life are both crucial to an individual's standard of living. San Diego County is an expensive place to live, as the cost of housing here is higher than it is in most other urban areas across the United States. Housing affordability is measured by the percentage of individuals who spend less than 30% of their income on housing. Being able to afford adequate housing and still being able to afford other necessities (health care, food, transportation, etc.) reflects an individual's ability to "live well."

STANDARD OF LIVING

Live Well San Diego Indicator #4: Unemployment Rate

Unemployment rate is measured as the percentage of the total labor force that is unemployed. The rate of unemployment has a strong negative influence on the financial health and overall well-being of a population.

CENTRAL REGION

San Diego County: **6.3%**

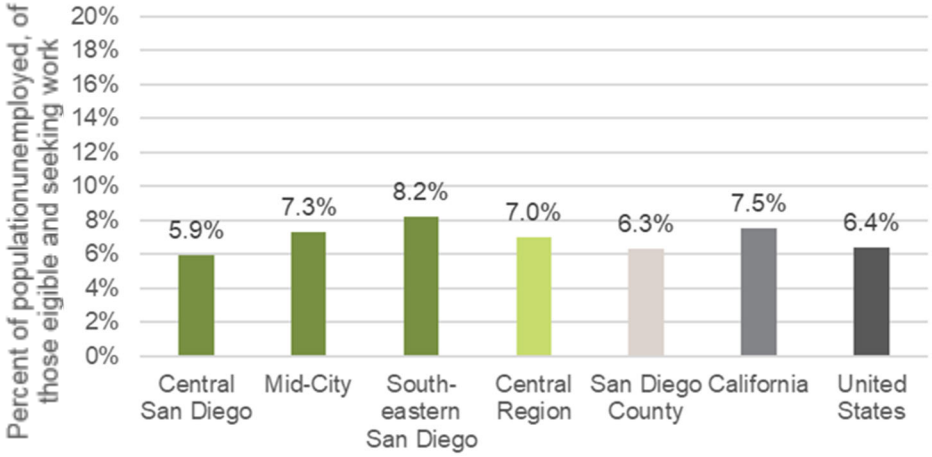
California: **7.5%**

United States: **6.4%**

In 2015, 7.0% of Central Region residents eligible and seeking work were unemployed. The unemployment rate for Central Region was higher than it was in San Diego County (6.3%) and the United States (6.4%), but lower than California (7.5%; Figure 24).

The SRA with the highest unemployment rate was Southeastern San Diego at 8.2%, where nearly 1 in 12 people eligible and seeking work were unemployed.

Figure 24. Population Unemployed,* Central Region by Subregional Area, 2015.

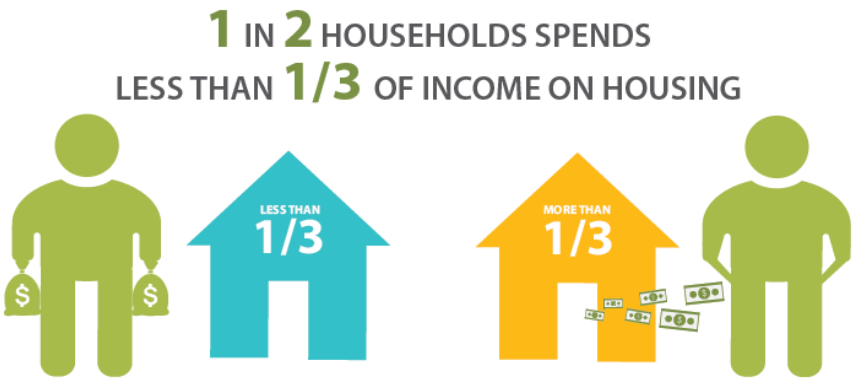


**"Unemployment" refers to the population unemployed, of those eligible and seeking work.*
Source: 2015 Unemployment Rate. ESRI Community Analyst.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

STANDARD OF LIVING

Live Well San Diego Indicator #5: Income

Income is measured as the percentage of the population spending less than 1/3 of income on housing. Households who spend more than 1/3 of household income for housing may have difficulty paying for necessities such as food, transportation, or medical care.



San Diego County: 51.8%

California: 53.5%

United States: 62.9%

In Central Region, a large proportion of residents (51.2%) spent less than one-third of their income on housing, which was smaller than in San Diego County (51.8%), California (53.5%), and the United States overall (62.9%).

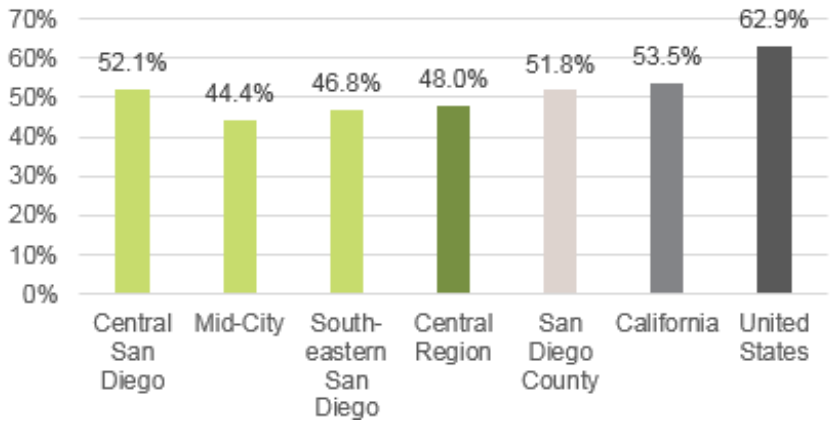
About half of households in the Central Region spent less than one-third of their income on housing, a pattern that held true across all SRAs within the Central Region. The SRA with the highest percentage of households spending less than one-third of their income on housing within the Central Region was Central San Diego (Figure 25).

Supporting Indicators

Occupation

A person's educational attainment likely influences their career. Industry and occupation determine level of income, which in turn reflects an individual's or family's spending power when it comes to housing, food, and medical care; these are all factors that influence the ability to "live well." Certain industries and occupations come with inherent environmental or occupational risks, which may influence an individual's health.

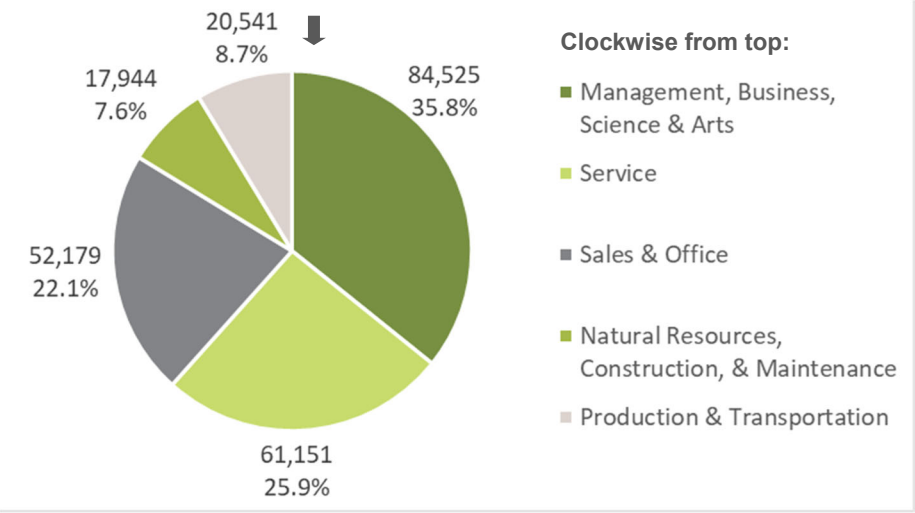
Figure 25. Households Spending Less Than 30% of Income on Housing, Central Region, 2015.



Does not include cash rent or those with zero or negative income.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table S2503.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

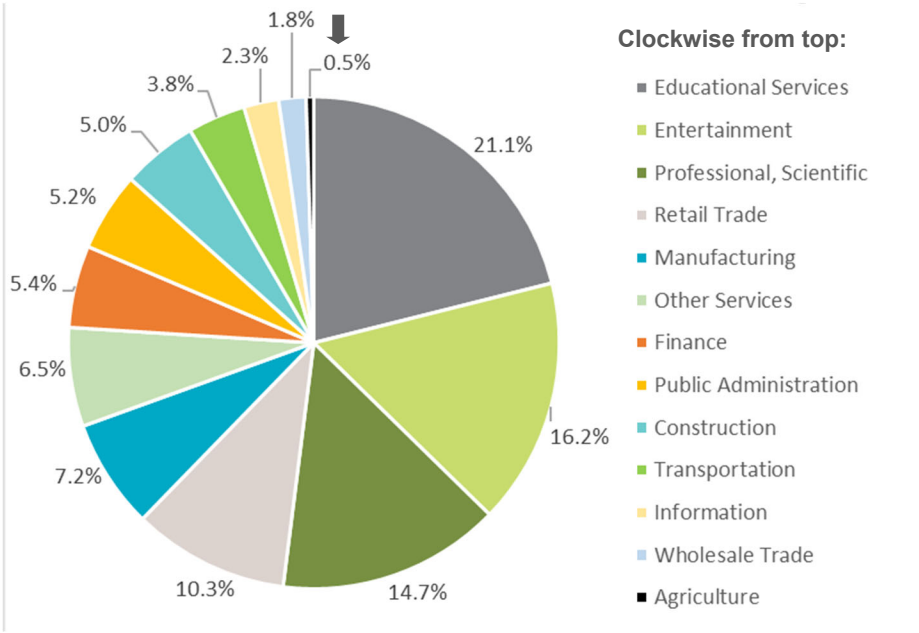
Management, business, science, and arts includes any occupation in business, finances, computer engineering, architecture, life science-related jobs, as well as community and social services, legal, education, arts, and healthcare. *Service* refers to healthcare support, protective services such as firefighting and law enforcement, food preparation and service, custodial and maintenance, as well as personal care. *Sales and office* refers to anything related to sales or office and administrative support. *Natural resources, construction, and maintenance* refers to farming, fishing, forestry, construction, extraction, installation, maintenance and repair. *Production and transportation* includes anything related to production, transportation, or material moving. In Central Region, over one-third of people who are over the age of 16 and employed in a civilian capacity were involved in the management, business, science and arts sectors. The sector with the least involvement was the production and transportation occupations (Figure 26).

Figure 26. Labor Force by Occupation, Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 27. Occupation by Industry, Central Region, 2015.



Total employed population: 236,104

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Industry

When broken down further by industry, a more detailed picture of the sectors employing the most Central Region residents emerges. The industry employing the highest percentage of residents was the educational services, health care and social assistance industry, with just over 1 in 5 of the employed civilian population. The next largest industry was the entertainment industry, including arts, entertainment and recreation, as well as accommodation and food services, at about 1 in 7 residents. The least populous industry was agriculture, with only 1 in 200 of the eligible population employed (Figure 27).

Median Household Income and Person Per Household Income

Income reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to "live well." Household income includes income earned by the householder and all other people 15 years and older in the household, whether or not they are related to the householder. Median household income is determined by looking at the distribution of income across all households, including those with no income, and picking the point at which half the distribution falls below it, and half the distribution falls above it.

The median household income in Central Region was almost $52,000 per year in 2015. This is lower than San Diego County as a whole, California, and the United States overall (Figure 28).

Person per household (PPH) income is determined by taking the median and dividing it by the average number of people per household, which is 2.52 people in Central Region. The PPH Income in Central Region is about $20,500 per year. This is lower than San Diego County, and about the same as California and the United States overall (Figure 28).

STANDARD OF LIVING

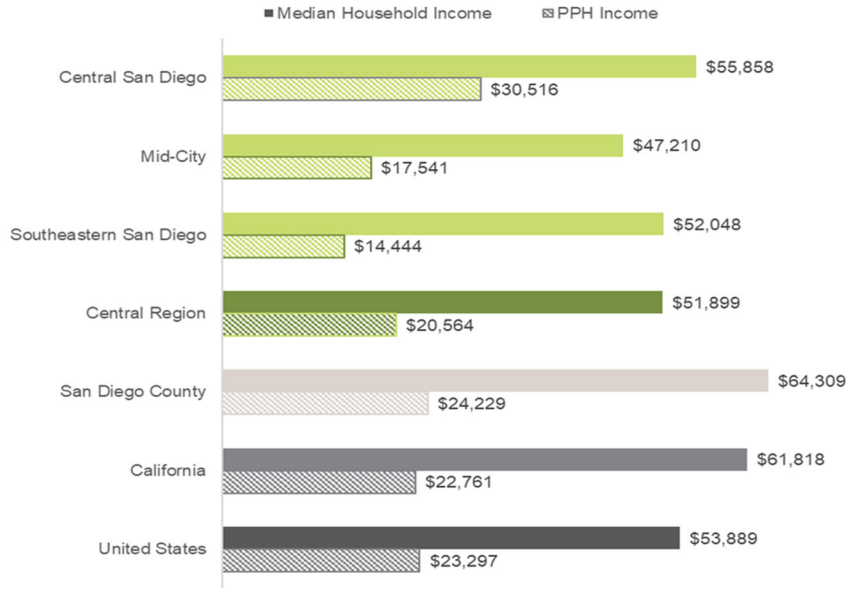
Socioeconomic status is defined as a composite measure that typically incorporates economic, social, and work status. Economic and social status are measured by income, and work status is measured by occupation; each status is considered an indicator, and these indicators are related but do not overlap.

Cost of Living

According to the Consumer Price Index compiled by the U.S. Bureau of Labor Statistics, prices for goods, services and shelter rose 1.7% within the first six months of 2017. It was noted that the increase was primarily influenced by rising costs of shelter.[†] According to a study by Cushman and Wakefield, only 26% of households in San Diego can afford median-priced homes.[§]

The median rent in Central Region in 2015 was $1,226 per month; the highest SRA was Southeastern San Diego; the least expensive was Central San Diego.

Figure 28. Income, Central Region by Subregional Area, 2015.

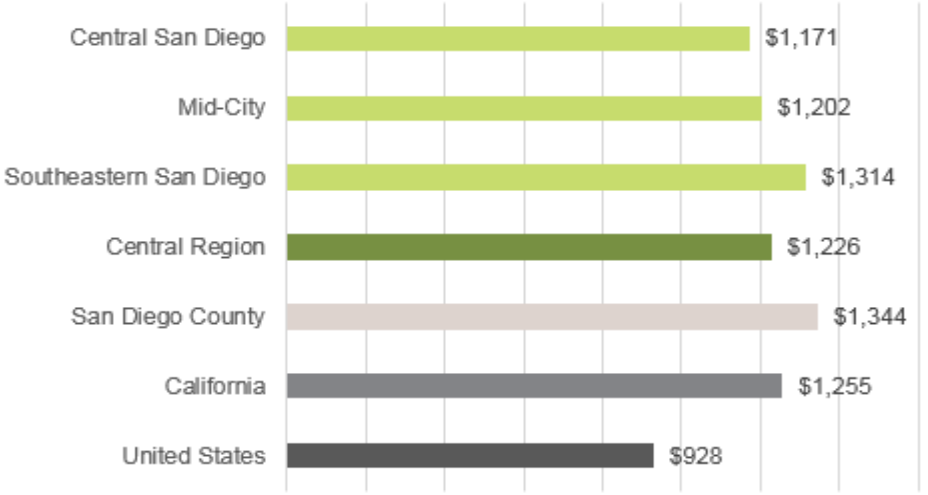


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP02, DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The median rent in Central Region was lower than San Diego County, about equal to California, and significantly higher than the United States as a whole (Figure 29).

In the United States, the median house value was below $200,000. In Central Region, the median house value was about $370,000. The SRA with the highest median house value was Central San Diego, at over $450,000. The SRA with the lowest median house value was Southeastern San Diego, at just under $290,000. The median house value in Central Region was lower than San Diego County, about equal to California, and significantly higher than the United States as a whole (Figure 30).

Figure 29. Median Gross Rent, Central Region by Subregional Area, 2015.



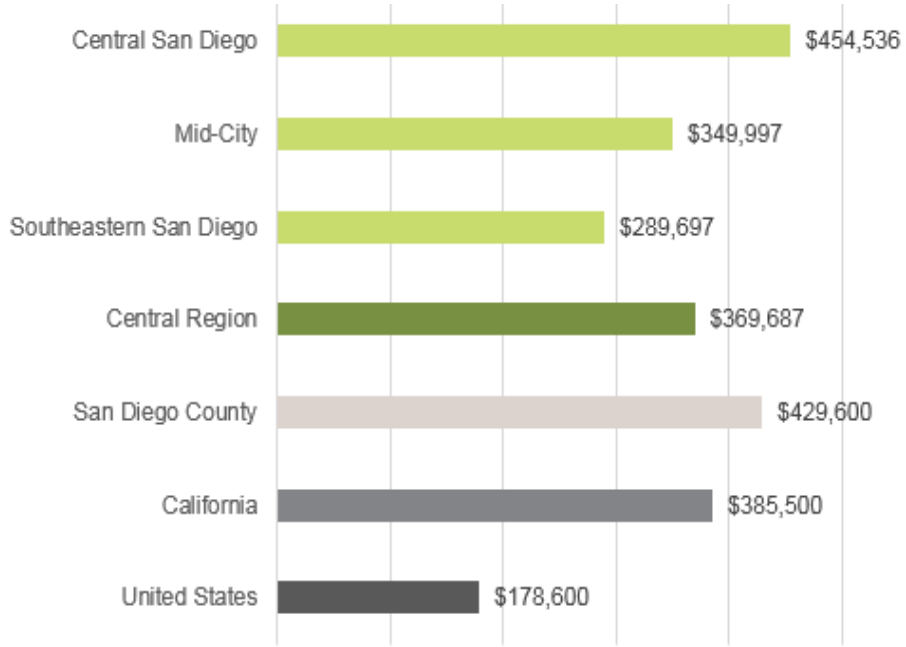
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

[†] *United States Department of Labor, Bureau of Labor Statistics. Consumer Price Index, San Diego—First Half 2017. https://www.bls.gov/regions/west/news-release/2017/consumerpriceindex_sandiego_20170714.htm#tableA. Accessed July 23, 2018.*
[§] *Cushman & Wakefield. San Diego MARKETBEAT Multi-Family Spring 2018. http://www.cushmanwakefield.com/en/research-and-insight/unitedstates/san-diego-multifamily-snapshot. Accessed June 25, 2018.*

STANDARD OF LIVING

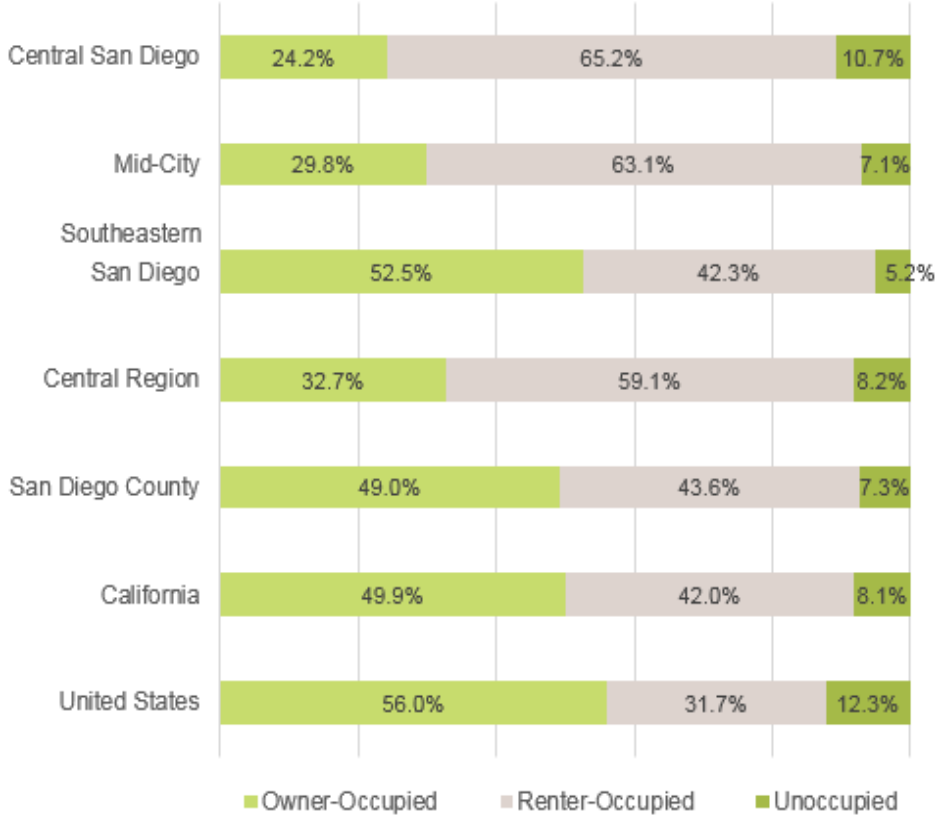
In the Central Region, about one-third of householders owned the home they live in. Almost three out of five housing units were rented. Nearly 1 in 10 housing units were unoccupied. The highest proportion of rented units were within the Central San Diego SRA. Southeastern San Diego had the highest number of owner-occupied units (Figure 31).

Figure 30. Median House Value, Central Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

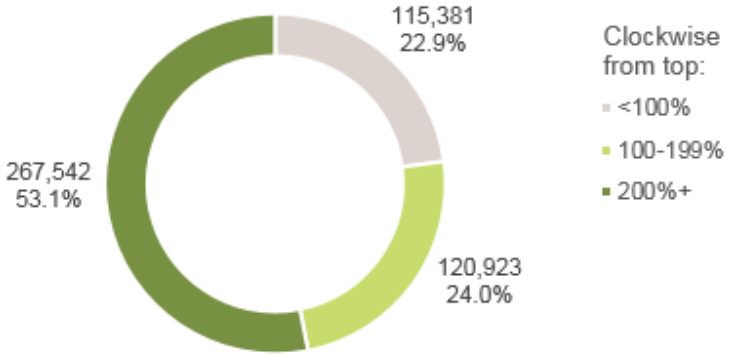
Figure 31. Housing Occupancy, Central Region by Subregional Area,



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Figure 32. Population by Poverty Level, Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table B17024.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

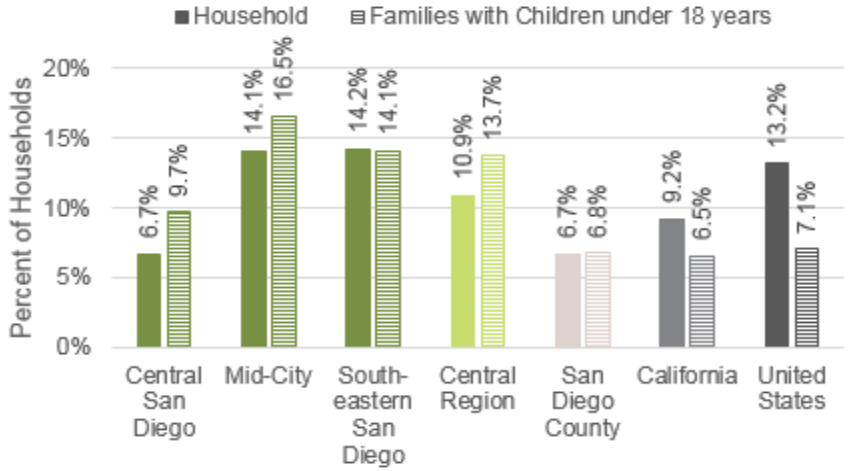
Poverty is determined to be when a person or group of people lack human needs because they cannot afford them – including basic necessities such as clean water, adequate nutrition, health care, education, clothing, and shelter. Families or people with income below a certain limit are considered to be below the poverty level. Poverty level for a household is determined, in part, by the number of people in the household who must be supported by the combined household income.

In Central Region, almost 1 in 4 people lived below the poverty line (Figure 32). It is generally accepted that in order to be able to afford basic necessities, an individual or household must be at or above 200% of the poverty level. With that standard, nearly 1 in 2 people were living without adequate financial resources.

Public Program Participation

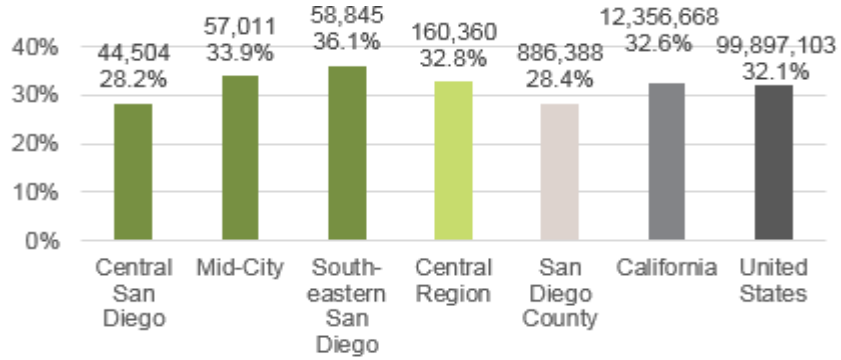
Many San Diegans rely on public assistance to make ends meet. In 2015, 10.9% of households within the Central Region received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 13.7% received CalFresh benefits. The SRA with the greatest percentage of families with children under 18 receiving benefits was Mid-City. The SRAs with the greatest proportion of households receiving CalFresh benefits were Southeastern San Diego and Mid-City (Figure 33).

Figure 33. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, Central Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B22022.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 34. Public Health Insurance Coverage, Central Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2704.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Of the nearly 500,000 people living in Central Region, almost one-third relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or VA health care coverage; Figure 34).

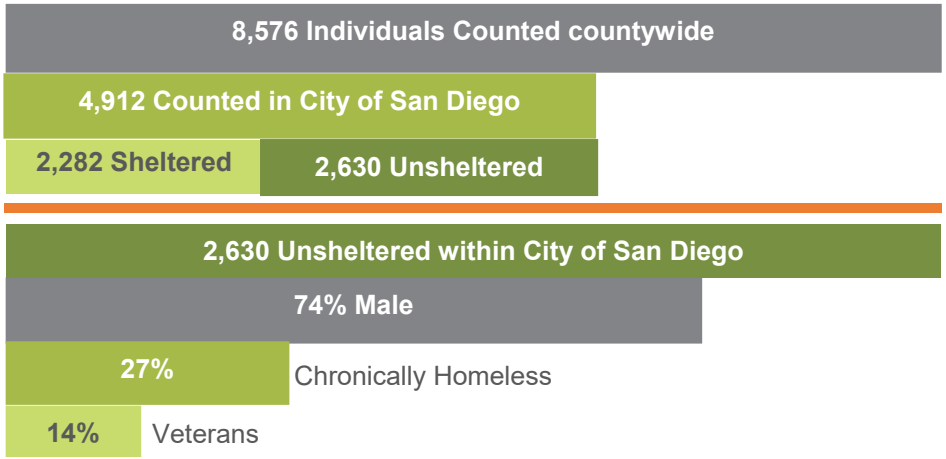
External Standard of Living Assessment

In this section, the results of an additional external standard of living assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2018 WEALLCOUNT: San Diego's Annual Point-in-Time Count

On January 26, 2018, 8,576 individuals were counted as homeless in San Diego County during San Diego County's annual WEALLCOUNT Homeless Point-In-Time count. Of those, 4,990 (58.2%) were unsheltered, and 3,586 (41.8%) were considered to be sheltered (spent the night in homeless shelter or program). About 57% of those counted were within the City of San Diego, whose boundaries approximate the combined Central and North Central Regions together. Over half of the 4,912 counted within the City of San Diego were unsheltered (Figure 35).

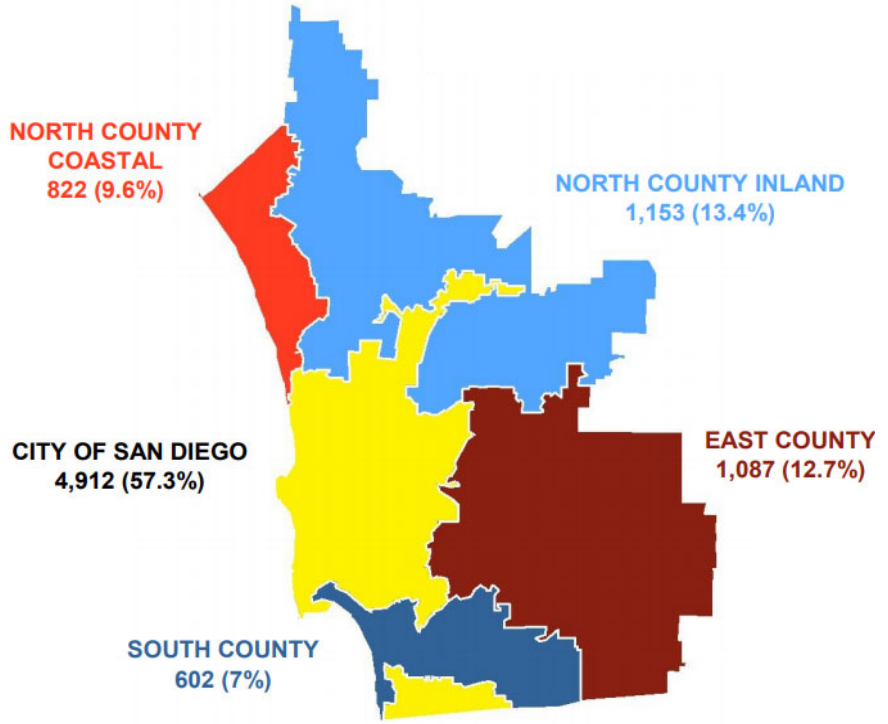
Figure 35. Point-In-Time Count Results, Central Region, 2018.



Source: San Diego County Regional Task Force On The Homeless. 2017 WEALLCOUNT Annual Report. http://www.rtfhsd.org/wp-content/uploads/2017/07/comp-report-final.pdf.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Of the unsheltered population, 27% (708 individuals) were chronically homeless as defined by the U.S. Department of Housing and Urban Development (HUD). To be chronically homeless means than an individual has experienced homelessness for a year or longer, or has experienced at least four episodes of homelessness in the past year, and also has a diagnosed disability that prevents them from maintaining work or housing. Of the unsheltered population, 14% (367) were veterans.

Figure 36. 2018 Point-in-Time Count: Regional Breakdown of Percent of Homeless Individuals.



Source: San Diego County Regional Task Force On The Homeless. 2018 WE ALL Count Annual Report. https://www.rtfhsd.org/wp-content/uploads/2017/06/2018-WPoint-in-Time-Count-Annual-Report.pdf. The breakdown by region for the homeless count is not the same as HHSA regions in that the boundaries for the City of San Diego approximate Central and North Central Regions combined.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

COMMUNITY

Area of Influence: Community

The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment.

Conflict resolution programs are keeping youth out of the detention system, environmentally-conscious buildings and events are creating community pride, and community gardens are beautifying the environment and improving local access to healthy foods. Partners are training residents to be advocates for change in their own neighborhoods, and the community as a whole benefits as a result.

Live Well San Diego indicators that measure progress towards this area of influence include Security (Crime Rate), Physical Environment (Air Quality), and Built Environment (Distance to Park). Living in a crime-free or low-crime area reduces stress and increases an individual's ability to go outside and interact with their environment, leading to better health outcomes. Many residents of San Diego County live in highly urban areas where there is not much open space—having a park nearby provides an opportunity to be physically active and leads to reduced disease associated with sedentary lifestyle.

Live Well San Diego Indicator #6: Security (Crime Rate)

Security (Crime Rate) is measured as the number of crimes per 100,000 people. Crime, including violent and property crimes, can have a significant impact on well-being of the population, and contributes to premature death and disability, poor mental health, and lost productivity.

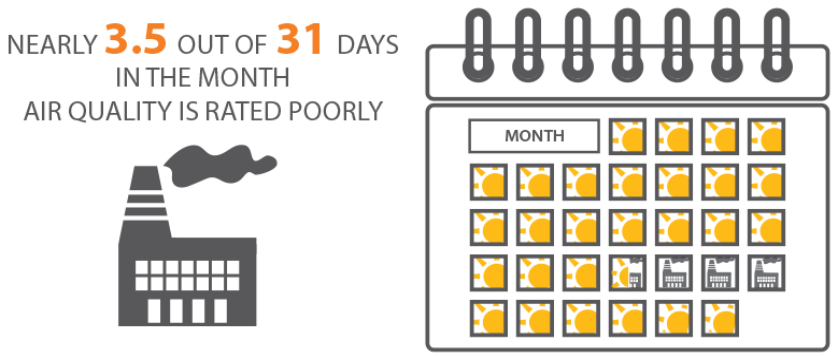
Source: 2016 Overall Crime rate per 100,000 population. Consists of Violent Crime: Murder and Non-negligent Manslaughter, Forcible Rape, Robbery, and Aggravated Assault AND Property Crime: Burglary, Larceny-Theft, and Motor Vehicle theft (Arson included); US Department of Justice- Federal Bureau of Investigation's Uniform Crime Reporting Statistics. 2016. Original Date: 8/22/2012. Accessed on: 9/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #7: Physical Environment (Air Quality)

Physical Environment: Air Quality is measured as the ratio of days that air quality is rated unhealthy. Air pollution affects more people than any other pollutant. Lower levels of air pollution in a Region correlate with better respiratory and cardiovascular health of the population.

In San Diego County, the air quality was rated poorly on 11.5% of days.

SAN DIEGO COUNTY



California:
7.8%

United States:
Data Not Available

Source: 2016. San Diego, State and Nation from EPA AirData System. http://www.epa.gov/airdata/ad_rep_con.html. May include exceptional events. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #8: Built Environment (Distance to Park)

Built environment/distance to park is measured as the percentage of the population living within a quarter mile of a park. Access to parks and recreation services has been shown to have positive health impacts, including the physical, social, and mental aspects of health.

The Central Region and its SRAs overall had more than three-quarters of its residents living within a quarter mile of a park. This was higher than San Diego County overall (Figure 37).

3 IN 4 PEOPLE LIVE WITHIN A QUARTER MILE OF A PARK

CENTRAL REGION: 77.6%

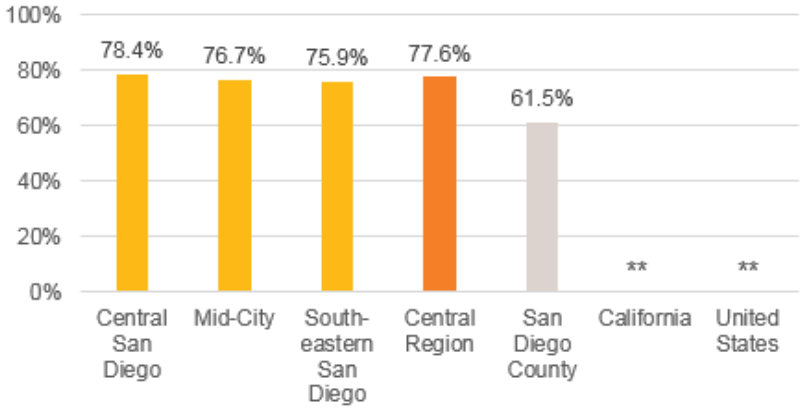
San Diego County:
61.5%

California:
******

United States:
******

*** Data Not Available*
Source: 2015 County Business Patterns dataset. censtats.census.gov/. Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 37. Percentage of Population Living within One-Quarter Mile of a Park or Community Space, Central Region by Subregional Area, 2015.



*** Data Not Available*
Source: 2015 County Business Patterns dataset. censtats.census.gov/. Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

Air Quality

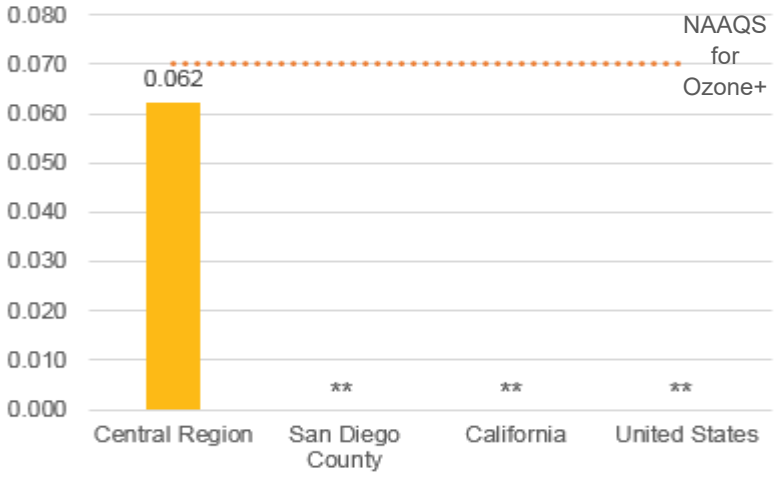
Ozone- One type of pollutant that contributes to air quality is ozone. Higher temperatures increase ground-level ozone, one type of secondary air pollutant, as a result of chemical reactions taking place at power plants, within motor vehicles, and ultimately creating smog and pollution. Ozone affects those with cardiovascular and respiratory difficulties, such as asthma, and contributes to related mortality, emergency room visits, and hospitalizations. Ozone concentrations are higher where there is heavy vehicle traffic, coal-fired power plants, and industrial processes occurring.

Figure 38 shows ozone concentration for Central Region. The Design Value, or DV, is a statistic describing the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS). If the DV is less than the standard, then the area is in attainment of the standard (or that area, on average, meets the standard).

In the Central Region, the DV for 2014-2016 was below the national standard, meaning the Region's ozone concentration was lower than the standard and thereby in attainment of the standard (Figure 38).

PM 2.5 Concentration- PM 2.5, or particulate matter 2.5 microns or less in diameter, includes pollutants such as combustion particles, organic compounds, metals, and any other fine particulate matter, and is capable of reaching deep into the lungs and causing cancers and other diseases. PM 2.5 levels are higher in areas

Figure 38. Ozone Concentration, Central Region, 2014-2016.



*** Data Not Available*
Note: 2014-2016 3-year average of the 4th high 8-hour ozone concentration. When the Design Value (DV) is less than or equal to the standard, then we are in attainment of the standard. Original Date: 4/17/2013. Accessed on: 8/2017.
Source: United States Environmental Protection Agency. NAAQS table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

where heavy equipment is used, burning activities occur, and industrial facilities are located.

The Central Region had an average PM 2.5 concentration well below the National Ambient Air Quality Standard for the United States. This means that there is less PM 2.5 in the air than is allowed by the Environmental Protection Agency (EPA), and thereby in compliance with standards (Figure 39).

Figure 39. PM 2.5 Concentration, Central Region, 2014-2016.

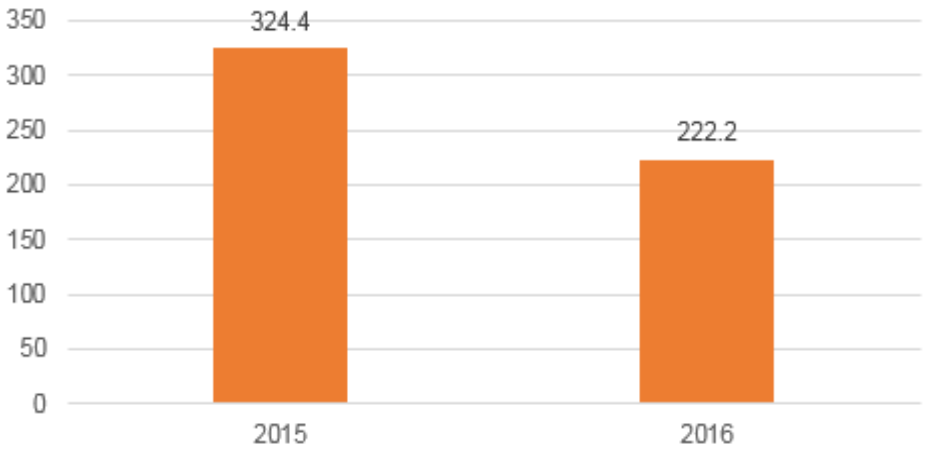
*** Data Not Available*
Source: 2014-2016 San Diego Air Pollution District Data. Particulate Matter 2.5—here we use a 3 year average of the 98th percentile of collected samples for a 24 hour standard. Not all Regions are represented. Original date: 4/17/2013. Accessed on: 8/2016.
Source: United States Environmental Protection Agency (EPA). NAAQS Table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Water Quality

Environmental health affects the health of the population. Climate change is part of environmental health, and is defined as major changes in the earth's temperature, rainfall, snow and wind patterns. Climate change affects many areas of life, including health, water resources, food production, agriculture, forestry, wildlife, and energy supply.

Water quality is measured by tracking water quality violations. The actual indicator is rate of violations per year for federally regulated drinking water contaminants per 100,000 people. San Diego County level data is presented in Figure 40.

Figure 40. Water Quality, San Diego County, 2015-2016.



Rate of total water violations per 100,000 population for federally regulated drinking water contaminants and other drinking water violations. Data are not comparable to data collected prior to 2013 as EPA has done quality assurance on their system and increased reporting in many states.
Source: 2015-2016 EPA water violations from SDWISFED Drinking Water Data. Original Date: 1/26/2012. Accessed on: 8/2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Geography

Geography has come to the forefront of the discussion on health equity. The idea that "place matters" has become more commonplace in recent years. Together, there are 18 incorporated cities and towns, as well as several unincorporated communities. Several community types exist throughout the County – some more urban, some more rural. Data are collected and reported out by the 41 Subregional Areas (SRAs) in San Diego County. San Diego County has an area of over 4,200 square miles and over 70 miles of coastline. Substantial differences in health indicators and health-related behaviors exist in the different areas of the County. More information on how geography affects health can be found in the *Identifying Health Disparities to Achieve Health Equity in San Diego County: Geography* report at HE_Geography_FINAL.pdf (sandiegocounty.gov).

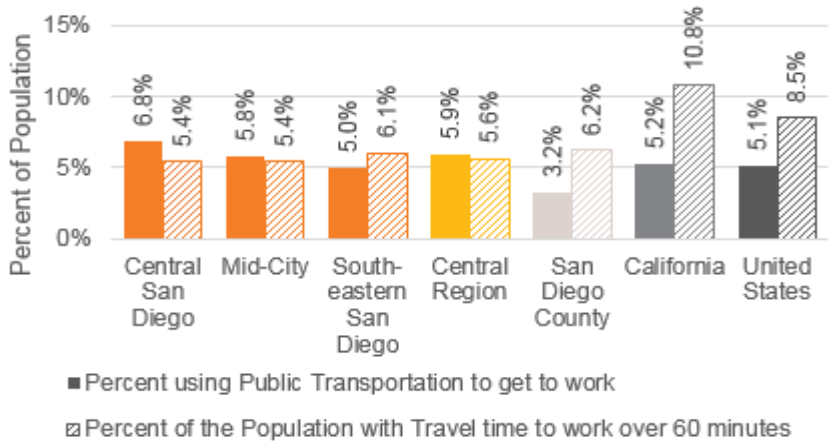
Public Transportation and Commute to Work

Active transportation, or walking and using public transportation to get around, is related to the built environment and the individual's perception of safety, as well as the availability of public transit. This indicator measures the percent of population using public transportation to get to work.

A higher percentage of those living in the Central Region use public transit to get to work than those in San Diego County, California, and the United States as a whole. The SRA with the highest proportion of residents using public transit to work was Central San Diego. The SRA with the lowest proportion was Southeastern San Diego.

Commute to work can be measured as the average travel time to work. It is also interesting to see how much of the population spend more than an hour commuting to work. In the Central Region, 5.6% of residents commuted 60 minutes or more to get to their workplace. This was lower than San Diego County, California, and the United States as a whole. The SRA with the greatest proportion of residents commuting 60 minutes or more to work was Southeastern San Diego at 6.1%. The SRAs with the lowest proportions were Central San Diego and Mid-City, at 5.4% in both SRAs (Figure 41).

Figure 41. Commute to Work, Central Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03, B08012. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

SOCIAL

Area of Influence: Social

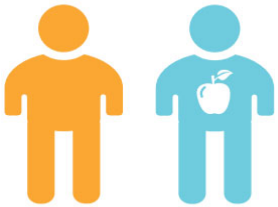
The Social Area of Influence concerns residents helping one another. San Diegans help one another and contribute to their communities by volunteering to serve others who may be less fortunate, by contributing to charitable organizations, and by being politically active and voting in Local, State and Federal elections. There are also vulnerable populations within the County who benefit from the help that others provide.

Vulnerable populations in San Diego County include those who live below 200% of the poverty level and may also be experiencing food insecurity. Food insecurity refers to individuals and families who are unable to afford enough food on a regular basis. In turn, they may not have access to healthier foods essential for good nutrition, and this impacts the health and well-being of the population.

Communities thrive when people get to know their neighbors and are invested in the well-being of the people they interact with every day. *Live Well San Diego* partners encourage community connections and engaged citizens. New residents are finding hope through refugee and survivor programs, foster youth and families are discovering resiliency through training and education, seniors are receiving comfort and nourishment through meal delivery services, and volunteers are gaining greater purpose by giving back to their neighbors.

Live Well San Diego Indicator #9. Vulnerable Populations (Food Insecurity)

Food insecurity is measured as the percentage of the low income (income at or below 200% federal poverty level) population who have reported inability to purchase enough food on a regular basis, based on survey data. Food insecurity affects not only current health status, but also physical, mental, and social development.



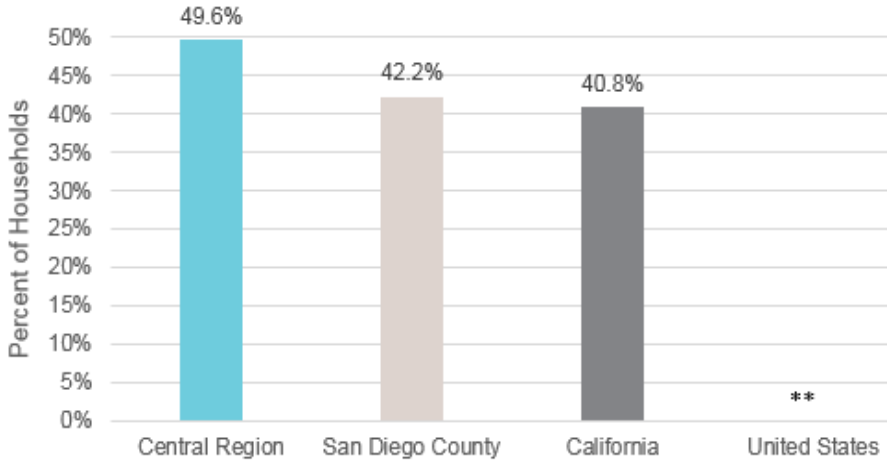
CENTRAL REGION: 49.6%

1 IN 2 PEOPLE WITH LOW-INCOME* EXPERIENCE FOOD INSECURITY

*Low-income is 200% or below the Federal Poverty Level (FPL)

San Diego County:	California:	United States:
42.2%	40.8%	**

Figure 42. Food Insecurity, Central Region, 2014-2015.



*** Data Not Available*

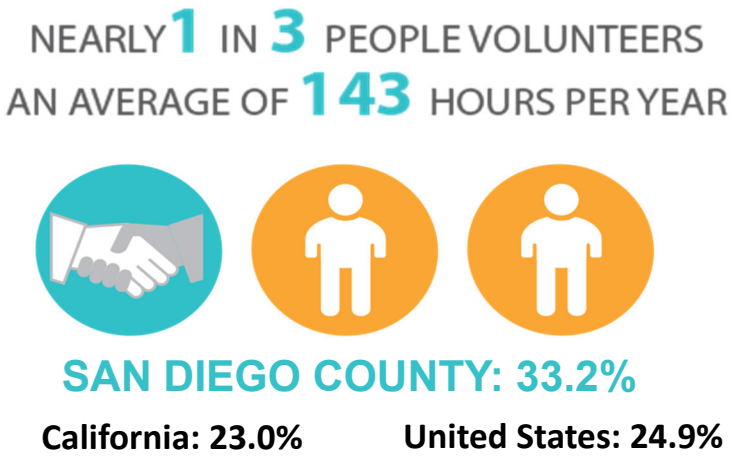
Source: 2014-2015 UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 9/2017.

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #10: Community Involvement (Volunteerism)

Volunteerism is measured as the percentage of the population who volunteer. Volunteering creates a meaningful, positive impact on the community, and benefits the volunteers themselves.

Data is not available by Region, so the figure for San Diego County overall is provided. A higher percentage of individuals in San Diego County volunteered compared to the State and the Nation.



Source: Percent of residents who volunteer. Data from 2015 from Corporation for National and Community Service. Original Date: 1/24/2013. Accessed on: 6/2017.

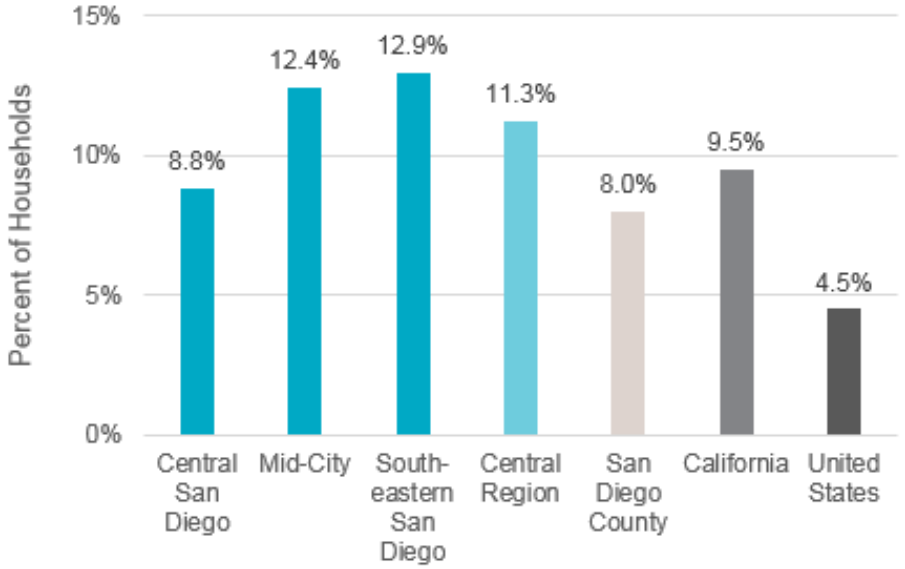
Supporting Indicators

Linguistic Isolation

Linguistic isolation refers to those residents who are isolated because they are unable to communicate effectively in English. Those who cannot effectively communicate in English may have trouble talking to people who provide social services and medical care. They may also not hear or understand important information when there is an emergency – such as an accidental chemical release, or spill. As a result, those who do not communicate well in English may be less likely to get the health care or safety information that they need.

A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." In Central Region overall, about 1 in 10 households were linguistically isolated (see Figure 43). The SRA with the highest percentage of linguistically isolated households was Southeastern San Diego. The SRA with the lowest percentage of linguistically isolated households was Central San Diego.

Figure 43. Linguistic Isolation, Central Region, 2015.



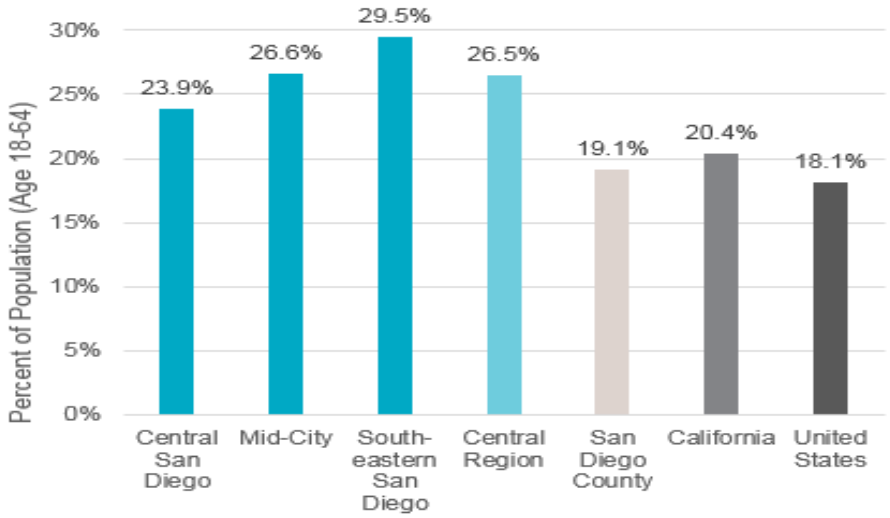
Percent of population considered linguistically isolated. A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who may speak only English.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1602. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Health Insurance Status

An individual's ability to live well is influenced by their ability to access the health care system, for both urgent medical issues and preventive care. This indicator measures the lack of health insurance for the non-elderly adult population, or those aged 18 to 64. Children and the elderly often are more likely to be eligible for public health insurance programs, such as Medi-Cal and Medicare, than those adults who fall between the ages of 18 and 64.

More than 1 in 4 adults ages 18-64 were lacking health insurance in the Central Region, which was higher than the 1 in 5 in the County overall. The SRA within the Central Region with the highest percent of uninsured adults was Southeastern San Diego. The SRA within the Central Region with the lowest percent of uninsured adults was Central San Diego (Figure 44).

Figure 44. Lack of Health Insurance (Ages 18-64), Central Region by Subregional Area, 2015.



Note: Percent of population not currently covered by health insurance, ages 18-64.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2701. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

For the most current data, be sure to visit:

Community Health Statistics (sandiegocounty.gov) and

Data & Results (livewellsd.org)

East Region
Community Health Assessment

TABLE OF CONTENTS

East Region Community Leadership Team 4

Introduction 6

Community Health Status Assessment

Demographics.....7

Morbidity and Mortality.....9

Community Health Status Assessment by Area of Influence.....17

Health.....18

Knowledge.....23

Standard of Living.....25

Community.....32

Social.....38

COMMUNITY LEADERSHIP TEAM MEMBERS

Co-Chairs:

- Jennifer Bransford-Koons, Director of Regional Operations, HHSA-East & North Central Regions
- R. Daniel Hernandez, Director of Community Relations, San Ysidro Health Center

Some members are also *Live Well San Diego* Recognized Partners which is indicated with an asterisk (*).

COMMUNITY LEADERSHIP TEAM MEMBERS BY SECTORS

Schools:

- Grossmont-Cuyamaca Community College District*
- La Mesa-Spring Valley School District*
- Lemon Grove School District*
- San Diego County Office of Education*
- Grossmont Union High School District*

Cities & Governments:

- City of El Cajon*
- City of La Mesa*
- City of Santee*
- County of San Diego, HHSA (multiple departments)

Businesses & Media

- Kim Center for Social Balance*

Community and Faith-Based Organizations:

- American Heart Association*
- Bayside Community Center*
- Community, Action, Service & Advocacy (CASA)*
- Community Health Improvement Partners (CHIP)*
- El Cajon Collaborative*
- East County Chamber of Commerce/Homeless Task Force*
- East Region Collaborative Network*
- Family Health Centers of San Diego*
- Grossmont Healthcare District*
- Home Start, Inc.*
- I Love a Clean San Diego*
- Institute for Public Strategies*, East County Community Coalition Program
- Jacobs and Cushman San Diego Food Bank*
- McAlister Institute*
- Meals on Wheels*
- Mountain Health & Community Services, Inc.*
- PATH San Diego*
- Rady Children's Hospital*
- San Diego Center for Children*
- San Diego Children and Nature*
- San Diego Council on Literacy*
- San Diego County Breastfeeding Coalition*
- San Diego Youth Services*
- Santee Community Collaborative*
- San Ysidro Health*
- Spring Valley Youth and Family Coalition*
- St. Madeline Sophie's Center*
- YMCA*
- Southern Caregiver Resource Center*
- Vets' Community Connections*
- Vista Hill*

Other Valued Members:

- AKA Head Start
- Dairy Council of California
- East County Resident Leadership Academy members
- Fleet and Family Support Center
- Lemon Grove HEAL Zone
- Mental Health America
- Mountain Empire Collaborative
- San Diego Community Action Network
- San Diego Foundation
- San Diego River Park Foundation
- Santee Solutions
- Vizer App
- YALLA San Diego*

EAST REGION (2015)

Demographics

Over **1** in **9** residents (11.8%) was a veteran.

Health

The **life expectancy** for a baby born today was

80.1 years

Quality of Life

Almost **1** in **10** residents was not sufficiently able to live independently

(93.3% were sufficiently able to live independently).

Knowledge

Almost **8** in **9** residents (87.0%) graduated from high school.

Standard of Living

$

$65,137

East Region had a **higher median household income** compared to County overall ($64,309).

Over **1** in **2** households in East Region is **owner-occupied**.

9.9%

of households within East Region relied on **CalFresh benefits**, compared to 6.7% within the County overall.

1 in **3** residents (33.3%) relied on **public health Insurance coverage**, compared to 28.4% within the County overall.

Community

Just over **1** in **2** residents of East Region (53.3%) lived within a **quarter mile of a park**, less than the County overall.

Social

Over **1** in **2** low-income residents (54.4%) experienced **food insecurity** in East Region, compared to 42.2% within the County overall.

1 in **6** (17.5%) adult residents (18-64 years) was **uninsured** in East Region, compared to 19.1% within the County overall.

Introduction

Formation of Leadership Team

The *Live Well San Diego* East Region Community Leadership Team was formed in 2011 to assist in the implementation of the *Live Well San Diego* vision. The leadership team brings together community leaders, stakeholders and residents to initiate change that will help build healthy, safe, and thriving communities. The mission of the *Live Well San Diego* East Region Leadership Team is to improve the overall health and well-being of San Diego County residents through community engagement.

Formation of Regions

In 1998, due to the size and diversity of the County, a new Regional service delivery system was created, enabling Regional general managers (now called Regional Directors) to better acquaint themselves with their individual communities, and develop partnerships to meet the unique needs of each one. In six HHSA Regions, staff provides services in an integrated fashion, close to families and communities, in collaboration with other public and private sector providers.

Community Leadership Team Structure and Planning Process

The East Region Leadership Team is comprised of several members representing 43 community-based organizations, city and government organizations, and schools. The entire team meets monthly and supports three workgroups:

- Active Living
- Healthy Eating
- Substance Abuse Prevention

As part of their planning process for the second MAPP cycle,[†] East Region Leadership Team members received a presentation by County staff describing data relating to the health status of residents within their Region. The leadership team used this data to inform their community health improvement planning process. The leadership team discussed the assessments, reviewed County health data, and determined if the health issues the group had previously decided upon (during the first MAPP cycle) were still relevant to the community. Once the health issues selected by the leadership team were agreed upon, goals and activities were discussed and updated as needed.

[†] For information on the planning process during the first MAPP cycle, please refer to the *2014 Live Well San Diego Community Health Improvement Plan* at CHIP_Final-10-22-14.pdf (livewellsd.org).

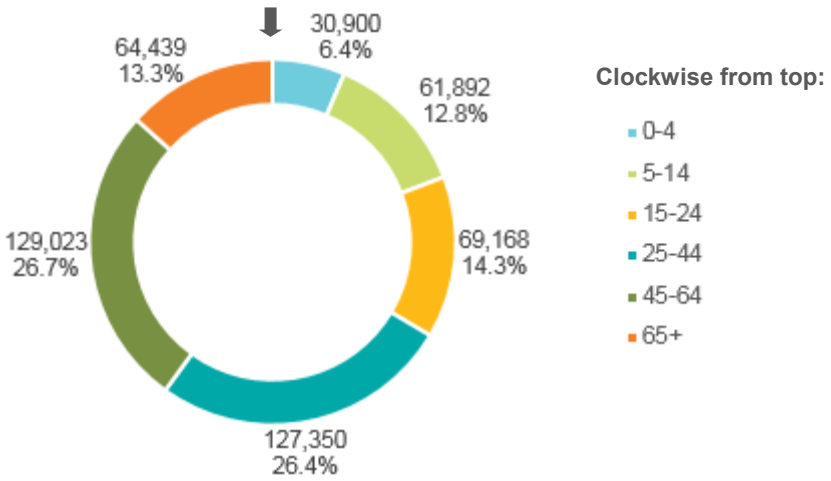
Community Health Status Assessments

Demographics

The East Region of San Diego County is the second largest geographical area in the County. East Region is a very diverse geographic Region in the County, and includes vast valleys, arid landscapes, and mountainous terrain. The East Region had a population of over 482,000 residents and is comprised of incorporated and unincorporated areas, suburban and rural communities, and Indian reservations. The communities of El Cajon, Lemon Grove, Alpine, Spring Valley and Mountain Empire all make up a portion East Region.

According to the U.S. Census Bureau's American Community Survey, the population in East Region was diverse. The majority of residents were between the ages of 25-44 (1 in 4), and those aged 45-64 (1 in 4; Figure 1). There were nearly equal percentages of males and females.

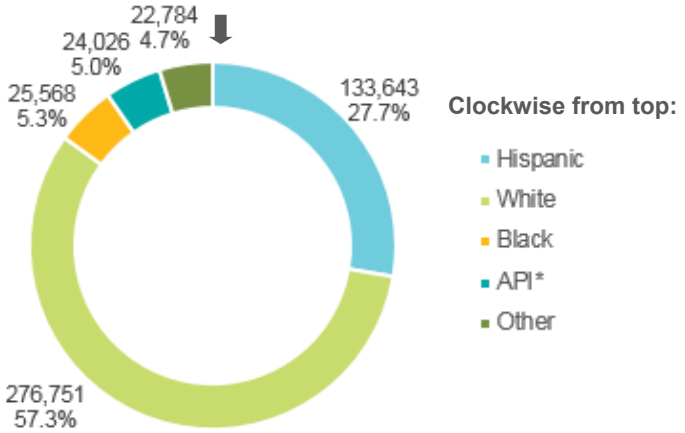
Figure 1. Population by Age Group, East Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Almost one in three East Region residents were Hispanic. Over one in two were white. Black, Asian/Pacific Islander, and residents of Other Race/Ethnicity each accounted for one in twenty people (Figure 2).

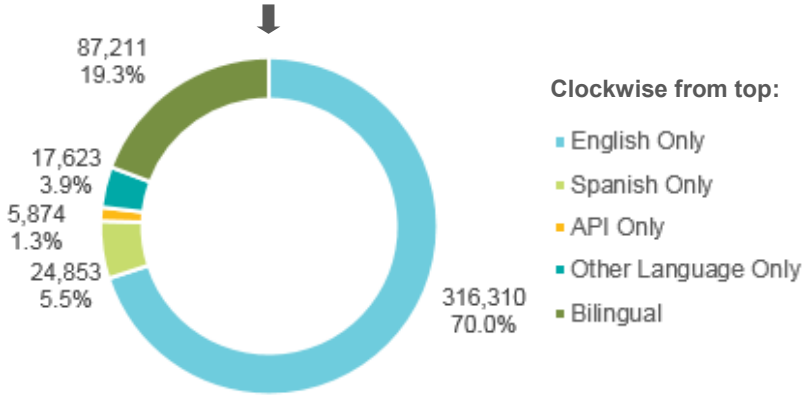
Figure 2. Population by Race/Ethnicity, East Region, 2015.



**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B03002.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

DEMOGRAPHICS

Figure 3. Population by Language Spoken at Home, East Region, 2015.

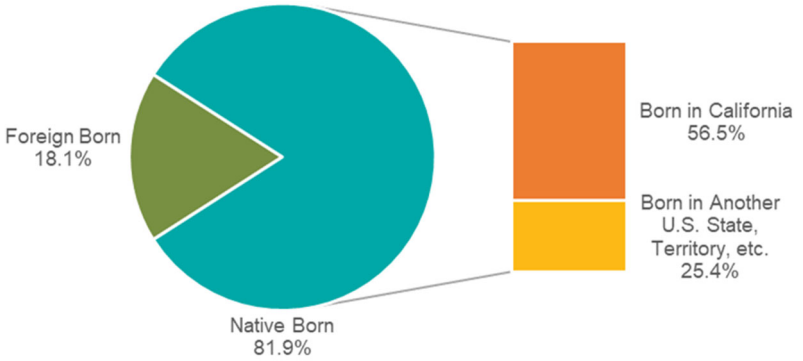


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Almost 3 in 4 residents aged 5 years and older were English-only speakers. Over 1 in 20 were Spanish-only speakers, and another 1 in 5 were bilingual (Figure 3). Almost 1 in 5 people living in East Region were foreign born. Of those who were born in the United States, more than half were born in California (Figure 4).

Note: This word cloud is a representation of the diversity of languages spoken in San Diego County. Not all languages spoken are represented.

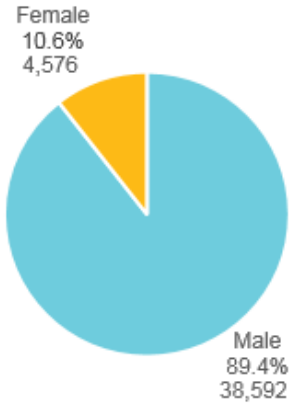
Figure 4. Population by Nativity and Place of Birth, East Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B06001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

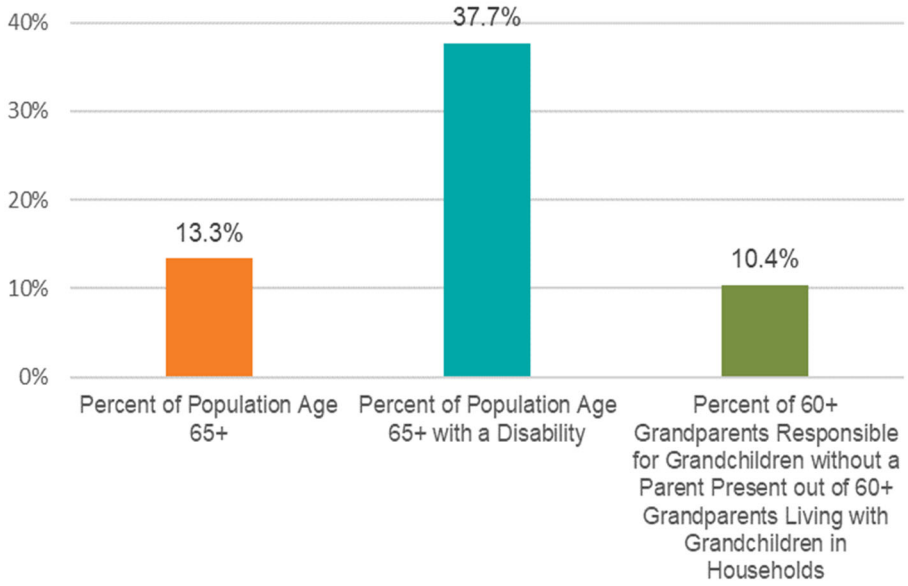
Figure 5. Veterans in the Population, East Region, 2015.

11.8%
of East Region Residents 18+ were Veterans.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S2101.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 6. Characteristics of Older Adult Population, East Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

Approximately 1 in 8 East Region residents was a veteran. Of those residents who are veterans, about 1 in 10 were female (Figure 5).

Over 1 out of 8 East Region residents were seniors (over the age of 65). Of those over the age of 65, more than 1 in 3 had some kind of a disability (hearing, vision, cognitive, self-care). Approximately 1 in 10 residents over the age of 60 in the Central Region were solely responsible for raising a grandchild (no parent present in the household; Figure 6).

Morbidity and Mortality

According to the Centers for Disease Control and Prevention, morbidity is defined as any departure, subjective or objective, from a state of physiological or psychological well-being, encompassing disease, injury, and disability. Mortality refers to death.

In this section, conditions contributing to the greatest amount of morbidity and mortality are discussed. First, the 3-4-50 concept is introduced and explained, with data relevant to each indicator presented. Next, prevention quality indicators, measures formulated and defined by the U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality, are presented. These indicators describe the rate of hospitalizations for conditions or complications that could have been prevented with adequate primary or outpatient care. Lastly, the leading causes of death by Region and County overall are presented, in contrast to those for California and the United States as a whole.

The purpose of this section is to describe what conditions are contributing the most to the morbidity and mortality of people living in San Diego County.

3-4-50

Introduction

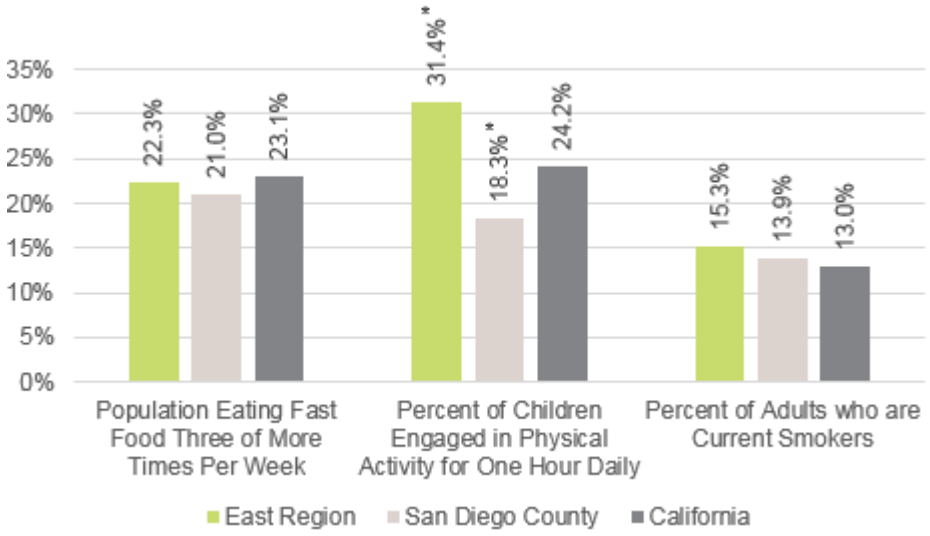
Chronic diseases are now among the leading causes of death and disability worldwide. This reflects an improvement in the prevention and treatment of infectious diseases as well as significant changes in dietary habits, physical activity levels, and tobacco use in the population.[1] Three behaviors (poor diet, physical inactivity, and tobacco use) contribute to four chronic diseases (cancer, heart disease and stroke, type 2 diabetes, and lung diseases such as asthma) that result in over 50 percent of all deaths worldwide. This is the foundation of the 3-4-50 concept.[2] The influence of these three unhealthy behaviors may be seen in San Diego County as these four chronic diseases are among the most common causes of death and disability in our Region.

The information discussed on the following pages is specific to East Region and its SRAs. For a more detailed explanation, please se the 3-4-50 section in the countywide document (page 31), or the 3-4-50 reports located here: [3-4-50 (sandiegocounty.gov)]

Three Behaviors

Diet, which is ultimately a personal choice, is one of the factors that can contribute to obesity. The physical environment, including lack of sidewalks and adequate lighting, pose challenges to walking. Smoking is the leading factor contributing to lung cancer and chronic obstructive pulmonary disease (COPD) deaths in the United States. Exposure to second-hand smoke increases risk of heart disease and lung cancer in adults, and asthma attacks and respiratory infections in children.

Figure 7. Measures of Three Behaviors (Poor Diet, Physical Inactivity, and Smoking) Contributing to 3-4-50 Deaths, East Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

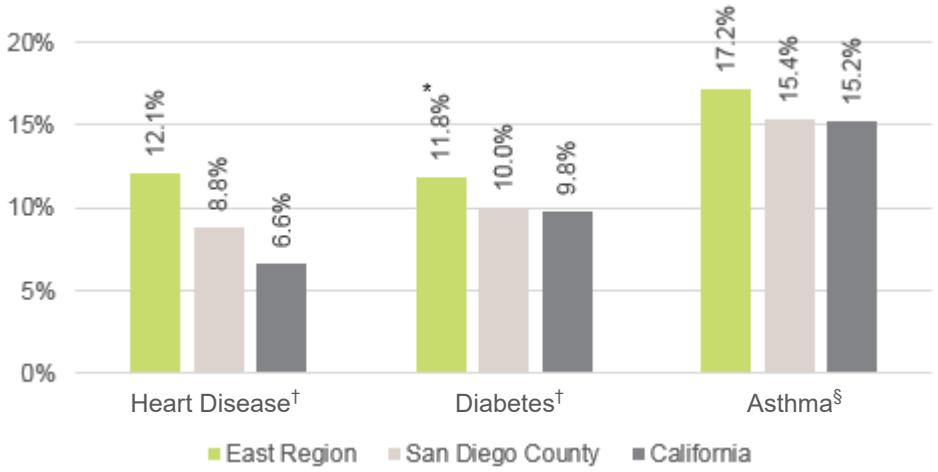
In 2015 (Figure 7):

- Over 1 in 5 residents aged 2 and over ate fast food three or more times per week in East Region. This was higher than the County overall.
- Nearly 1 in 4 children aged 2-11 in California engaged in physical activity for one hour daily.
- Over 1 in 7 adults in East Region were current smokers. This was about equal to the nearly 1 in 7 adult smokers in the County and State overall.

Four Diseases

Cancer is a term used to describe a group of diseases in which abnormal cells divide without control and invade other tissues.[3] Heart disease refers to any acute or chronic condition that involves the heart or its blood vessels: the muscle itself, valves, blood flow, and beating rhythm.[4] Stroke is a distinct type of cardiovascular disease, also called cerebrovascular disease. Specifically, stroke is a disease that affects the arteries leading to and within the brain.[5] Diabetes mellitus is a serious disease in which the levels of blood glucose, or blood sugar, are above normal.[6] Asthma is a chronic inflammatory disease of the respiratory system which causes the airways of the lungs to constrict and become inflamed in response to certain triggers. Chronic Obstructive Pulmonary Disease (COPD) is a disease that makes it hard to breathe.[7]

Figure 8. Ever Diagnosed with a Disease Contributing to 3-4-50 Deaths, East Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
† Adults aged 18 and over.
§ Residents aged 1 year and over.
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 8 provides an estimate of the percent of adult residents who may be suffering from heart disease and diabetes. Estimates of asthma prevalence are for residents aged 1 and over. Estimates of cancer prevalence are not available through the same data source, and are therefore not comparable and not included in this analysis.

In 2015:

- 1 in 8 adult residents of East Region had ever been told they had heart disease. This was higher than the County and the State overall.
- 1 in 10 adult residents of San Diego County had ever been told they had diabetes. This was slightly higher than the State overall.
- Over 1 in 6 residents of East Region over the age of 1 year old had ever been diagnosed with asthma. This was higher than the County and the State overall.

Over 50% of Deaths

Three behaviors - poor diet, physical inactivity and tobacco use - contribute to four major chronic diseases - cancer, heart disease, type 2 diabetes, and pulmonary disease - which are responsible for more than 50% of deaths worldwide. In San Diego County in 2016, 53% of deaths are due to these chronic diseases. In East Region in 2016, 54% of deaths were due to 3-4-50 diseases (Table 1).

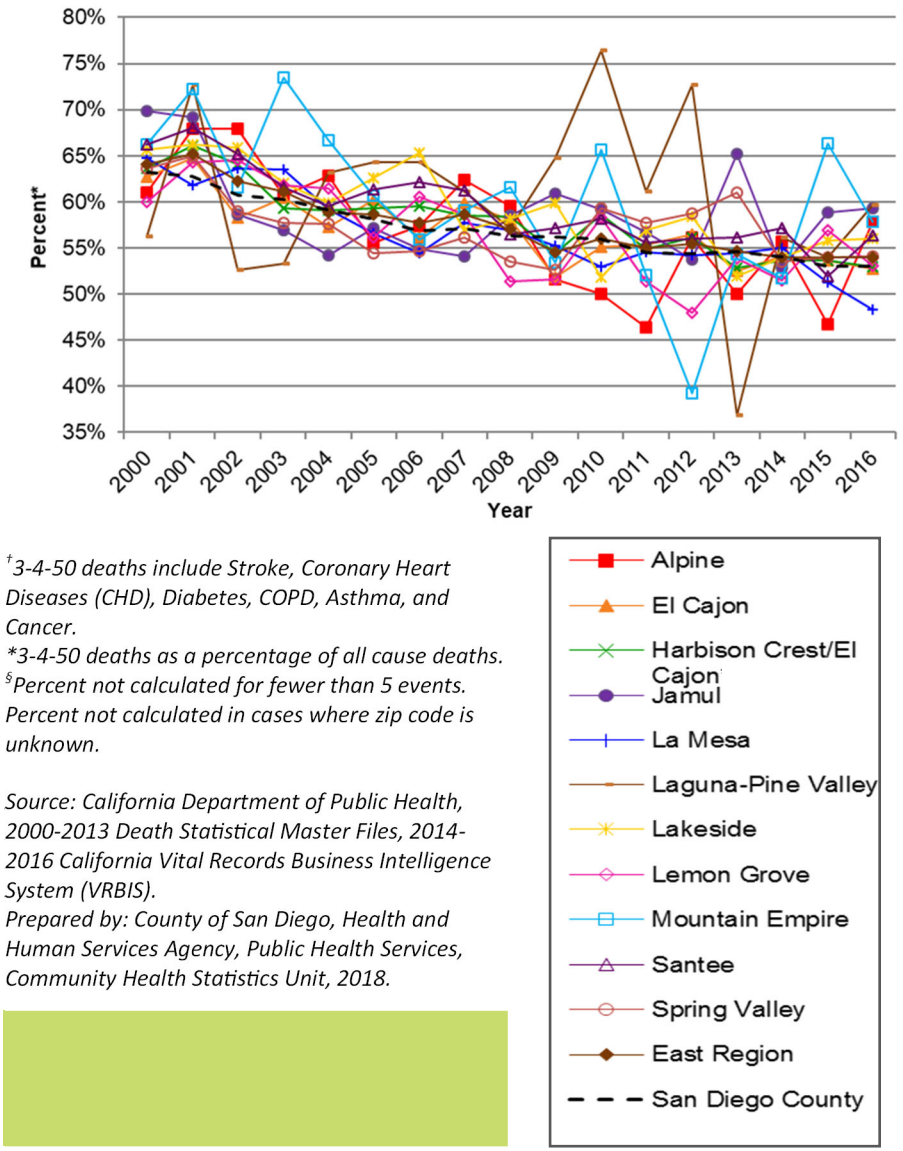
Compared to the County overall, East Region had a slightly higher percentage of deaths due to 3-4-50 diseases. The SRA with the highest 3-4-50 percentage in 2016 was Laguna-Pine Valley, at 60%. The SRA with the lowest percentage was La Mesa, at 48%. The percentages for East Region and its SRAs decreased from 2000 to 2016 (Figure 9).

Summary

Overall, the percentage of deaths due to 3-4-50 diseases was decreasing within the East Region, and within the County overall as well. While relatively low percentages of San Diegans residing in East Region were participating in the risk behaviors that lead to deaths from one of the 3-4-50 diseases, more work is needed to continue to lower the percentage of deaths due to chronic disease. Addressing 3-4-50 behaviors and diseases ultimately helps East Region residents, and all San Diegans, to live well.

1. World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).
2. 3Four50, www.3four50.com (Accessed July 2, 2010).
3. National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).
4. Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).
5. American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015).
6. American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).
7. Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).

Figure 9. 3-4-50 Death† Percentages* Among San Diego County Residents—East Region, 2000-2016.



†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
§Percent not calculated for fewer than 5 events.
Percent not calculated in cases where zip code is unknown.

Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 1. 3-4-50 Death† Percentages* Among San Diego County Residents—East Region, 2000-2016.

Geography	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alpine	61%	68%	68%	61%	63%	56%	57%	62%	60%	52%	50%	46%	56%	50%	56%	47%	58%
El Cajon	63%	65%	58%	60%	57%	60%	56%	60%	58%	52%	55%	55%	56%	53%	54%	54%	53%
Harbison Crest/ El Cajon	64%	66%	64%	59%	59%	59%	60%	59%	58%	54%	59%	55%	56%	53%	54%	54%	53%
Jamul	70%	69%	59%	57%	54%	57%	55%	54%	58%	61%	59%	57%	54%	65%	53%	59%	59%
La Mesa	65%	62%	64%	64%	59%	57%	54%	58%	57%	55%	53%	55%	54%	54%	55%	51%	48%
Laguna - Pine Valley	56%	73%	53%	53%	63%	64%	64%	61%	57%	65%	76%	61%	73%	37%	56%	54%	60%
Lakeside	66%	66%	66%	62%	62%	60%	63%	65%	57%	58%	60%	52%	57%	58%	54%	56%	56%
Lemon Grove	60%	64%	65%	62%	62%	56%	61%	59%	51%	52%	58%	51%	48%	54%	51%	57%	53%
Mountain Empire	66%	72%	62%	74%	67%	61%	56%	59%	62%	53%	66%	52%	39%	54%	52%	66%	58%
Santee	66%	68%	65%	62%	59%	61%	62%	61%	57%	57%	58%	56%	56%	56%	57%	52%	56%
Spring Valley	64%	65%	59%	58%	58%	54%	55%	56%	54%	53%	59%	58%	59%	61%	54%	54%	54%
East Region	64%	65%	62%	61%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	54%	54%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
§Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Leading Causes of Death

Introduction

The leading causes of death are mortality statistics useful for showing the relative burden of cause-specific mortality. The top 10 most common rankable causes of death are determined in San Diego County each year, based on rankable categories and reported underlying cause of death. Rankings show the most frequently occurring causes of death out of those rankable. It is important to note that rankings do not depict risk of dying from one condition or another. Mortality rates for a specific cause of death may increase or decrease, but the ranking may not change over time.

Rankable causes of death are categories determined based on recommendations from the 1951 Public Health Conference on Records and Statistics. The original list had 64 selected causes of death; the list used for the 2015 rankings only had 51 categories. For more information on the categories and the conditions they encompass, please visit https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf.

Analysis

Table 2 on the following page shows the Leading Causes of Death in East Region, San Diego County and the United States as a whole. In East Region in 2015, malignant neoplasms were the leading causes of death (same as the County overall), followed by diseases of the heart. Compared to the County overall, East Region had chronic lower respiratory diseases ranked higher (#3 in East Region; #6 in San Diego County), and Alzheimer's Disease ranked lower (#4 in East Region; #3 in San Diego County).

Summary

Overall, the most common causes of death in 2015 were malignant neoplasms and diseases of the heart, ranking either first or second within each HHSA Region, the County overall, California, and the nation. Alzheimer's disease deaths were more common in California, the County, and the HHSA Regions than it was in the United States overall.

Infant Mortality

The Centers for Disease Control and Prevention (CDC) define infant mortality as the death of an infant before his or her first birthday, while defining the rate of infant mortality as the number of those infant deaths per 1,000 live births in the same year.[1] In 2016, the top three causes of infant mortality in the United States were congenital malformations, low birth weight and Sudden Infant Death Syndrome. It is common practice to consider the infant mortality rate (IMR) as a representative indicator of population health.[2] It is theorized that using IMR as an indicator might mirror other factors of population health such as social well-being, rates of illness and disease, economic development, general living conditions and others.[3] It has also been used as a proxy measure for access and quality of pre-term and post-term medical care, for both the mother and infant.[4]

The infant mortality rate in East Region in 2015 was 4.4 deaths per 1,000 live births, well below the Healthy People 2020 Target (Figure 11, page 16). The IMR in East Region was slightly higher than the County overall (3.7 per 1,000 live births). The IMR in East Region in 2015 was also higher than California (4.3 deaths per 1,000 live births), but lower than the United States as a whole (5.9 deaths per 1,000 live

1. Centers for Disease Control and Prevention (CDC). Infant Mortality. Reproductive Health.https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Published 2017.

2. Kochanek KD, Murphy SL, Xu J, Arias E. Mortality in the United States, 2016. NCHS Data Brief. doi:10.1056/NEJM184002260220306.

3. Reidpath DD. Infant mortality rate as an indicator of population health. *J Epidemiol Community Heal*. 2003;57(5):344-346. doi:10.1136/jech.57.5.344.

4. Fry-Johnson YW, Levine R, Rowley D, Agboto V, Rust G. United States black:white infant mortality disparities are not inevitable: Identification of community resilience independent of socioeconomic status. *Ethn Dis*. 2010;20(1 SUPPL.1):1-10.

Table 2. Leading Causes of Death[1,2] Among San Diego County Residents, East Region, 2015.

Rank	East Region	San Diego County	California	United States
1	Malignant Neoplasms	Malignant Neoplasms	Diseases of the Heart	Diseases of the Heart
2	Diseases of the Heart	Diseases of the Heart	Malignant Neoplasms	Malignant Neoplasms
3	Chronic Lower Respiratory Diseases	Alzheimer's Disease	Alzheimer's Disease	Chronic Lower Respiratory Diseases
4	Alzheimer's Disease	Cerebrovascular Diseases	Cerebrovascular Diseases	Accidents/Unintentional Injuries
5	Cerebrovascular Diseases	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
6	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Accidents/Unintentional Injuries	Alzheimer's Disease
7	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
8	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)	Influenza and Pneumonia	Influenza and Pneumonia
9	Chronic Liver Disease And Cirrhosis	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Nephritis, Nephrotic Syndrome and Nephrosis
10	Intentional Self-Harm (Suicide)	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)

Note: Diseases ranked 1 and 2 make up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 are within 5% of one another for San Diego County and each of the six HHSA Regions.

[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the San Diego County residents for 2015.

[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

[§] Not shown for fewer than 5 deaths.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System.

Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, June, 2018.

Suicide

In 2016, East Region had a higher suicide rate than San Diego County overall, California, the United States as a whole, and was over the Healthy People target (10.2 per 100,000 population). In the Jamul SRA, the suicide rate was highest compared to the other SRAs. The rate in El Cajon was the lowest (compared to those SRAs for which there were data; Table 4 on the following page). Between 2011-2016, rates in La Mesa and Spring Valley SRAs increased, while the rates in El Cajon, Lakeside, Lemon Grove, and Santee decreased. The rate in East Region also decreased between 2011-2016 (Figure 12). East Region, and all of its SRAs for which there were data, all had suicide death rates higher than the Healthy People 2020 Target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicide death by the year 2020).

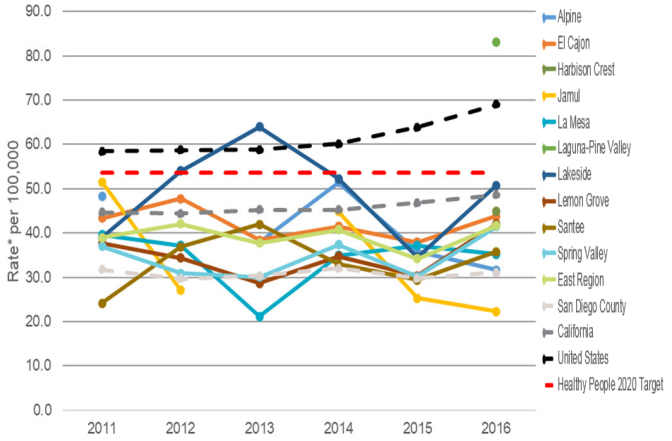
Unintentional Injury

Unintentional injuries include any accident that results in cutting or piercing of the skin, drowning or submersion, falls, or motor vehicle accidents. Nationally, more than 3 million people are hospitalized, 27 million people are treated in emergency departments and released, and over 192,000 die as a result of violence and unintentional injuries each year. The cost of both fatal and nonfatal injury in the U.S. in 2013 was $671 billion, in both medical and work loss costs, according to the CDC.

Unintentional injury is related to community because most unintentional injuries are preventable through safety measures, both on the part of the individual (i.e. seat belt use) and of the community (e.g. safe sidewalks and intersections).

In 2016, all SRAs within East Region except Jamul, and East Region as a whole, had rates of unintentional injury death above San Diego County overall (Table 3). The rates of unintentional injury death in San Diego County, East Region, and all the SRAs within East Region except Laguna-Pine Valley were below the Healthy People 2020 target. The SRA with the highest unintentional injury death rate was Laguna-Pine Valley; the lowest for which there were data was Jamul. Between 2011-2016, the unintentional injury death rate increased in El Cajon, Lakeside, Lemon Grove, Santee, Spring Valley, and East Region overall. Alpine, Jamul, and La Mesa experienced a decrease between 2011-2016 in the unintentional injury death rate (Figure 10).

Figure 10. Unintentional Injury Death*, East Region, 2011-2016.



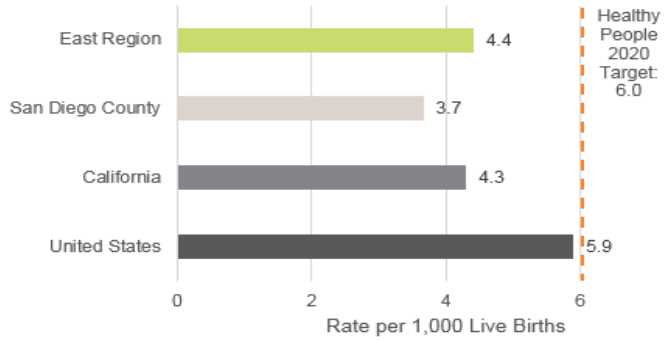
*All rates are age-adjusted; rate per 100,000.
§ Rates not calculated for less than 5 cases.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 3. Unintentional Injury Death,* East Region, 2016.

Geography	2016 Unintentional Death Rate*	Geography	2016 Unintentional Death Rate*
Alpine	31.7	Mountain Empire	§
El Cajon	43.9	Santee	35.8
Harbison Crest	45.0	Spring Valley	41.5
Jamul	22.3	East Region	41.6
La Mesa	35.3	San Diego County	31.1
Laguna-Pine Valley	83.2	California	48.6
Lakeside	50.8	United States	69.0
Lemon Grove	42.0	Healthy People 2020 Target	53.7

*All rates are age-adjusted; rate per 100,000.
§ Rates not calculated for less than 5 cases.
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 11. Overall Infant Mortality Rate, East Region Comparison, 2015.



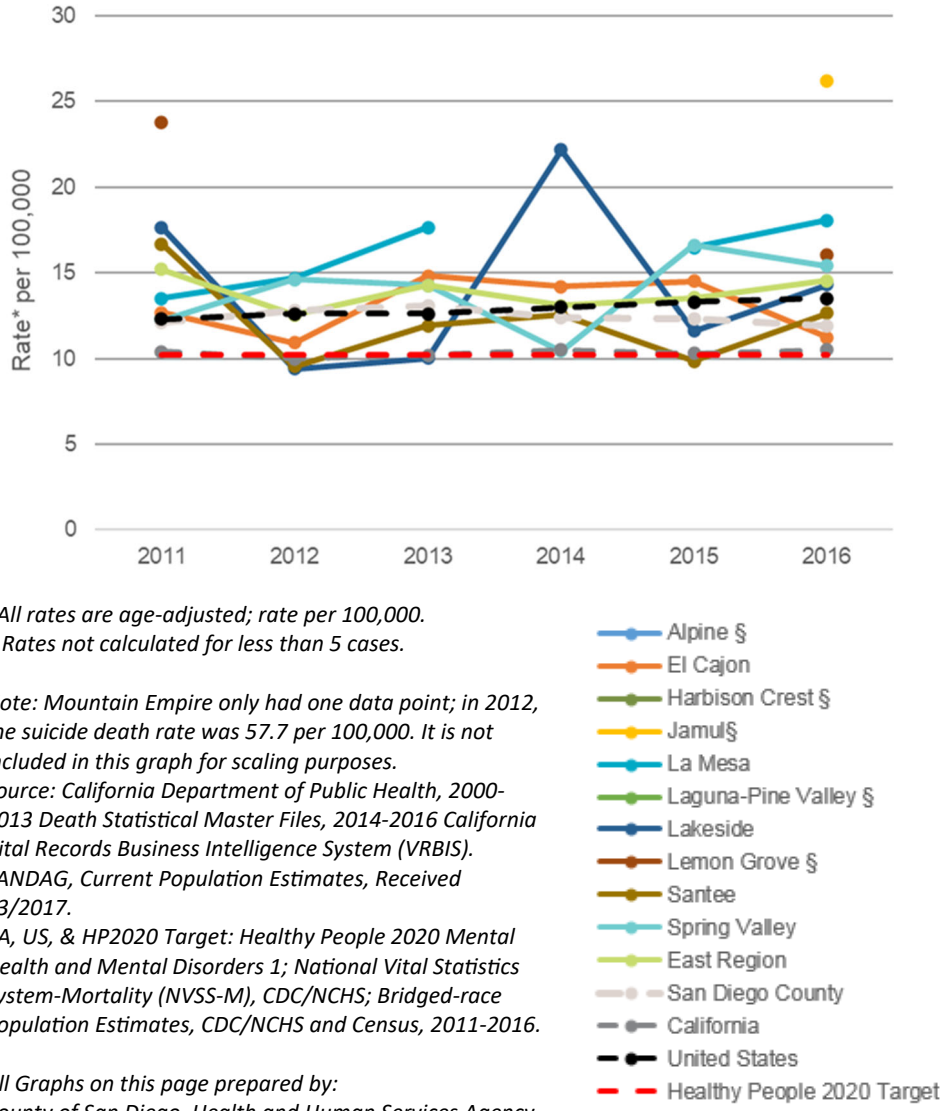
Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.

Table 4. Suicide*, East Region, 2016.

Geography	2016 Suicide Death Rate*	Geography	2016 Suicide Death Rate*
Alpine	§	Mountain Empire	§
El Cajon	11.2	Santee	12.6
Harbison Crest	§	Spring Valley	15.4
Jamul	26.2	East Region	14.6
La Mesa	18.1	San Diego County	11.9
Laguna-Pine Valley	§	California	10.5
Lakeside	14.3	United States	13.5
Lemon Grove	16.0	Healthy People 2020 Target	10.2

Source: Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.

Figure 12. Suicide*, East Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
§ Rates not calculated for less than 5 cases.

Note: Mountain Empire only had one data point; in 2012, the suicide death rate was 57.7 per 100,000. It is not included in this graph for scaling purposes.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.

All Graphs on this page prepared by:
County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

AREAS OF INFLUENCE

LWSD Areas of Influence and Indicators

Areas of Influence

The following pages show data by Area of Influence, or factors that influence quality of life. The *Live Well San Diego* Areas of Influence and Indicator Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Table 5).

Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to live well.

Table 5. Indicators by Area of Influence.

Areas of Influence	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community Involvement

HEALTH

Area of Influence: Health

The health of an individual influences their ability to "live well." Improving health and supporting healthy choices is essential to Building Better Health in San Diego County. Two of the Top 10 indicators measuring progress for *Live Well San Diego* fall under the Health area of influence. The first, life expectancy, refers to the measure of length of life expected at birth, and describes the overall health status of a population.

The second, quality of life, describes the percent of the population that is sufficiently healthy and able to live independently. Other measures that contribute to quality of life include disability status and health insurance coverage. An individual's disability status can create barriers to education, employment, and ability to live independently, thus influencing their quality of life. Access to care – both preventive medicine services and treatment for disease—is essential to a high quality of life. Both disability status and access to care influence a person's health and therefore influence their quality of life.

Live Well San Diego Indicator #1: Life Expectancy

Life expectancy at birth is measured as the average number of years a baby born today is expected to live if current mortality patterns continue throughout his or her lifetime.

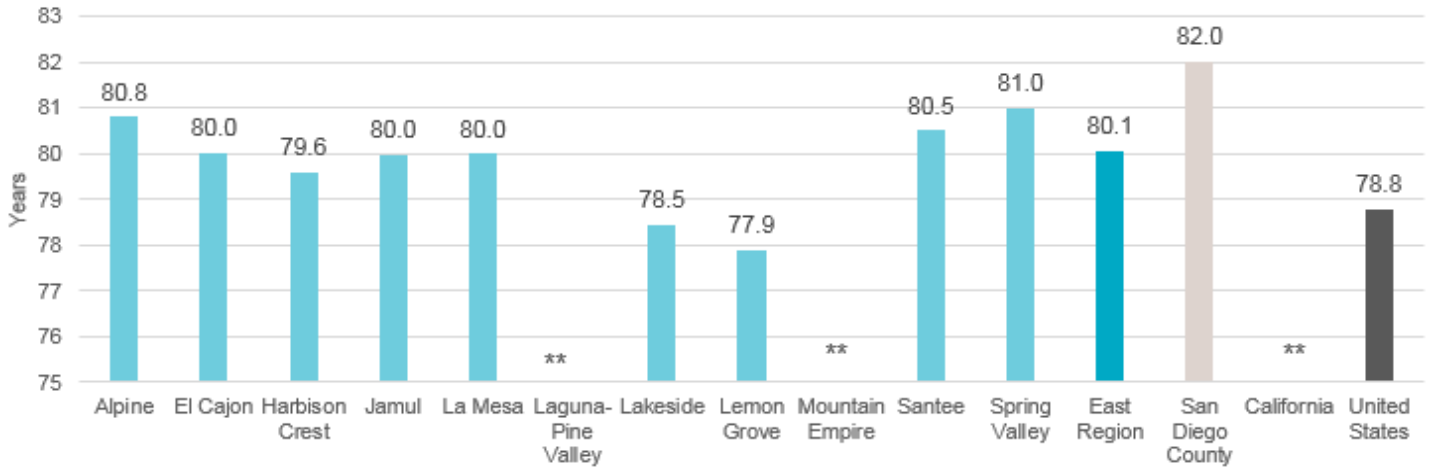
AVERAGE LIFE EXPECTANCY FOR A BABY BORN TODAY

80.1 YEARS

EAST REGION

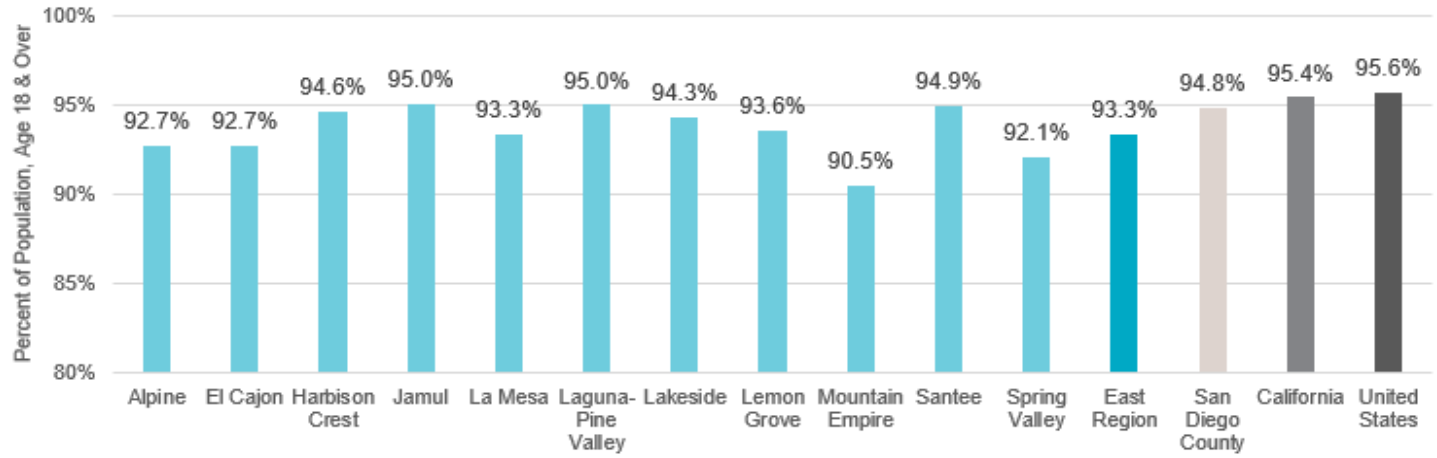
San Diego County:	California:	United States:
82.0 Years	**	78.8 Years

Figure 13. Life Expectancy, East Region, 2015.



*** Data not available.*
Source: Life Expectancy: U.S. and State data from the United States Centers for Disease Control and Prevention, FastStats.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, 2015. Accessed 09/2017.

Figure 14. Quality of Life, East Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

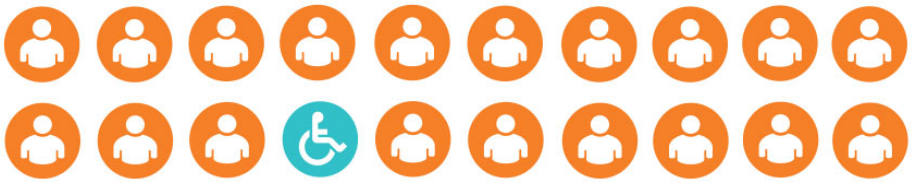
In 2015, life expectancy in East Region was 80.1 years, which was lower than San Diego County overall, and higher than the United States as a whole. The SRA with the highest life expectancy in East Region was Spring Valley at 81.0 years. The SRA with the lowest life expectancy was Lemon Grove, at 77.9 years (Figure 13).

Live Well San Diego Indicator #2: Quality of Life

Quality of life is measured as the percentage of the population sufficiently healthy to live independently. The ability to live independently has a positive impact on physical, mental, emotional, and social well-being.

In East Region, 19 out of 20 people were healthy enough to live independently (meaning the individual does not have any physical, mental, or emotional condition that impacts their ability to live independently).

The SRA with the lowest quality of life was Mountain Empire (90.5% of residents able to sufficiently live independently. The SRAs with the highest quality of life were Jamul, Laguna-Pine Valley, and Santee (Figure 14).



19 IN **20** PEOPLE ARE HEALTHY ENOUGH TO LIVE INDEPENDENTLY*

**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*

EAST REGION: 93.3%

San Diego County:	California:	United States:
94.8%	95.4%	95.6%

The percentage of people who are able to live independently was slightly lower in East Region (93.3%) than it was in San Diego County overall, and slightly lower than California (95.4%) and the United States as a whole (95.6%). (Figure 14).

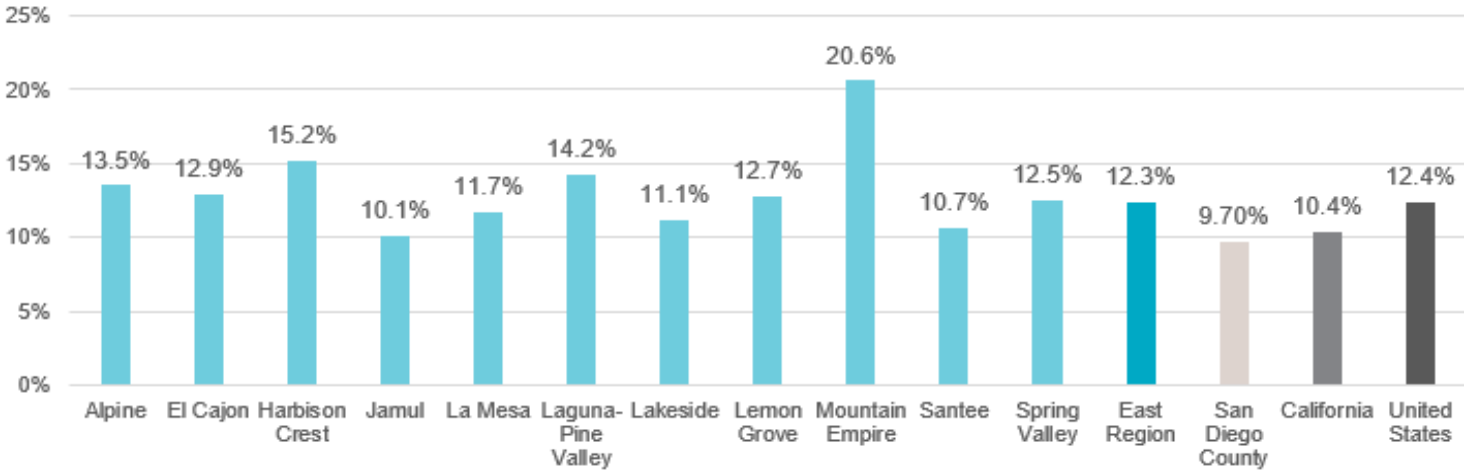
Supporting Indicators

Disability Status

Disability is defined as a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business. Disability also contributes to an individual's ability to live independently. In 2015, 58,194 residents in East Region reported having a disability (Figure 15).

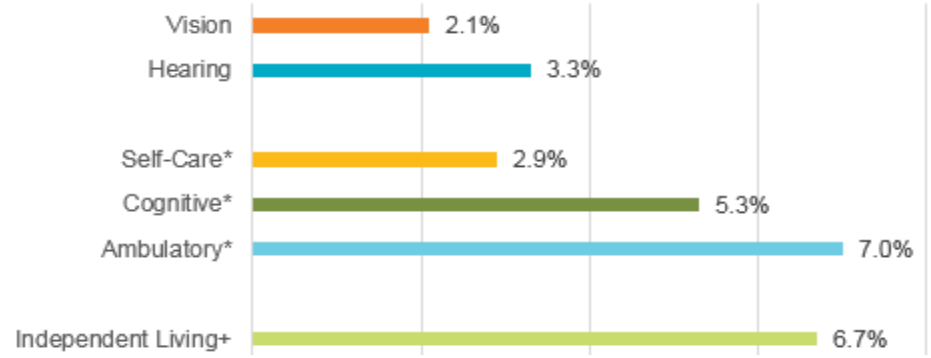
In 2015, 12.3% of residents in the East Region had some kind of disability. The SRA with the highest percentage of disabled residents was Mountain Empire (20.6%). The SRA with the lowest percentage of residents who were disabled was Jamul (10.1%). East Region overall had a higher percentage of disabled residents than San Diego County or California overall, but was about equal with the United States as a whole (Figure 15).

Figure 15. Disability Status, East Region, 2015.



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810. Accessed 04/2017
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 16. Disability Status by Type, East Region, 2015.



**Cognitive, Ambulatory, and Self-Care excludes population under 5 years.*
[+]Independent living disabilities only calculated for 18+ population.
Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

The most prevalent type of disability in East Region was ambulatory, meaning the person had serious difficulty walking or climbing stairs (7.0%). Another 6.7% of residents (age 18 and over) had an independent living difficulty, meaning that they had trouble doing errands alone, such as visiting a doctor's office, or shopping, due to a physical, mental, or emotional condition (Figure 16).

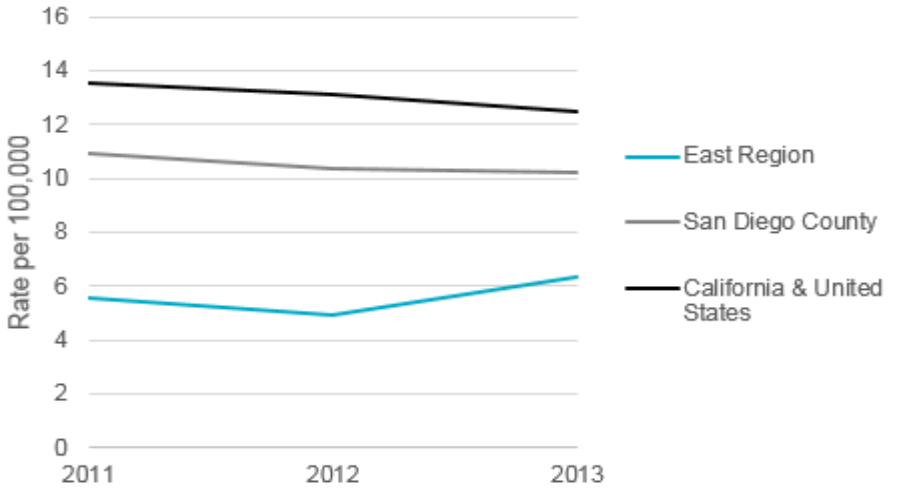
Internal Health Assessment

In this section, the results of other internal and external health assessments are described. The purpose of this section is to help paint a more complete picture of the health of San Diego residents.

HIV/AIDS Assessment

Human Immunodeficiency Virus, or HIV, is a virus that weakens a person's immune system by destroying important cells that fight disease and infection. Acquired Immunodeficiency Syndrome, or AIDS, refers to an advanced HIV infection, and is diagnosed when immune cell counts drop below a certain threshold, or when a person with an HIV infection acquires another opportunistic infection due to their severely weakened immune system.

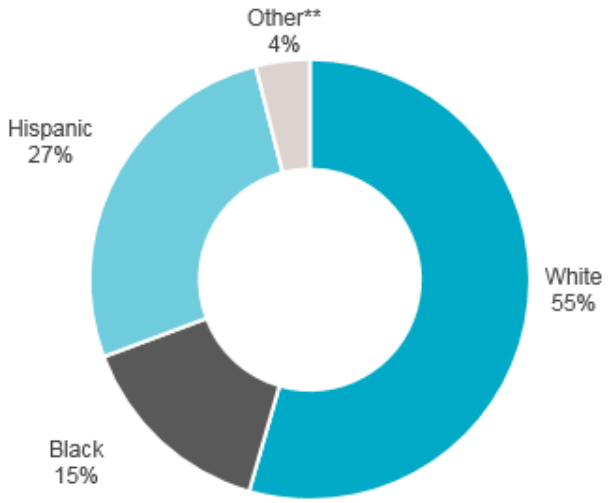
Figure 17. HIV Incidence, East Region, 2011-2013.



Note: California and United States have nearly identical incidence rates and are represented by one line.
United States Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention. HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf. Accessed December 2017.
California Source: California Department of Public Health, Center for Infectious Diseases, Office of AIDS, Sacramento, California. California HIV Surveillance Report—2015. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California%20HIV%20Surveillance%20Report%20-%202015%20(Final%20Version%20Submitted%20for%20Approval).pdf. Accessed December 2017.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), retrieved December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

In 2013, the rate at which new cases of HIV were diagnosed in East Region was 6.4 cases per 100,000 people (Figure 17). The HIV incidence rate in East Region from 2011-2013 was consistently lower than the rate in San Diego County, California, and the United States.

Figure 18. Persons Living with HIV/AIDS, by Race/Ethnicity, East Region, 2010-2014.



***Includes Asian/Pacific Islander, Native American, and Unknown.*
Note: Percentages may not total to 100% due to rounding.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), HIV Epidemiology report 2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Between 2010-2014, there were 2,438 new HIV diagnoses in the County, 9% of which were in the East Region.

Of persons living with HIV/AIDS in the East Region between 2010-2014, 55% were white, 15% were black, 27% were Hispanic, and an additional 4% were either Asian/ Pacific Islander, Native American, or their race/ethnicity was unknown (Figure 18).

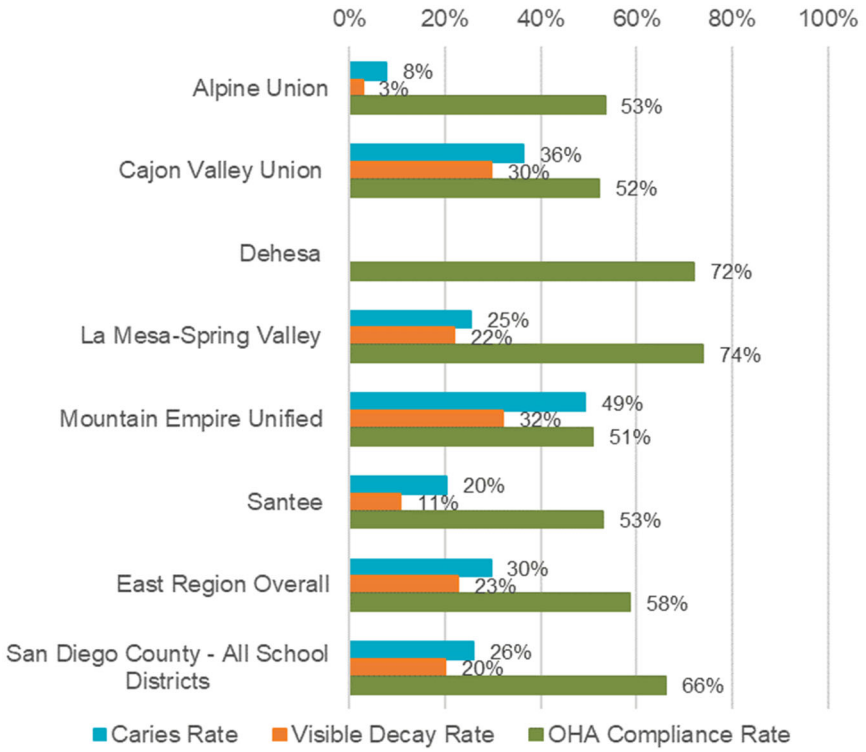
External Health Assessment

Oral Health Assessment

Assembly Bill 1433 requires schools to distribute the Oral Health Assessment (OHA) Form to parents who are registering their child in public school, in either kindergarten or first grade. Schools must collect the Oral Health Assessment Forms by May 31 of the school year and are responsible to report totals to their district. All Regions are required to collect this data.

The summary report submitted by each district contains information about the number of children with an OHA on file, the number of children with a waiver on file,

Figure 19. Oral Health Assessment (OHA) Results, East Region, 2017-2018.



Note: In geographies where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.
Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

Oral Health Assessment (continued)

and the number of children without an OHA or waiver on file for the current school year. Once reports are submitted to the local Child Health and Disability Prevention (CHDP) Program, data are analyzed. Although the following results provide insight on current oral health issues among school children, findings should be interpreted with caution because of potential data accuracy and reporting issues. All school districts are required to participate.

In East Region, schools from six school districts participated. For East Region overall, out of 3,451 eligible kindergartners and first graders during the 2017-2018 school year, 2,018 (58%) participated in the oral health assessment (Figure 19). Approximately 30% (597) were experiencing dental caries. Of those who participated, 23% (458) were experiencing dental decay.

Compared to the County overall, participating students in the East Region had higher rates of dental caries (30%; County 26%). Participating students in the East Region also had higher rates of decay (23%; County 20%) than the County overall. The compliance (participation) rate in East Region, was also lower than the County overall (58%; County 65%).

Area of Influence: Knowledge

KNOWLEDGE

Knowledge and access to education play an important part in the ability of an individual to "live well." Learning throughout the lifetime, for all individuals, impacts their health status. Education is measured by looking at the percentage of the population aged 25+ that currently has a high school diploma or GED. Graduation from high school is required for individuals to either further their education by going on to college, or in most cases, to get a job. Both of these factors influence the health of an individual.

Live Well San Diego Indicator #3: Education

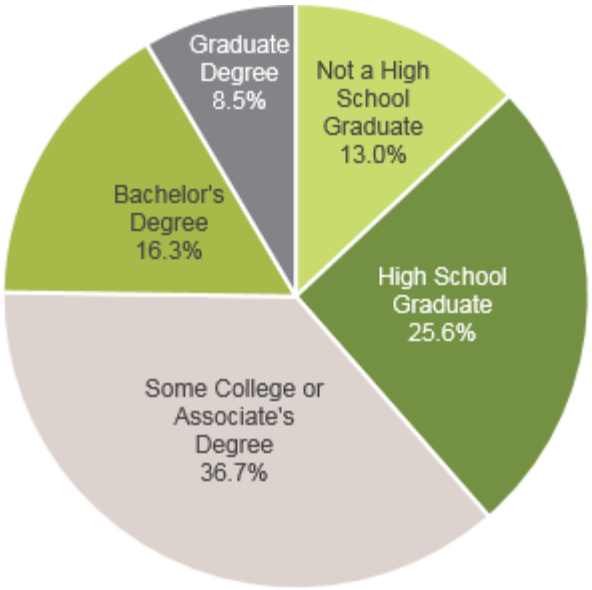
Education is measured as the percentage of the population with a high school diploma or equivalent. Education has a beneficial influence on a variety of economic, social and psychological factors which impact the health and well-being of a population.

8 IN 9 STUDENTS GRADUATE FROM HIGH SCHOOL

EAST REGION: 87.0%

San Diego County:	California:	United States:
85.5%	81.8%	86.7%

Figure 20. Overall Educational Attainment, East Region, 2015.



Note: "Educational Attainment" refers to the percent of population 25 years and older at the listed education level.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP02.
Prepared by: Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

Overall Educational Attainment

In East Region, 87.0% of adults aged 25 and over had a high school diploma or equivalent. This was higher than the County as a whole, California, and the United States overall in 2015.

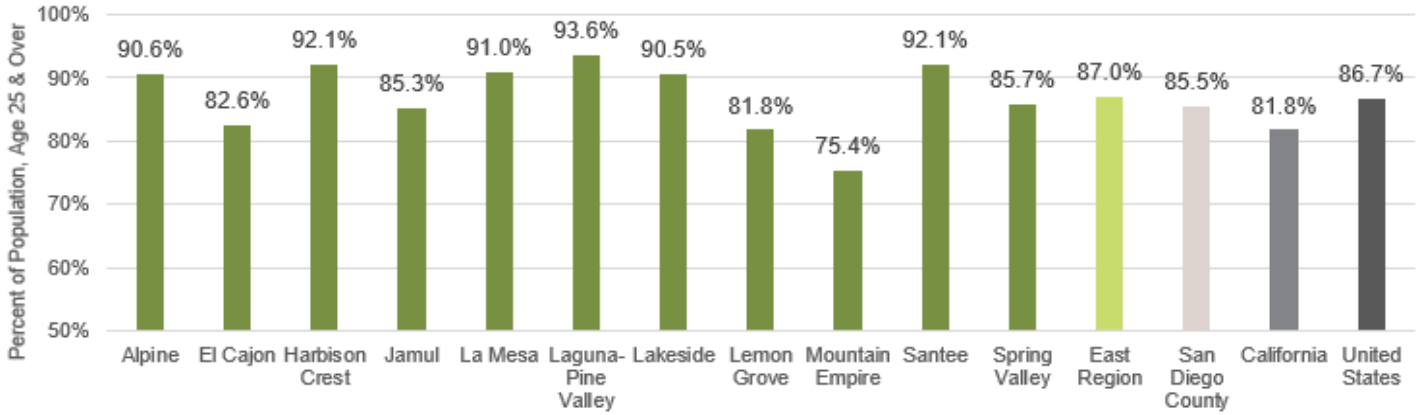
About three-fifths of East Region residents had at least some college education, with one-third having some college or an associates degree, one-sixth having a bachelors degree, and one-twelfth having a graduate degree (Figure 20).

The SRA with the highest percentage of residents aged 25 and over with a high school diploma was Laguna-Pine Valley (93.6%). The SRA with the lowest percentage of residents aged 25 and over with a high school diploma was Mountain Empire (75.4%; Figure 21).

School Enrollment

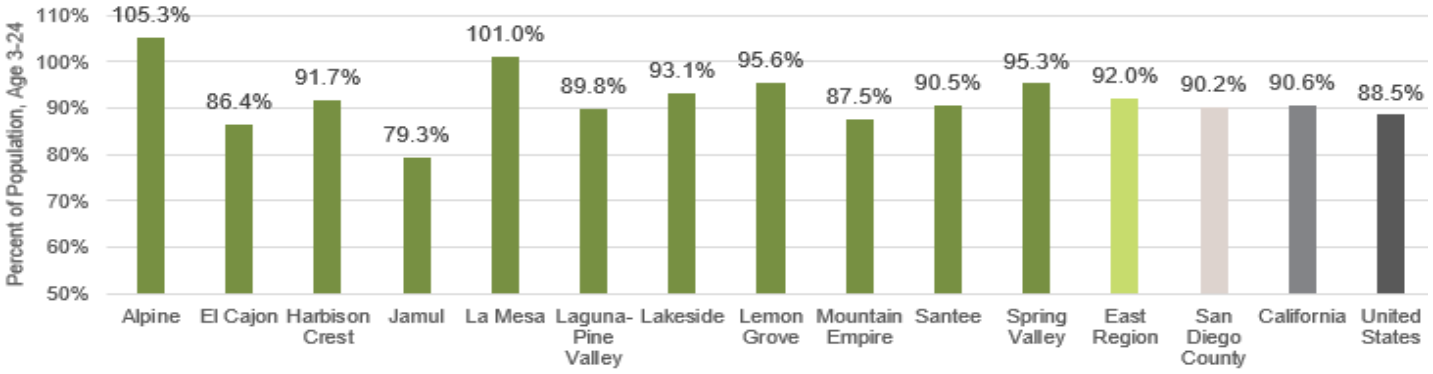
In 2015, 92.0% of school-aged residents (aged 3-24 years) were enrolled in school in the East Region. This figure was higher than enrollment in San Diego County (90.2%), California (90.6%), and the United States as a whole (88.5%; Figure 22).

Figure 21. Education, East Region, 2015.



"Education" refers to percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1501. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 22. School Enrollment, East Region, 2015.



"School enrollment" refers to Enrollment in regular school, either public or private, which includes nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1401; Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

STANDARD OF LIVING

Area of Influence: Standard of Living

STANDARD OF LIVING

The Standard of Living Area of Influence concerns residents having enough resources to live a quality life. Important indicators include unemployment rate because having a steady job and making enough money to live a quality life are both crucial to an individual's standard of living. San Diego County is an expensive place to live, as the cost of housing here is higher than it is in most other urban areas across the United States. Housing affordability is measured by the percentage of individuals who spend less than 30% of their income on housing. Being able to afford adequate housing and still being able to afford other necessities (health care, food, transportation, etc.) reflects an individual's ability to "live well."

Live Well San Diego Indicator #4: Unemployment Rate

Unemployment rate is measured as the percentage of the total labor force that is unemployed. The rate of unemployment has a strong negative influence on the financial health and overall well-being of a population.

EAST REGION

7.1 % OF PEOPLE IN THE TOTAL LABOR FORCE ARE UNEMPLOYED

San Diego County: 6.3%

California: 7.5%

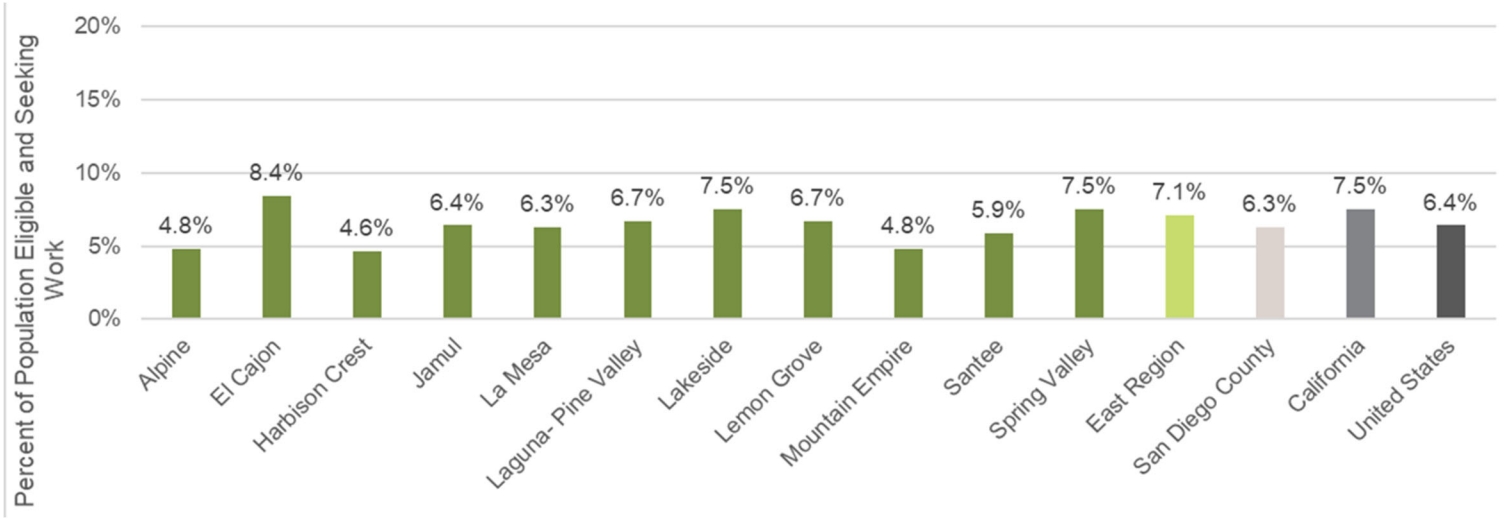
United States: 6.4%

Source: 2015 Unemployment Rate. ESRI Community Analyst.

In 2015, 7.1% of East Region residents eligible and seeking work were unemployed. The unemployment rate for East Region was higher in 2015 than it was in both San Diego County (6.3%) and the United States as a whole (6.4%), but lower than California (7.5%).

The SRA in the East Region with the lowest unemployment rate was Harbison Crest (4.6%). The SRA with the highest unemployment rate was El Cajon (8.4%; Figure 23).

Figure 23. Population Unemployed*, East Region by Subregional Area, 2015.



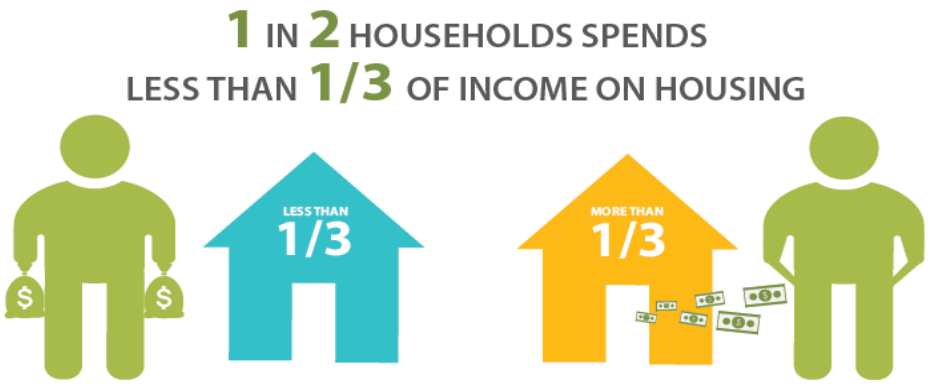
*"Unemployment" refers to the population unemployed, of those eligible and seeking work.
Source: 2015 Unemployment Rate. ESRI Community Analyst.

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

STANDARD OF LIVING

Live Well San Diego Indicator #5: Income

Income is measured as the percentage of the population spending less than one-third of income on housing. Households who spend more than one-third of household income for housing may have difficulty paying for necessities such as food, transportation, or medical care.



EAST REGION: 52.4%

San Diego County: 51.8%

California: 53.5%

United States: 62.9%

In East Region, a large proportion of residents (52.4%) spent less than one-third of their income on housing, which was similar than in San Diego County (51.8%), and California (53.5%), but lower than the United States overall (62.9%).

About half of households in the East Region spent less than one-third of their income on housing, a pattern that held true across all SRAs within the East Region. The SRA with the highest percentage of households spending less than one-third of their income on housing within the East Region was Laguna-Pine Valley (Figure 24).

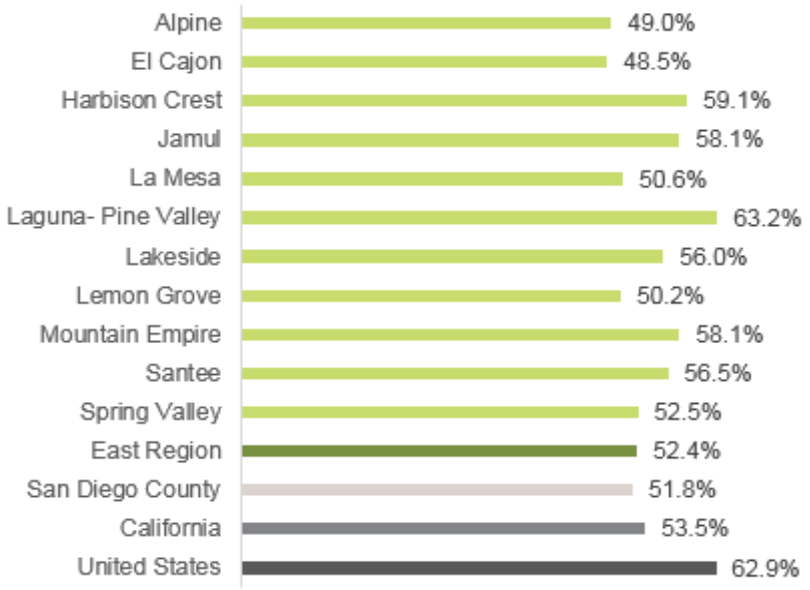
Supporting Indicators

Occupation

A person's educational attainment likely influences their career. Industry and occupation determine level of income, which in turn reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Certain industries and occupations come with inherent environmental or occupational risks, which may influence an individual's health.

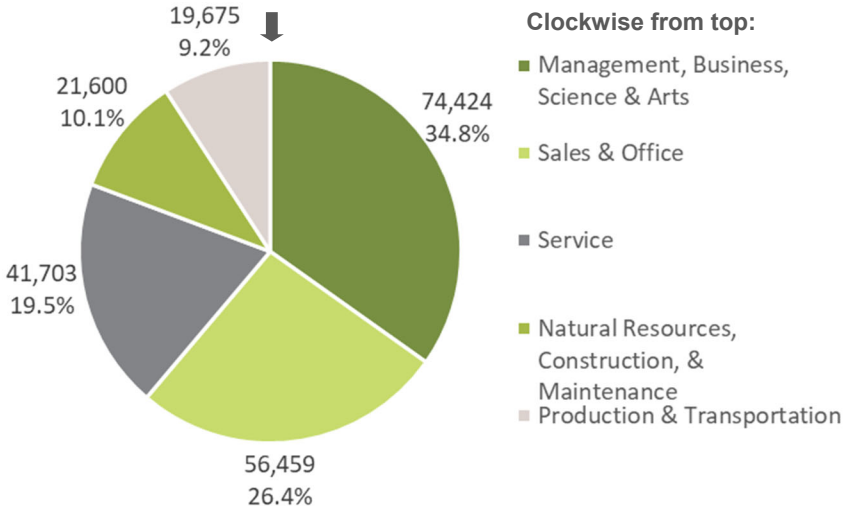
Management, business, science & arts includes any occupation in business, finances, computer engineering, architecture, life science-related jobs, as well as community and social services, legal, education, arts, and healthcare professionals and techs. *Service* refers to healthcare support, protective services such as firefighting and law enforcement, food preparation and service, custodial and maintenance, and personal care. *Sales and office* refers to anything related to sales or office and

Figure 24. Households Spending Less Than One-Third of Income on Housing, East Region, 2015.



Does not include cash rent or those with zero or negative income.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2503.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 25. Labor Force by Occupation, East Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

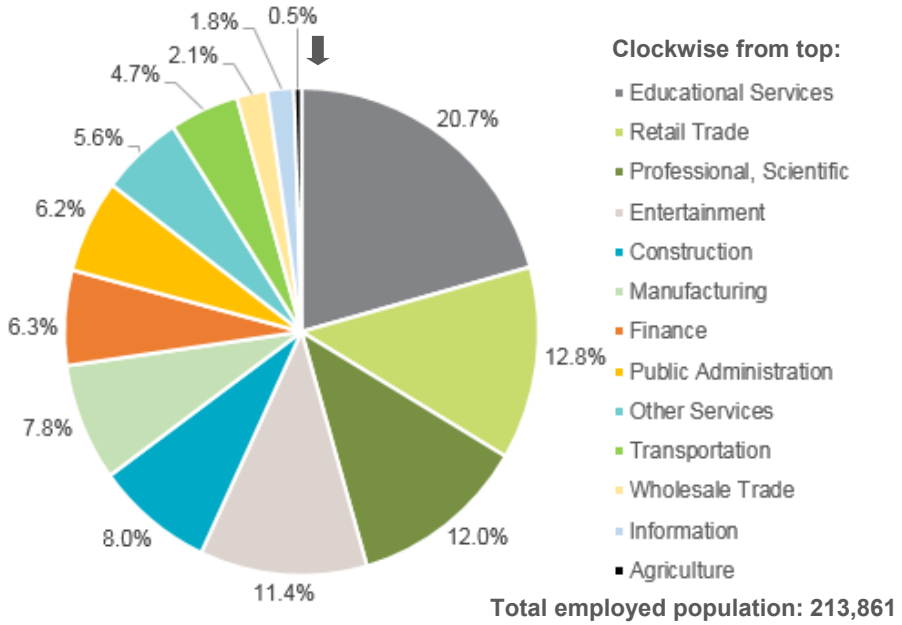
administrative support. *Natural resources, construction, and maintenance* refers to farming, fishing, forestry, construction, extraction, installation, maintenance and repair. *Production and transportation* includes anything related to production, transportation or material moving.

In East Region, over one-third of people who were over the age of 16 and employed in a civilian capacity were involved in the management, business, science and arts sectors. The sector with the least involvement was the production and transportation occupations (Figure 25).

Industry

When broken down further by industry, a more detailed picture of the sectors employing the most East Region residents emerged. The industry employing the highest percentage of residents was the educational services, which includes the health care and social assistance industries, at just over 1 in 5 of the employed civilian population. The next largest industry was retail trade, at about 1 in 8

Figure 26. Occupation by Industry, East Region, 2015.



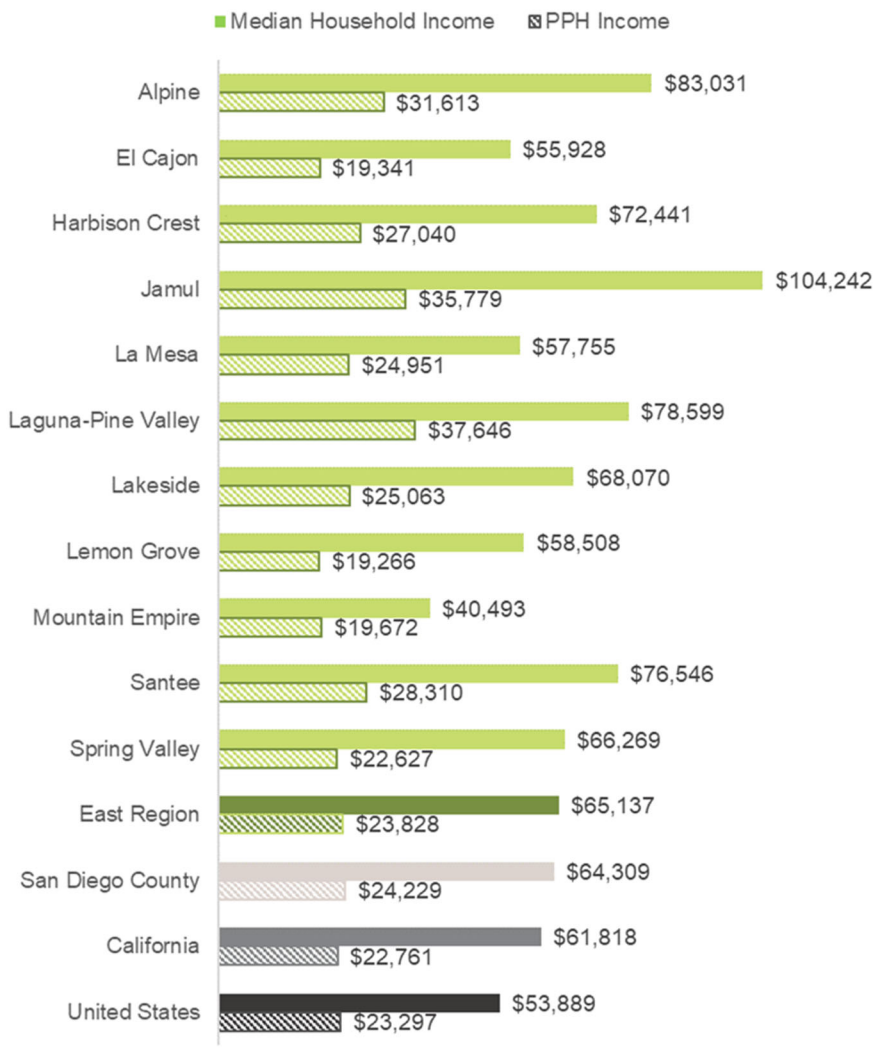
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

residents. The least populous industry was agriculture, with only 1 in 200 of the eligible population employed (Figure 26).

Median Household Income, Persons Per Household Income, Poverty, and Socioeconomic Status

Income reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Household income includes income earned by the householder and all other people 15 years and older in the household, whether or not they are related to the householder. Median household income is determined by looking at the distribution of income across all households, including those with no income, and picking the point at which half the distribution falls below it, and half the distribution falls above it.

Figure 27. Income, East Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03, DP04.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The median household income in East Region was over $65,000 per year. This was higher than San Diego County as a whole, California, and the United States overall (Figure 27).

Persons per household (PPH) income was determined by taking the median household income and dividing it by the average number of people per household, which was 2.73 people in East Region. The PPH Income in East Region was about $24,000 per year. This was about equal with San Diego County, and higher than California, and the United States overall (Figure 27).

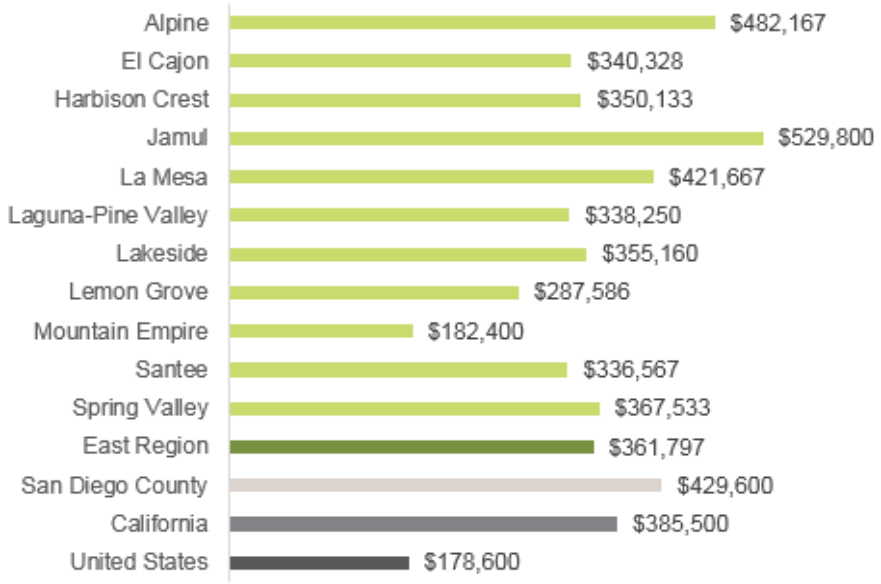
Socioeconomic status is defined as a composite measure that typically incorporates economic, social, and work status. Economic and social status are measured by income, and work status is measured by occupation; each status is considered an indicator, and these indicators are related but do not overlap.

STANDARD OF LIVING

Cost of Living

According to the Consumer Price Index compiled by the U.S. Bureau of Labor Statistics, prices for goods, services and shelter rose 1.7% within the first six months of 2017. It was noted that the increase was primarily influenced by rising costs of shelter.[†] According to a study by Cushman and Wakefield, only 26% of households in San Diego could afford median-priced homes.[§]

Figure 28. Median House Value, East Region by Subregional Area, 2015.



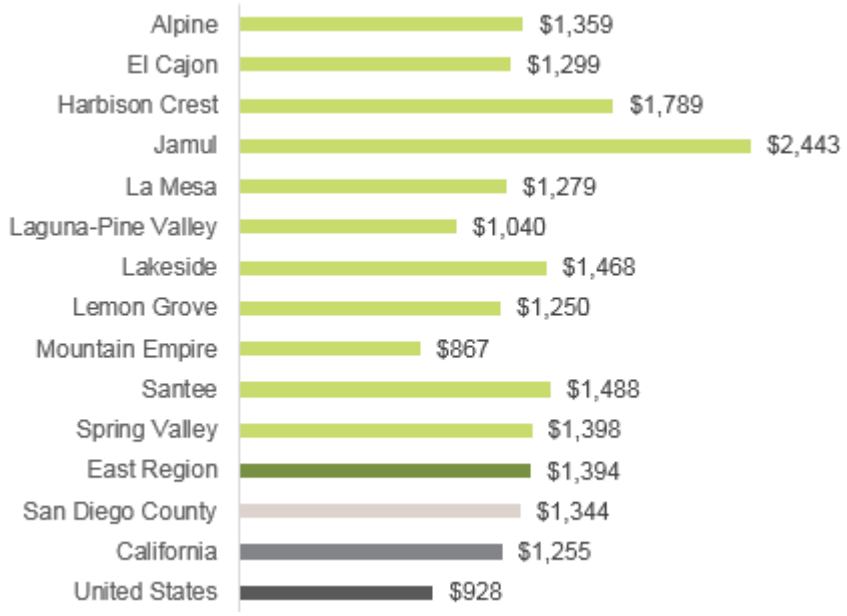
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

[†] *United States Department of Labor, Bureau of Labor Statistics. Consumer Price Index, San Diego—First Half 2017. https://www.bls.gov/Regions/west/news-release/2017/consumerpriceindex_sandiego_20170714.htm#tableA. Accessed July 23, 2018.*
[§] *Cushman & Wakefield. San Diego MARKETBEAT Multi-Family Spring 2018. http://www.cushmanwakefield.com/en/research-and-insight/unitedstates/san-diego-multifamily-snapshot. Accessed June 25, 2018.*

In the United States, the median house value was just below $200,000. In East Region, the median house value was about $362,000. The SRA with the highest median house value was Jamul, at almost $530,000. The SRA with the lowest median house value was Mountain Empire, at just over $182,000. The median house value in East Region was lower than San Diego County, about equal to California, and significantly higher than the United States as a whole (Figure 28).

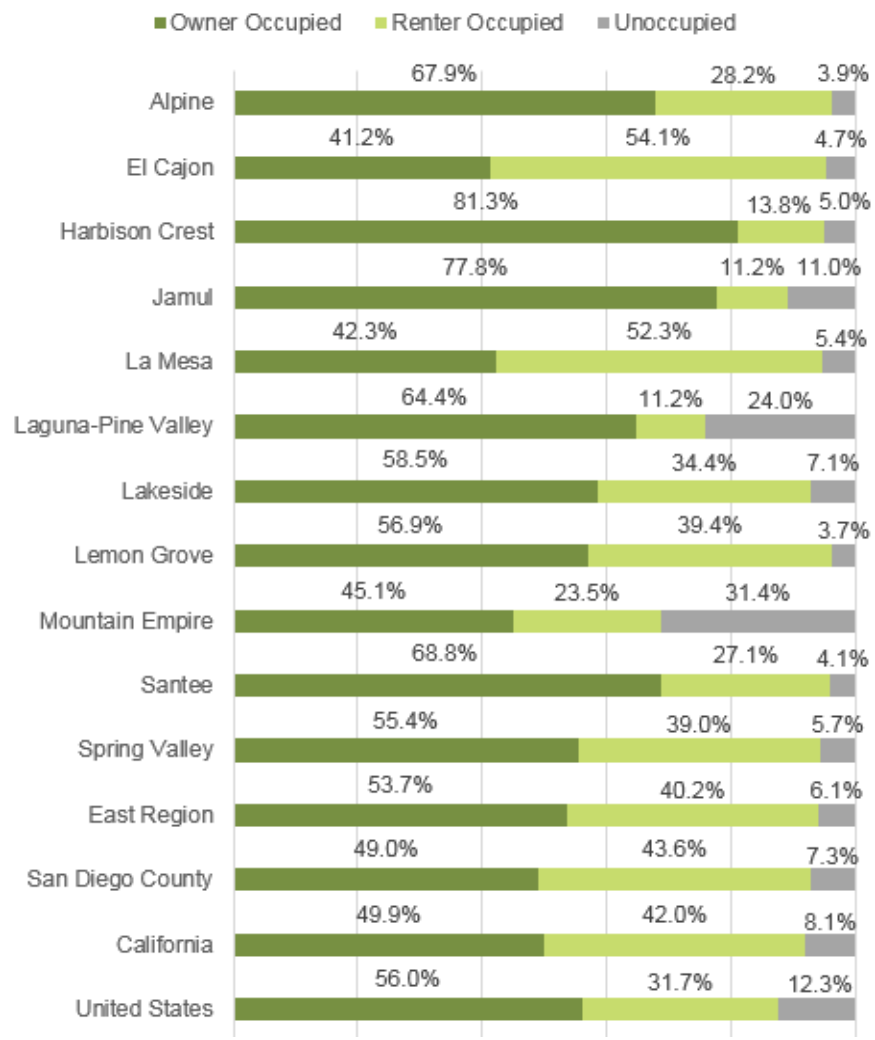
The median rent in East Region was $1,394 per month. The most expensive SRA to rent in was Jamul; the least expensive was Mountain Empire. The median rent in East Region is about equal to San Diego County, higher than California, and significantly higher than the United States as a whole (Figure 29).

Figure 29. Median Gross Rent, East Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 30. Housing Occupancy, East Region by Subregional Area,



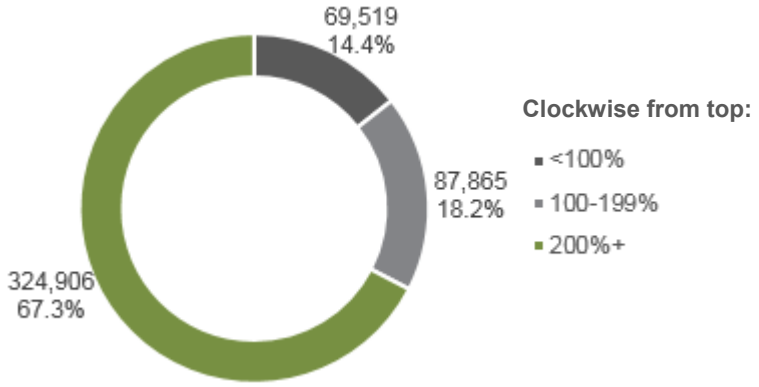
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

In East Region, over half of householders lived in the home they own. Just under half of housing units were rented. The SRA with the highest percentage of those renting was in El Cajon, with almost three in five housing units occupied as rentals. The SRA with the highest percentage of owner-occupied units was Harbison Crest, with more than four in five of units owner occupied (Figure 30).

Poverty is determined to be when a person or group of people lack human needs because they cannot afford them – including basic necessities such as clean water, adequate nutrition, health care, education, clothing, and shelter. Families or people with income below a certain limit are considered to be below the poverty level. Poverty level for a household is determined, in part, by the number of people in the household who must be supported by the combined household income.

In East Region, 1 in 7 people lived below the poverty line (Figure 31). It is generally accepted that in order to be able to afford basic necessities, an individual or household must be at or above 200% of the poverty level. With that standard, nearly one-third of the population lived without adequate financial resources.

Figure 31. Population by Poverty Level, East Region, 2015.

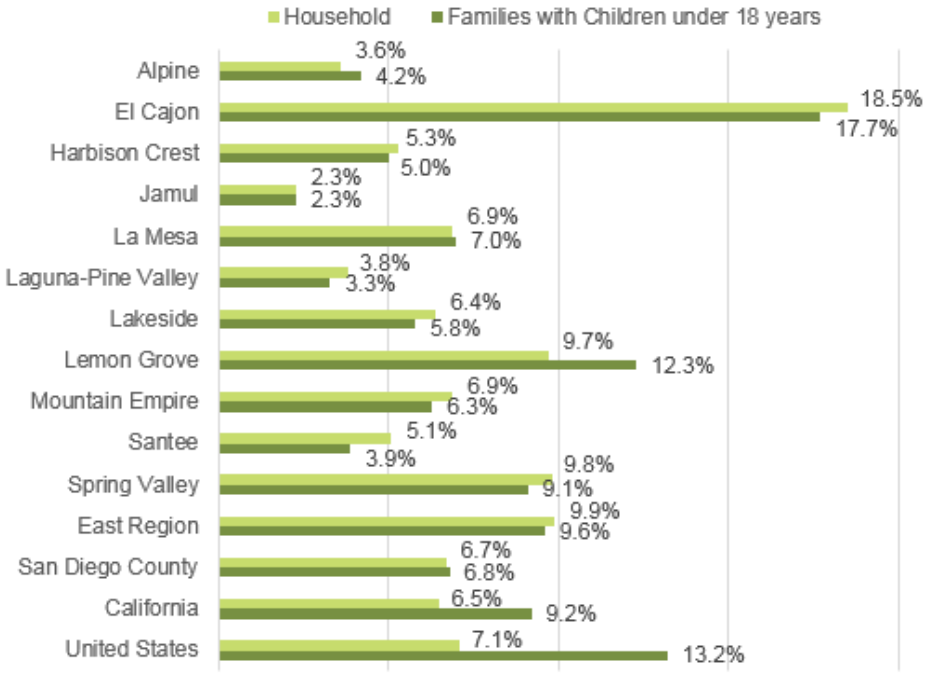


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table B17024.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Public Program Participation

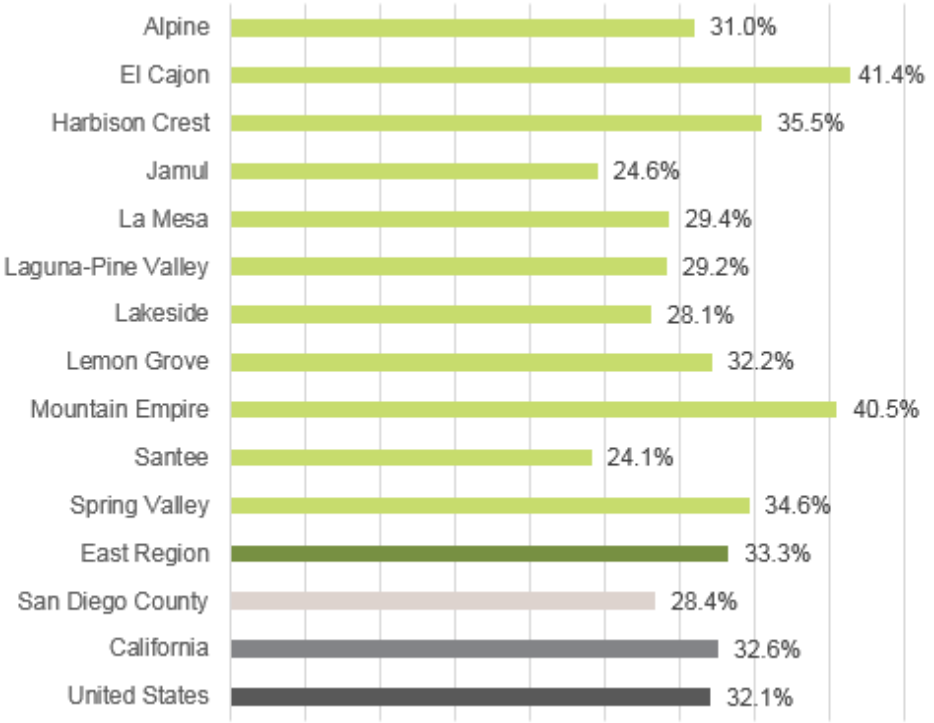
Many San Diegans rely on public assistance to make ends meet. In 2015, 9.9% of households within the East Region received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 9.6% received CalFresh benefits. The SRA with the greatest percentage of families with children under 18 receiving benefits was El Cajon. The SRA with the greatest proportion of households receiving CalFresh benefits was also El Cajon (Figure 32). Of the nearly 500,000 people living in East Region, one-third relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or VA health care coverage; Figure 33).

Figure 32. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, East Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B22022.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 33. Public Health Insurance Coverage, East Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2704.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Standard of Living Assessment

In this section, the results of an additional standard of living assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2018 WEALLCOUNT: San Diego's Annual Point-in-Time Count

On January 26th, 2018, 8,576 individuals were counted as homeless in San Diego County during San Diego County's annual WEALLCOUNT Homeless Point-In-Time count. Of those, 4,990 (58.2%) were unsheltered, and 3,586 (41.8%) were considered to be sheltered (spent the night in homeless shelter or program). About 13% of those counted were in East County. Nearly two thirds of the 1,087 counted in East Region were unsheltered (Figure 35).

Figure 34. 2018 Point-in-Time Count: Regional Breakdown.

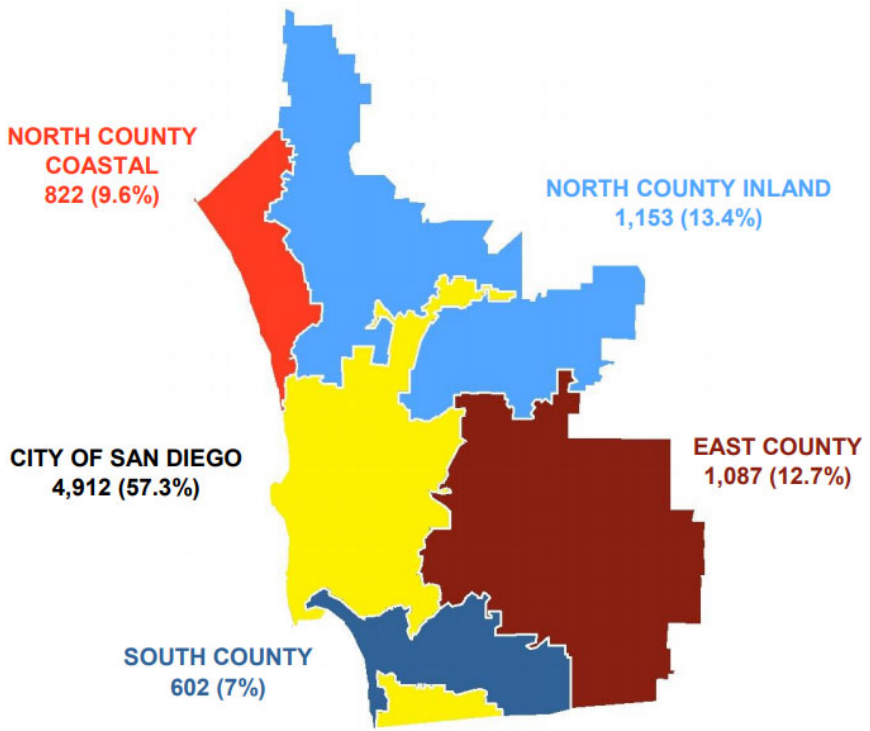
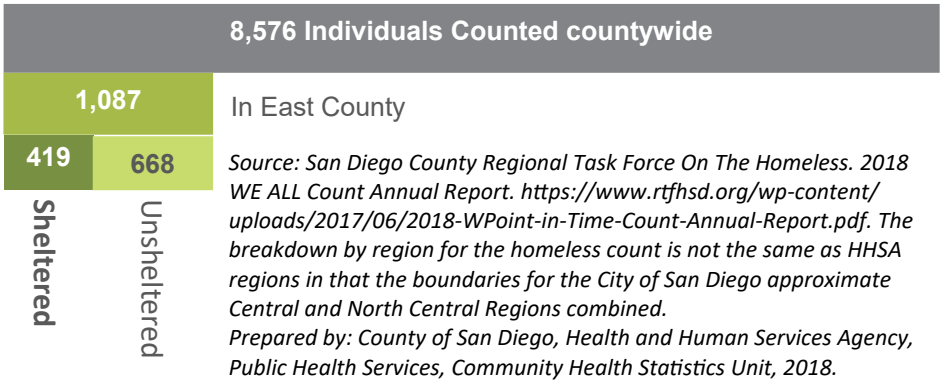


Figure 35. Point-In-Time Count Results, East Region, 2018.



Source: San Diego County Regional Task Force On The Homeless. 2018 WE ALL Count Annual Report. https://www.rtfhsd.org/wp-content/uploads/2017/06/2018-WPoint-in-Time-Count-Annual-Report.pdf. The breakdown by region for the homeless count is not the same as HHSA regions in that the boundaries for the City of San Diego approximate Central and North Central Regions combined.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Area of Influence: Community

The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment.

Conflict resolution programs are keeping youth out of the detention system, environmentally-conscious buildings and events are creating community pride, and community gardens are beautifying the environment and improving local access to healthy foods. Partners are training residents to be advocates for change in their own neighborhoods, and the community as a whole benefits as a result.

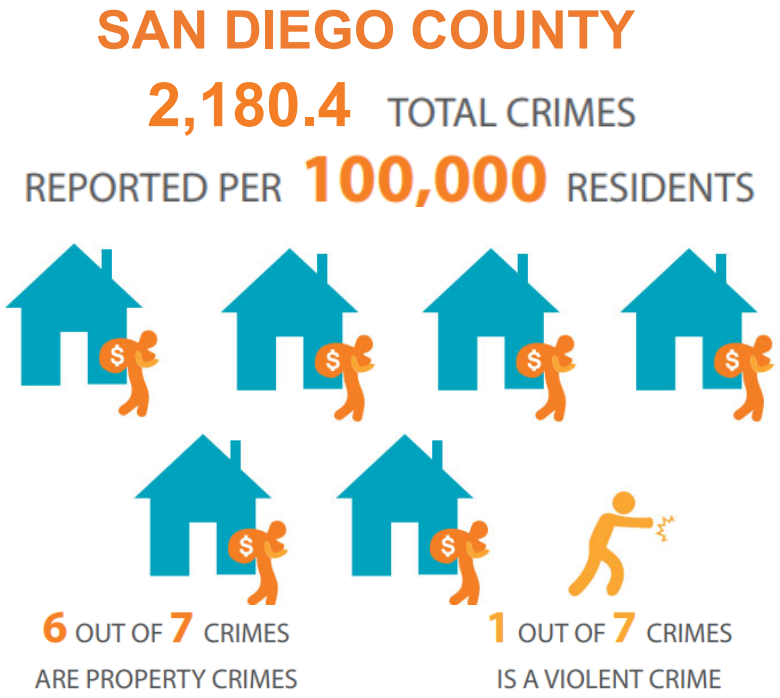
Live Well San Diego indicators that measure progress towards this area of influence include Security (Crime Rate), Physical Environment (Air Quality), and Built Environment (Distance to Park). Living in a crime-free or low-crime area reduces stress and increases an individual's ability to go outside and interact with their environment, leading to better health outcomes. Air quality influences lung health and chronic lung diseases. Many residents of San Diego County lived in highly urban areas where there is not much open space – having a park nearby provides an opportunity to be physically active and leads to reduced disease associated with sedentary lifestyle.

COMMUNITY

Security (Crime Rate) is measured as the number of crimes per 100,000 people. Crime, including violent and property crimes, can have a significant impact on well-being of the population, and contributes to premature death and disability, poor mental health, and lost productivity.

Data for this indicator is not available at the Regional level; therefore, the data presented in the infographic below represents San Diego County overall.

Live Well San Diego Indicator #6: Security (Crime Rate)

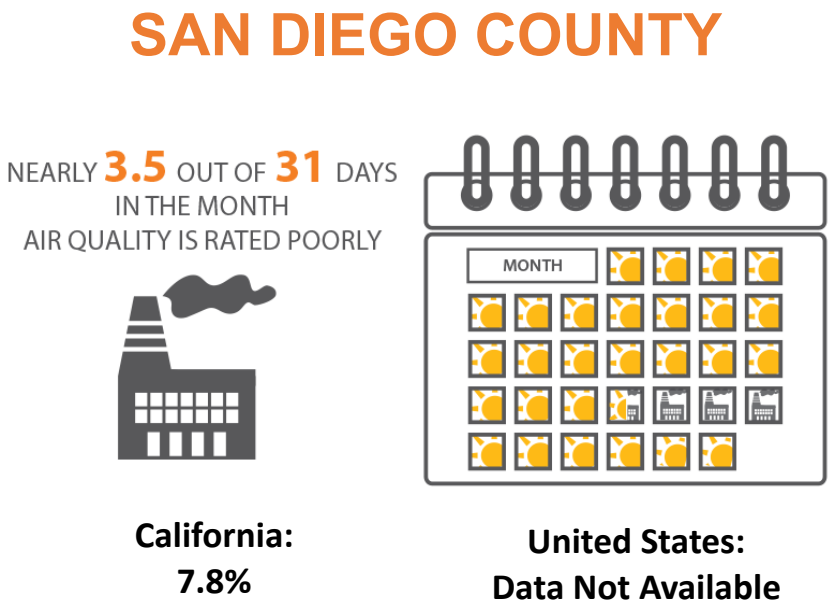


Source: 2016 Overall Crime rate per 100,000 population. Consists of Violent Crime: Murder and Non-negligent Manslaughter, Forcible Rape, Robbery, and Aggravated Assault AND Property Crime: Burglary, Larceny-Theft, and Motor Vehicle theft (Arson included); US Department of Justice- Federal Bureau of Investigation's Uniform Crime Reporting Statistics. 2016. Original Date: 8/22/2012. Accessed on: 9/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #7: Physical Environment (Air Quality)

Physical Environment (Air Quality) is measured as the ratio of days that air quality is rated unhealthy. Air pollution affects more people than any other pollutant. Lower levels of air pollution in a Region correlate with better respiratory and cardiovascular health of the population.

In San Diego County, the air quality was rated poorly on 11.5% of days.



Source: 2016. San Diego, State and Nation from EPA AirData System. http://www.epa.gov/airdata/ad_rep_con.html. May include exceptional events. Accessed 8/2017.

Live Well San Diego Indicator #8: Built Environment (Distance to Park)

Built environment (distance to park) is measured as the percentage of the population living within a quarter mile of a park. Access to parks and recreation services has been shown to have positive health impacts, including the physical, social, and mental aspects of health.

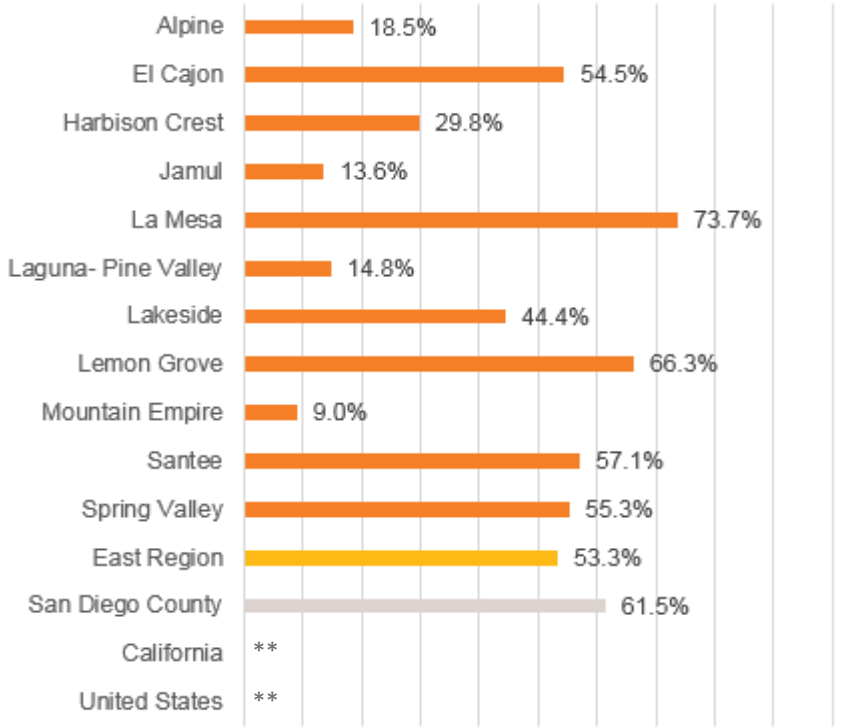
1 IN 2 PEOPLE LIVE WITHIN A QUARTER MILE OF A PARK

EAST REGION: 53.3%

San Diego County:	California:	United States:
61.5%	**	**

In East Region, over one in two residents lived within one-quarter mile of a park , which was a lower proportion than residents of San Diego County overall. The SRA with the highest proportion of residents was La Mesa, where almost three in four residents were living within one-quarter mile of a park. The SRA with the lowest proportion was Mountain Empire, where only one in ten residents lived within one-quarter mile of a park (Figure 36).

Figure 36. Percentage of Population Living within One-Quarter Mile of a Park or Community Space, East Region, 2015.



*** Data Not Available*
Source: Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). 2015 County Business Patterns data set. censtats.census.gov/. Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

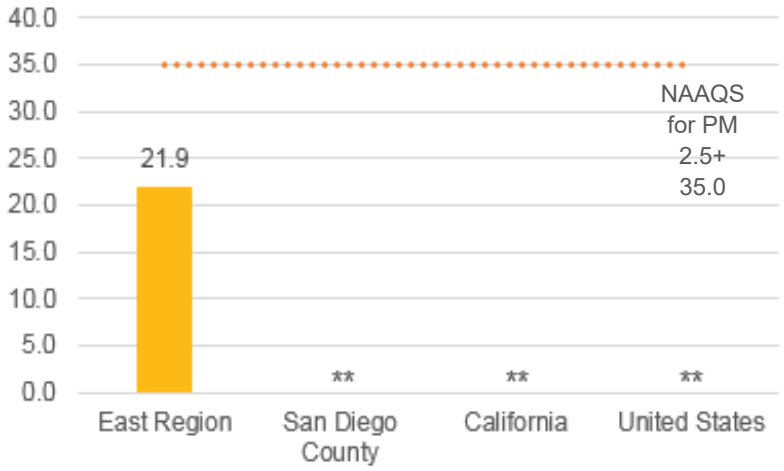
Air Quality

Ozone- One type of pollutant that contributes to air quality is ozone. Higher temperatures increase ground-level ozone, one type of secondary air pollutant as a result of chemical reactions taking place at power plants, and within motor vehicles, ultimately creating smog and pollution. Ozone affects those with cardiovascular and respiratory difficulties, such as asthma, and contributes to related mortality, emergency room visits, and hospitalizations. Ozone concentrations are higher where there are heavy vehicle traffic, coal-fired power plants, and industrial processes occurring.

Ozone Concentration is measured against the Design Value. The Design Value, or DV, is a statistic describing the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS). If the DV is less than the standard, then the area is in attainment of the standard (or that area, on average, meets the standard). Data for this particular indicator is not available for East Region.

PM 2.5 Concentration- PM 2.5, or particulate matter 2.5 microns or less in diameter, includes pollutants such as combustion particles, organic compounds, metals, and any other fine particulate matter, and is capable of reaching deep into the lungs and causing cancers and other diseases. PM 2.5 levels are higher in areas where heavy equipment is used, burning activities occur, and industrial facilities are located.

Figure 37. PM 2.5 Concentration, East Region, 2014-2016.



*** Data Not Available*
Source: 2014-2016 San Diego Air Pollution District Data. Particulate Matter 2.5—here we use a 3 year average of the 98th percentile of collected samples for a 24 hour standard. Not all Regions are represented. Original date: 4/17/2013. Accessed on: 8/2016.
+United States Environmental Protection Agency (EPA). NAAQS Table. Hhttps://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

The East Region had an average PM 2.5 concentration well below the National Ambient Air Quality Standard for the United States (Figure 37). This means that there was less PM 2.5 in the air than is allowed by the Environmental Protection Agency (EPA).

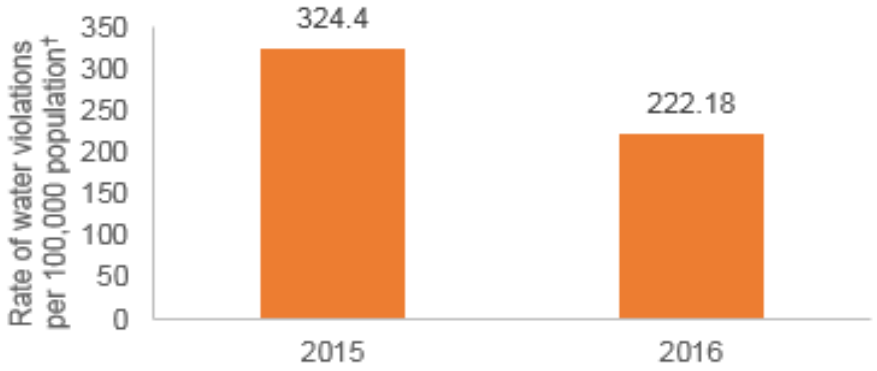
Water Quality

Environmental health affects the health of the population. Climate change is part of environmental health, and is defined as major changes in the earth's temperature, rainfall, snow and wind patterns. Climate change affects many areas of life, including health, water resources, food production, agriculture, forestry, wildlife, and energy supply.

Water quality is measured by tracking water quality violations. The actual indicator is rate of violations per year for federally regulated drinking water contaminants per 100,000 people.

Data was not available at the Regional level for water quality. The San Diego County level data is presented in Figures#38.

Figure 38. Water Quality, San Diego County, 2015-2016.



†Rate of total water violations per 100,000 population for federally regulated drinking water contaminants and other drinking water violations. Data is not comparable to data collected prior to 2013 as EPA has done quality assurance on their system and increased reporting in many states. 2015 EPA water violations from SDWISFED Drinking Water Data. Original Date: 1/26/2012. Accessed on: 8/2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Geography

Geography has come to the forefront of the discussion on health equity. The idea that "place matters" has become more commonplace in recent years. Together, there are 18 incorporated cities and towns, as well as several unincorporated communities. Several community types exist throughout the County – some more urban, some more rural. Data are collected and reported out by the 41 Subregional Areas (SRAs) in San Diego County. San Diego County has an area of over 4,200 square miles and over 70 miles of coastline. Substantial differences in health indicators and health-related behaviors exist in the different areas of the County. More information on how geography affects health can be found in the *Identifying Health Disparities to Achieve Health Equity in San Diego County: Geography at* HE_Geography_FINAL.pdf (sandiegocounty.gov).

Public Transportation and Commute to Work

Active transportation, or walking and using public transportation to get around, is related to the built environment and the individual's perception of safety, as well as the availability of public transit. This indicator measures the percent of population using public transportation to get to work.

Public transit usage as a mean to get to work is detailed in Figure 40. Those living in the East Region less frequently use public transit to get to work than those in San Diego County overall, California, and the United States as a whole. The SRA with the highest proportion of residents using public transit to get to work was Lemon Grove. The SRAs with the lowest proportion were Laguna-Pine Valley and Mountain Empire, where no residents reported using public transit to get to work.

Commute to work can be measured as the average travel time to work. It is also interesting to see how much of the population spend more than an hour commuting to work (Figure 39). In the East Region, 7.0% of residents commuted 60 minutes or more to get to their workplace. This was higher than San Diego County and the United States as a whole, but lower than California. The SRA with the greatest proportion of residents was Mountain Empire, with one-third of residents commuting 60 or more minutes to work. The SRA with the lowest proportion was La Mesa, with just 4.4% of residents travelling 60 or more minutes to get to work.

External Community Assessments

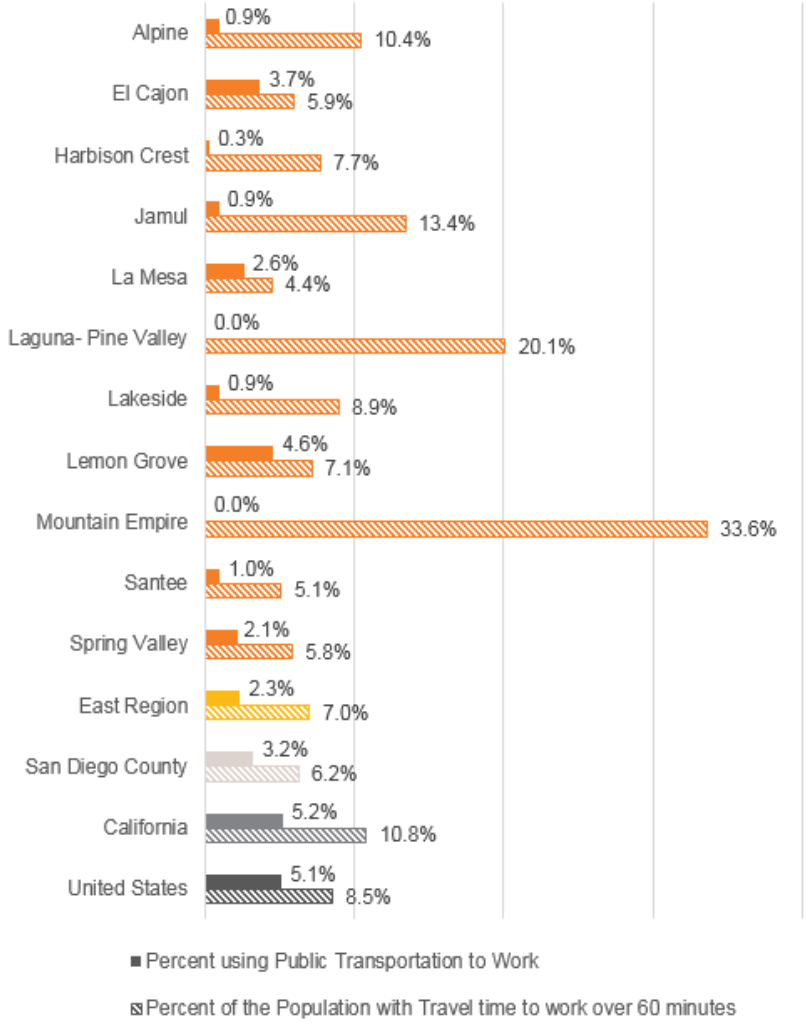
In this section, the results of additional external community assessments are described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2017 Youth Purchase Tobacco Survey

Vista Community Clinic (VCC), in partnership with CASA (Community Action Service & Advocacy), performed youth purchase tobacco surveys (YPTS) in three municipalities across San Diego County in 2017. The methods in each location were similar. Community Action Service and Advocacy (CASA), subcontracted to VCC, produced and distributed retailer Education Packets to managers or owners at every location licensed by the California Board of Equalization to sell tobacco products in the areas surveyed. On the day of the survey, teams of youth and adults supervisors traveled to businesses in each municipality, and the unaccompanied youth attempted to make a tobacco purchase. Data collected included whether the youth attempting the purchase was asked to show their identification, and whether the purchase was successful. In Lemon Grove, two different youth surveys were conducted to determine if results would be different if an older group of youth attempted to make tobacco purchases, compared to a younger group of youth. The results of the survey conducted in Lemon Grove are presented in Table 6.

For several sales in which the youth was able to make a tobacco purchase, the clerk did not ask for identification. In some instances, the clerk did ask for identification, or even swiped the underage identification for electronic confirmation, yet still completed the sale. Federal Law requires identification for tobacco purchases for any customer that appears to be under the age of 27. These sales to underage youth are sometimes occurring even when the clerks know they are selling to underage customers. In Lemon Grove, 8% of purchase attempts by younger underage youth were successful. Another 35% of attempts by older youth, however, were successful. This suggests that while retailers were enforcing the new law for younger youth, more needs to be done to prevent older youth from purchasing tobacco before they become of age.

Figure 39. Commute to Work, East Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03, B08012. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 6. Youth Purchase Tobacco Survey Results, San Diego County, 2017.

Geography	Mean Age of Youth Volunteers	Number of Retailers Surveyed	Successful Purchase Attempts
Lemon Grove – Younger Group (Youth age 16.2-16.8)	16.5	25	8%
Lemon Grove – Older Group (Youth aged 20.7 -20.8)	20.8	26	35%

Source: Vista Community Clinic, Local Tobacco Control Interventions: Tobacco Retail Licensing, Youth Tobacco Purchase Surveys, Lemon Grove, National City, and Escondido, CA, 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

SOCIAL

Area of Influence: Social

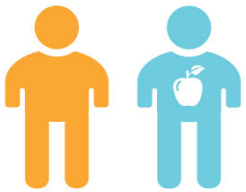
The Social Area of Influence concerns residents helping one another. San Diegans help one another and contribute to their communities by volunteering to serve others who may be less fortunate, by contributing to charitable organizations, and by being politically active and voting in Local, State and Federal elections. There are also vulnerable populations within the County who benefit from the help that others provide.

Vulnerable populations in San Diego include those who live below 200% of the poverty level who may also be experiencing food insecurity. Food insecurity refers to individuals and families who are unable to afford enough food on a regular basis. In turn, they may not have access to healthier foods essential for good nutrition, and this impacts the health and well-being of the population.

Communities thrive when people get to know their neighbors and are invested in the well-being of the people they interact with every day. *Live Well San Diego* partners encourage community connections and engaged citizens. New residents are finding hope through refugee and survivor programs, foster youth and families are discovering resiliency through training and education, seniors are receiving comfort and nourishment through meal delivery services, and volunteers are gaining greater purpose by giving back to their neighbors.

Live Well San Diego Indicator #9: Vulnerable Populations (Food Insecurity)

Food insecurity is measured as the percentage of the low income (income at or below 200% federal poverty level) population who have reported inability to purchase enough food on a regular basis, based on survey data. Food insecurity affects not only current health status, but also physical, mental, and social development (Figure 40).



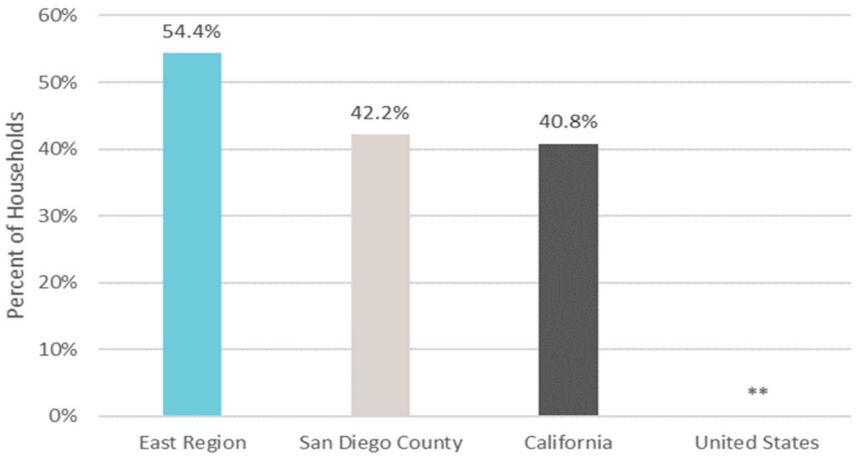
EAST REGION: 54.4%

1 IN 2 PEOPLE WITH LOW-INCOME* EXPERIENCE FOOD INSECURITY

*Low-income is 200% or below the Federal Poverty Level (FPL)

San Diego County:	California:	United States:
42.2%	40.8%	**

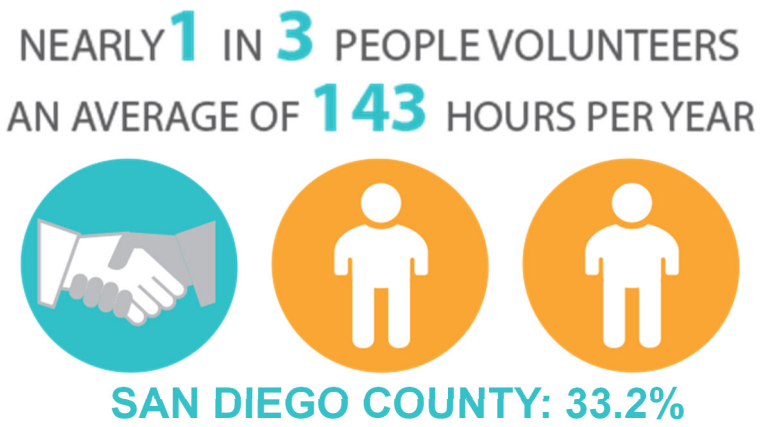
Figure 40. Food Insecurity, East Region, 2014-2015.



*** Data Not Available*

Source: 2014-2015 UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 9/2017.

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.



Source: Percent of residents who volunteer. Data from 2015 from Corporation for National and Community Service. Original Date: 1/24/2013. Accessed on: 6/2017.

Live Well San Diego Indicator #10: Community Involvement (Volunteerism)

Volunteerism is measured as the percentage of the population who volunteer. Volunteering creates a meaningful, positive impact on the community, and benefits the volunteers themselves.

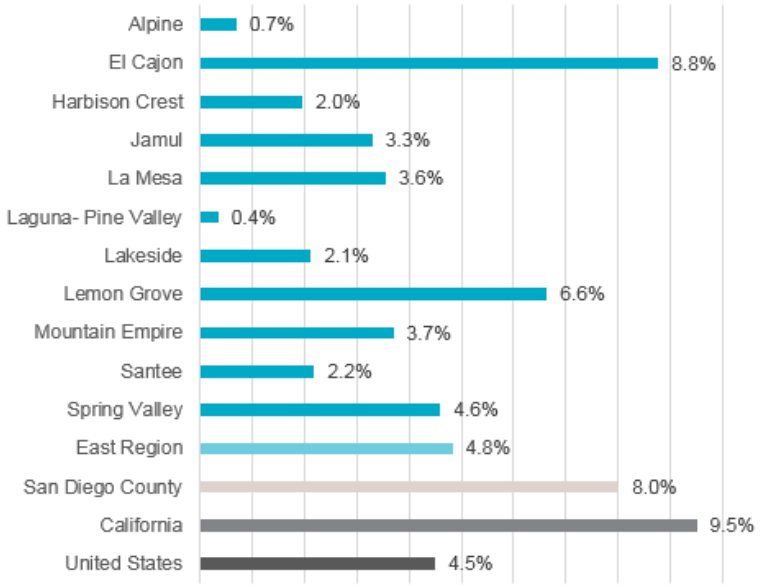
Data is not available by Region, so the figure for San Diego County overall is provided. A higher percentage of individuals in San Diego County volunteered compared to the State and the Nation.

Supporting Indicators

Linguistic Isolation

Linguistic isolation refers to those residents who are isolated because they are unable to communicate effectively in English. Those who cannot effectively communicate in English may have trouble talking to people who provide social services and medical care. They may also not hear or understand important information when there is an emergency – such as an accidental chemical release, or spill. As a result, those who do not communicate well in English may be less likely to get the health care, or safety information that they need.

Figure 41. Linguistic Isolation, East Region, 2015.



Percent of population considered linguistically isolated. A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who may speak only English.
Source: ACS Table S1602 5-yr estimates, 2015. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well."

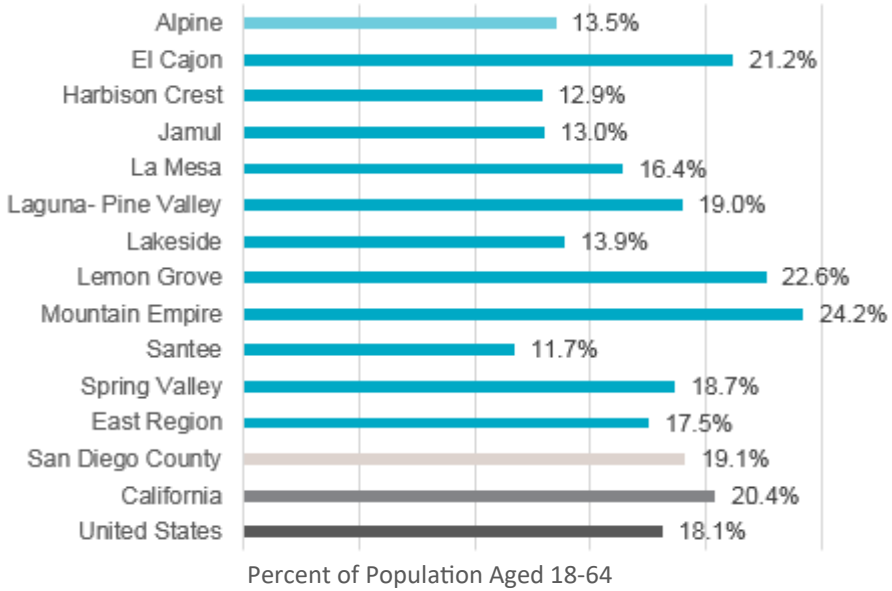
In East Region overall, about 1 in 20 households were linguistically isolated (see Figure 41). A smaller percentage of households in East Region were linguistically isolated, compared to San Diego County and California overall. A slightly larger percentage of East Region households were linguistically isolated compared to the United States overall. The SRA with the highest percentage of linguistically isolated households was El Cajon. The SRA with the lowest percentage of linguistically isolated households was Laguna-Pine Valley.

Health Insurance Status

An individual's ability to live well is influenced by their ability to access the health care system, for both urgent medical issues and preventive care. This indicator measures the lack of health insurance for the non-elderly adult population, or those aged 18 to 64. Children and the elderly often are more likely to be eligible for public health insurance programs, such as Medi-Cal and Medicare, than those adults who fall between the ages of 18 and 64.

Over 1 in 6 adults ages 18-64 were lacking health insurance in the East Region, which was slightly lower than the 1 in 5 in the County overall, and lower than California and the United States overall. The SRA within the East Region with the highest percent of uninsured adults was Mountain Empire. The SRA within the East Region with the lowest percent of uninsured adults was Santee (Figure 42).

Figure 42. Lack of Health Insurance (Ages 18-64), East Region, 2015.



Note: Percent of population not currently covered by health insurance, ages 18-64.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2701. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

For the most current data, be sure to visit:

Community Health Statistics (sandiegocounty.gov) and

Data & Results (livewellsd.org)

North Central Region
Community Health Assessment

TABLE OF CONTENTS

North Central Region Community Leadership Team 4

Introduction 6

Community Health Status Assessment

Demographics.....7

Morbidity and Mortality.....9

Community Health Status Assessment by Area of Influence.....18

Health.....19

Knowledge.....24

Standard of Living.....26

Community.....33

Social.....38

COMMUNITY LEADERSHIP TEAM MEMBERS

Co-Chairs:

- Jennifer Bransford-Koons, Director of Regional Operations, HHSA-East & North Central Regions
- Karen Lenyoun, Training & Reporting Specialist, National Alliance on Mental Illness (NAMI)

Some members are also *Live Well San Diego* Recognized Partners which is indicated with an asterisk (*).

COMMUNITY LEADERSHIP TEAM MEMBERS BY SECTORS

Cities & Governments

- County of San Diego, HHSA (multiple departments)
- County of San Diego, LUEG, Air Pollution and Control District
- County of San Diego, LUEG, Parks and Recreation Department

Community and Faith-Based Organizations:

- 2-1-1*
- Access, Inc.*- Youth and Immigration Services
- American Heart Association*
- American Red Cross*- WIC
- American Lung Association in California*
- Bayside Community Center*
- Community Health Improvement Partners (CHIP)*
- Family Health Center*-Beach Area
- Family Health Centers of San Diego*
- Institute of Violence, Abuse, and Trauma*
- Jewish Family Services of San Diego*
- Kids Turn San Diego*
- McAlister Institute*
- Mental Health Systems*- School Based
- NAMI San Diego*-Career Pathways
- Neighborhood House Association*
- Ovarian Cancer Alliance of San Diego*
- Jacobs & Cushman San Diego Food Bank*
- San Diego OASIS*
- SAY San Diego*
- Scripps Ranch Civic Association*
- Susan G. Komen San Diego*
- Union of Pan-Asian Communities*
- University City Community Association*

Schools & Education

- University of California, San Diego
- University of California Division of Agriculture and Natural Resources
- University of California Expanded Food and Nutrition Education Program
- San Diego Unified School District*

Other Valued Members

- Aetna Better Health
- Cross Cultural Horizons
- Linda Vista Multi-Cultural Fair
- Salud Health Info
- SCOO-SOI

NORTH CENTRAL REGION (2015)

Demographics

Nearly **3** in **5** residents (57.8%) were white.

Another **1** in **5** residents (19.1%) were Asian/Pacific Islander.

Health

13%

of all new HIV diagnoses within the County from 2010-2014 were in the **North Central Region.**

Knowledge

19 in **20** residents (95.0%) **graduated from high school**, compared to 85.5% in the County overall.

Standard of Living

$85,121

North Central Region had the **highest median household income** of all the HHSA Regions.

$1,786

North Central Region had the **highest median gross rent** of all the HHSA Regions.

Over **2** in **5** (45.2%) households in North Central Region were **renter-occupied**.

2.6%

of households within the North Central Region relied on **CalFresh benefits**, compared to 6.7% within the County overall.

Nearly **1** in **5** residents (21.2%) relied on **public health Insurance coverage**, compared to 28.4% within the County overall.

Community

Over **3** in **5** residents of North Central Region (69.8%) lived within a **quarter mile of a park**, more than the County overall.

Social

Nearly **1** in **3** low-income residents (30.7%) experienced **food insecurity** in North Central Region, compared to 42.2% within the County overall.

1 in **8** (12.0%) adult residents (18-64 years) were **uninsured** in North Central Region, compared to 19.1% within the County overall.

INTRODUCTION

Introduction

Formation of Leadership Team

The *Live Well San Diego* North Central Region Community Leadership Team was formed in June of 2012 to assist in the implementation of the *Live Well San Diego* vision. The leadership team brings together community leaders, stakeholders and residents to initiate change that will help build healthy, safe, and thriving communities. The mission of the North Central Region Leadership Team is to improve the overall health and well-being of San Diego County residents through community engagement.

Formation of Regions

In 1998, due to the size and diversity of the County, a new Regional service delivery system was created, enabling Regional general managers (now called Regional Directors) to better acquaint themselves with their individual communities, and develop partnerships to meet the unique needs of each one. In six HHSA Regions, staff provides services in an integrated fashion, close to families and communities, in collaboration with other public and private sector providers.

Community Leadership Team Structure and Planning Process

The North Central Region Leadership Team is comprised of several members representing 43 community-based organizations, city and government organizations, and schools. The entire team meets monthly and supports three workgroups:

- Behavioral Health
- Physical Activity
- Preventative Healthcare

As part of their planning process for the second MAPP cycle,[†] North Central Region Leadership Team members received a presentation from the Community Health Statistics Unit describing data relating to the health and wellness status of residents within their Region. The leadership team used this data to inform their community health improvement planning process. The leadership team discussed the assessments, reviewed County health data, and determined if the health issues the group had previously decided upon (during the first MAPP cycle) were still relevant to the community. Once the health issues selected by the leadership team were agreed upon, goals and activities were discussed and updated as needed.

[†] For information on the planning process during the first MAPP cycle, please refer to the *Live Well San Diego Community Health Improvement Plan,* 2014 at CHIP_Final-10-22-14.pdf (livewellsd.org)

Community Health Status Assessment

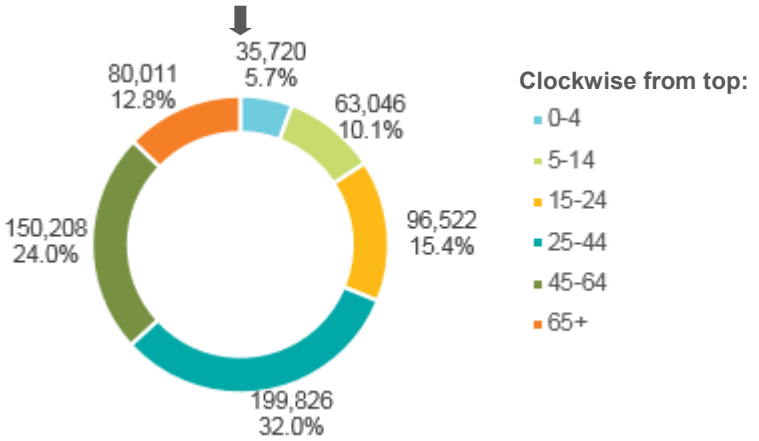
Demographics

The North Central Region of San Diego County is bordered by Interstate 8 to the south, the Pacific Ocean to the west, Del Mar and State route 56 to the north and extends to include Scripps Ranch and San Carlos to the east. North Central Region is one of the most diverse geographical regions in the County, including miles of pristine Pacific coastline, steep canyons, valleys, and mountainous terrains. The Region encompasses the northern half of the City of San Diego, and consists of 24 smaller communities including Linda Vista, Mission Valley, Clairemont and La Jolla. The North Central Region had a population of over 625,000 residents and is comprised of coastal towns, university communities, suburban areas, and military facilities.

According to the U.S. Census Bureau's American Community Survey, the population in North Central Region was fairly diverse. The majority of residents were between the ages of 25-44 (1 in 3), and those aged 45-64 (1 in 4; Figure 1). There were nearly equal percentages of males and females.

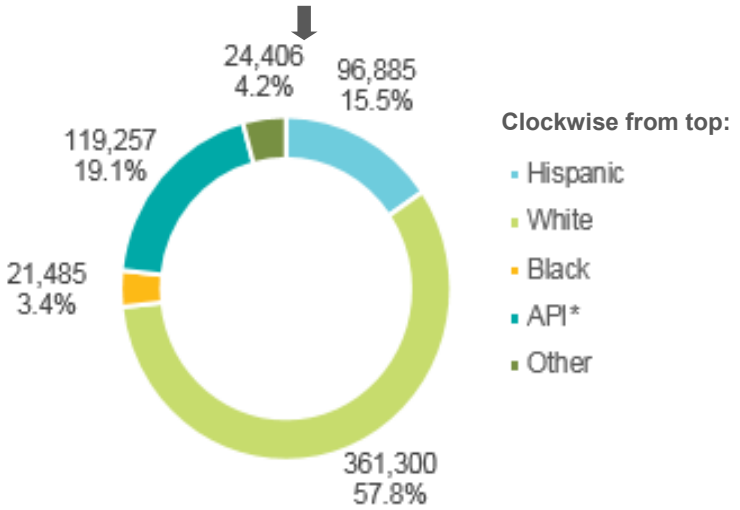
Almost 1 in 5 North Central Region residents were Asian/Pacific Islander. Over half were white. Another 1 in 7 were Hispanic. Another 1 in 30 were Black, and 1 in 25 were another race/ethnicity (Figure 2).

Figure 1. Population by Age Group, North Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

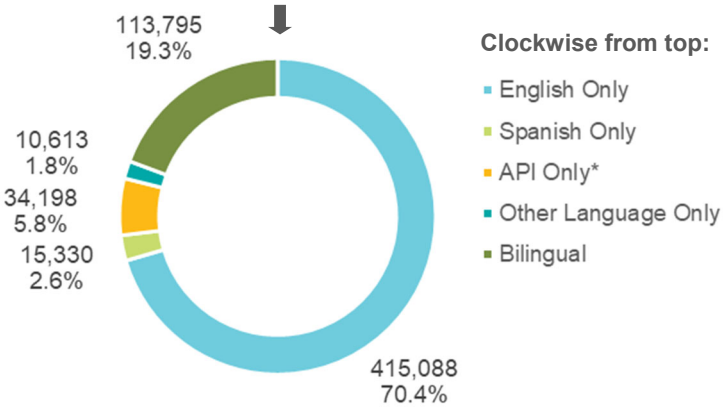
Figure 2. Population by Race/Ethnicity, North Central Region, 2015.



**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

DEMOGRAPHICS

Figure 3. Population by Language Spoken at Home, North Central Region, 2015.

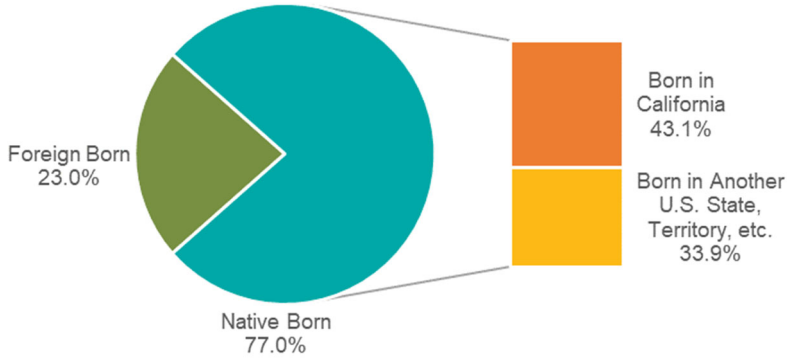


**API refers to Asian or Pacific Island languages.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Over 70% the population aged 5 years and older in North Central Region were English-only speakers. Almost 3% were Spanish-only speakers, and another nearly 20% were bilingual (Figure 3).

Note: This word cloud is a representation of the diversity of languages spoken in San Diego County. Not all languages spoken are represented.

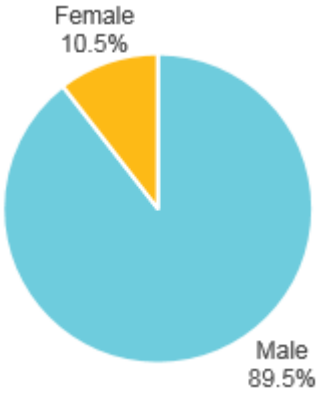
Figure 4. Population by Nativity and Place of Birth, North Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B06001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 5. Veterans in the Population, North Central Region, 2015.

9.8%
of North Central Region Residents 18+ were Veterans.

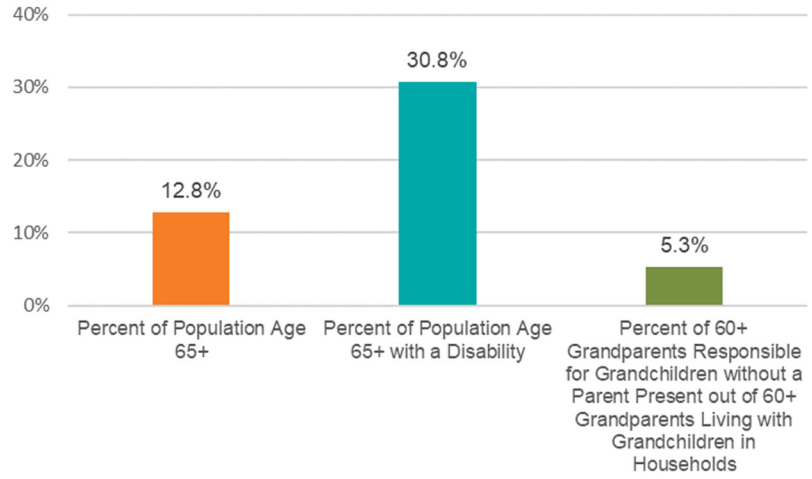


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S2101.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

MORBIDITY AND MORTALITY

Almost 1 in 4 people living in North Central Region were foreign born. Of those who were native born, over one in two were born in California (Figure 4). Approximately 1 in 8 North Central Region residents was a veteran. Of those residents who were veterans, about 1 in 10 were female (Figure 5).

Figure 6. Characteristics of Older Adult Population, North Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Over 1 out of 8 North Central Region residents were seniors (over the age of 65). Of those over the age of 65, about 1 in 3 had some kind of a disability (hearing, vision, cognitive, self-care). Approximately 1 in 20 residents over the age of 60 living with a grandchild in the North Central Region were solely responsible for raising a grandchild (no parent is present in the household). (Figure 6).

Morbidity and Mortality

According to the Centers for Disease Control and Prevention, morbidity is defined as any departure, subjective or objective, from a state of physiological or psychological well-being, encompassing disease, injury, and disability. Mortality refers to death.

In this section, conditions contributing to the greatest amount of morbidity and mortality are discussed. First, the 3-4-50 concept is introduced and explained, with data relevant to each indicator presented. Next, prevention quality indicators, measures formulated and defined by the U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality, are presented. These indicators describe the rate of hospitalizations for conditions or complications that could have been prevented with adequate primary or outpatient care. Lastly, the leading causes of death by Region and County overall are presented, in contrast to those for California and United States as a whole.

The purpose of this section is to describe what conditions are contributing the most to the morbidity and mortality of people living in San Diego County.

3-4-50

Introduction

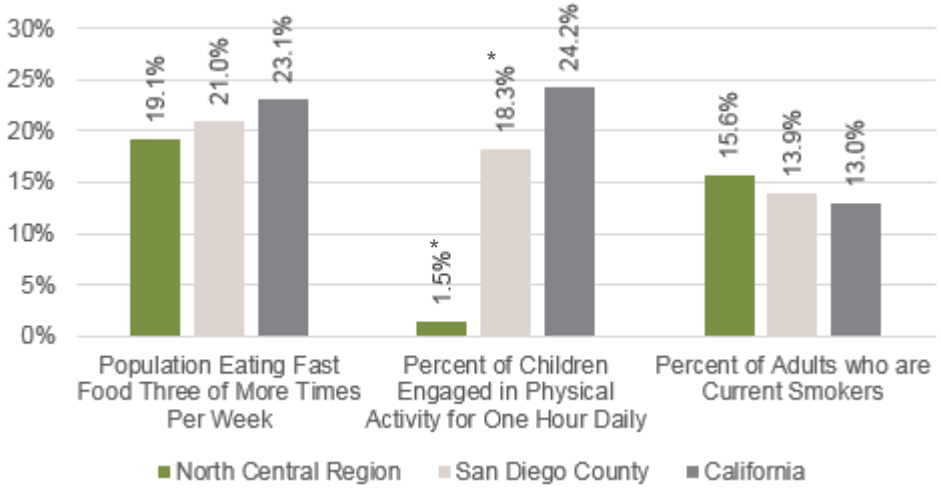
Chronic diseases are now among the leading causes of death and disability worldwide. This reflects an improvement in the prevention and treatment of infectious diseases as well as significant changes in dietary habits, physical activity levels, and tobacco use in the population.[1] Three behaviors (poor diet, physical inactivity, and tobacco use) contribute to four chronic diseases (cancer, heart disease and stroke, type 2 diabetes, and lung diseases such as asthma) that result in over 50 percent of all deaths worldwide. This is the foundation of the 3-4-50 concept.[2] The influence of these three unhealthy behaviors may be seen in San Diego County as these four chronic diseases are among the most common causes of death and disability in our Region.

The information discussed on the following pages is specific to North Central Region and its SRAs. For a more detailed explanation, please see the 3-4-50 section in the countywide document (page 31), or the 3-4-50 reports located here: 3-4-50 (sandiegocounty.gov).

Three Behaviors

Diet, which is ultimately a personal choice, is one of the factors that can contribute to obesity. The physical environment, including lack of sidewalks and adequate lighting, posed challenges to walking. Smoking is the leading factor contributing to lung cancer and chronic obstructive pulmonary disease (COPD) deaths in the United States. Exposure to second hand smoke increases risk of heart disease and lung cancer in adults, and asthma attacks and respiratory infections in children.

Figure 7. Measures of Three Behaviors (Poor Diet, Physical Inactivity, and Smoking) Contributing to 3-4-50 Deaths, North Central Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

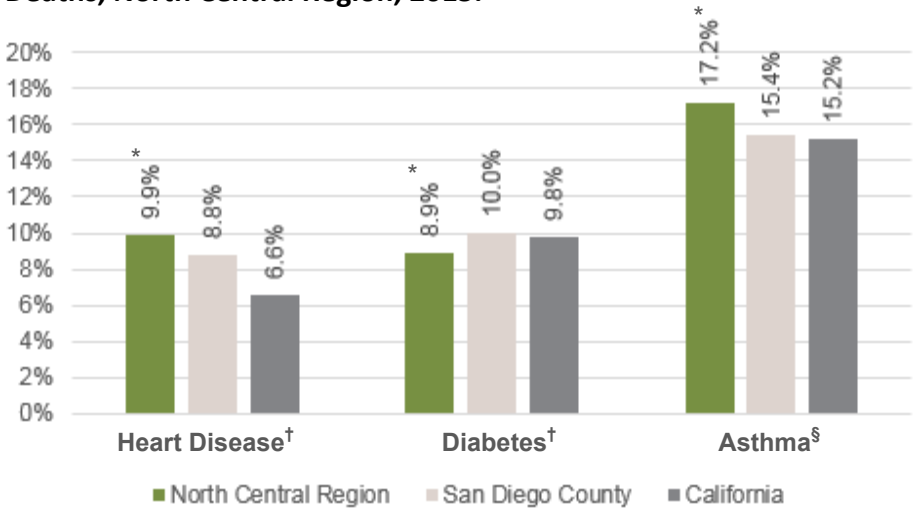
In 2015 (Figure 7):

- Nearly 1 in 5 residents aged 2 and over ate fast food three or more times per week in North Central Region. This was lower than the County and the State overall.
- Nearly 1 in 4 children aged 2-11 in California engaged in physical activity for one hour daily.
- Nearly 1 in 6 adults in North Central Region were current smokers. This was higher than the nearly 1 in 7 adult smokers in the County and the nearly 1 in 8 in the State overall.

Four Diseases

Cancer is a term used to describe a group of diseases in which abnormal cells divide without control and invade other tissues.[3] Heart disease refers to any acute or chronic condition that involves the heart or its blood vessels: the muscle itself, valves, blood flow, and beating rhythm.[4] Stroke is a distinct type of cardiovascular disease, also called cerebrovascular disease. Specifically, stroke is a disease that affects the arteries leading to and within the brain.[5] Diabetes mellitus is a serious disease in which the levels of blood glucose, or blood sugar, are above normal.[6] Asthma is a chronic inflammatory disease of the respiratory system which causes the airways of the lungs to constrict and become inflamed in response to certain triggers. Chronic Obstructive Pulmonary Disease (COPD) is a disease that makes it hard to breathe.[7]

Figure 8. Ever Diagnosed with a Disease Contributing to 3-4-50 Deaths, North Central Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
† Adults aged 18 and over.
§ Residents aged 1 year and over.
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

MORBIDITY AND MORTALITY

Figure 8 provides an estimate of the percent of adult residents who may be suffering from heart disease and diabetes. Estimates of asthma prevalence are for residents aged 1 and over. Estimates of cancer prevalence were not available through the same data source, and are therefore not comparable and not included in this analysis. Due to estimates being unstable for North Central Region, countywide trends are highlighted below.

In 2015:

- 1 in 12 adult residents of San Diego County had ever been told they had heart disease. This was lower than the State overall (Region unstable).
- 1 in 10 adult residents of San Diego County had ever been told they had diabetes. This was slightly higher than the State overall (Region unstable).
- Over 1 in 7 residents over the age of 1 year old had ever been diagnosed with asthma in San Diego County. This was slightly higher than the State overall (Region unstable).

Over 50% of Deaths

Three behaviors - poor diet, physical inactivity and tobacco use - contribute to four major chronic diseases - cancer, heart disease, type 2 diabetes, and pulmonary disease - which are responsible for more than 50% of deaths worldwide. In San Diego County in 2016, 53% of deaths were due to these chronic diseases. In North Central Region in 2016, 51% of deaths were due to 3-4-50 diseases (Table 1).

Compared to the County overall, North Central Region had nearly an equal percentage of deaths due to 3-4-50 diseases. The SRA with the highest 3-4-50 percentage in 2016 was Del Mar-Mira Mesa, at 56%. The SRA with the lowest percentage was Kearny Mesa, at 48%. The percentages for North Central Region and its SRAs decreased from 2000 to 2016 (Figure 9).

Summary

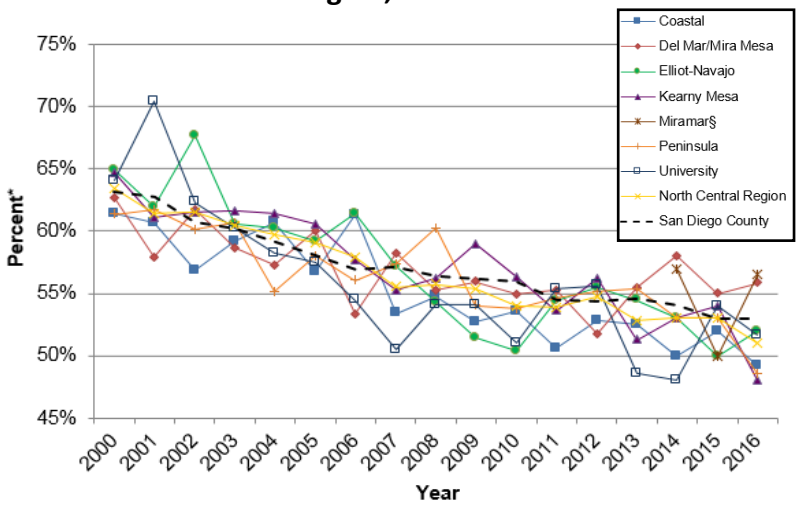
Overall, the percentage of deaths due to 3-4-50 diseases has been decreasing within the North Central Region, and within the County overall as well. While relatively low percentages of San Diegans residing in North Central Region were participating in the risk behaviors that lead to deaths from one of the 3-4-50 diseases, more work is needed to continue to lower the percentage of deaths due to chronic disease. Addressing 3-4-50 behaviors and diseases helps North Central Region residents, and all San Diegans, to live well.

Table 1. 3-4-50 Death[†] Percentages* Among San Diego County Residents—North Central Region, 2000-2016.

Geography	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Coastal	61%	61%	57%	59%	61%	57%	61%	53%	55%	53%	54%	51%	53%	52%	50%	52%	49%
Del Mar-Mira Mesa	63%	58%	62%	59%	57%	60%	53%	58%	55%	56%	55%	55%	52%	55%	58%	55%	56%
Elliott-Navajo	65%	62%	68%	61%	60%	59%	61%	57%	54%	51%	50%	54%	55%	54%	53%	50%	52%
Kearny Mesa	65%	61%	62%	62%	61%	61%	58%	55%	56%	59%	56%	54%	56%	51%	53%	54%	48%
Miramar[§]															57%	50%	56%
Peninsula	61%	62%	60%	61%	55%	58%	56%	57%	60%	54%	54%	55%	55%	55%	53%	53%	49%
University	64%	70%	62%	60%	58%	57%	54%	50%	54%	54%	51%	55%	56%	49%	48%	54%	52%
North Central Region	63%	61%	62%	60%	60%	59%	58%	56%	56%	55%	54%	54%	55%	53%	53%	53%	51%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

[†]3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
[§]Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown. Data not available before 2014.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 9. 3-4-50 Death† Percentages* Among San Diego County Residents—North Central Region, 2000-2016.



†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
§Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014 -2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

References

1. World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).
2. 3Four50, www.3four50.com (Accessed July 2, 2010).
3. National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).
4. Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).
5. American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015).
6. American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).
7. Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).

Leading Causes of Death

Introduction

The leading causes of death are mortality statistics useful for showing the relative burden of cause-specific mortality. The top 10 most common rankable causes of death are determined in San Diego County each year, based on rankable categories and reported underlying cause of death. Rankings show the most frequently occurring causes of death out of those rankable. It is important to note that rankings do not in any way depict risk of dying from one condition or another. Mortality rates for a specific cause of death may increase or decrease, but the ranking may not change over time.

Rankable causes of death are categories determined based on recommendations from the 1951 Public Health Conference on Records and Statistics. The original list had 64 selected causes of death; the list used for the 2015 rankings only had 51 categories. For more information on the categories and the conditions they encompass, please visit https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf.

Analysis

Table 2 on the following page shows the Leading Causes of Death in North Central Region, San Diego County, the State of California, and the United States as a whole. In North Central Region in 2015, Malignant Neoplasms (Cancer) were the leading cause of death (same placement as the County overall), followed by Diseases of the Heart.

Leading causes of death rankings were identical to the County overall until the ninth and tenth leading causes. Within North Central Region, essential hypertension and hypertensive renal disease, and influenza and pneumonia were ranked higher than in the County overall.

Summary

Overall, the most common causes of death in 2015 were Malignant Neoplasms and Diseases of the Heart, ranking either first or second within each HHSA Region, the County overall, California, and the nation. Diseases ranked 1 and 2 made up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 were within 5% of one another for San Diego County and each of the six HHSA Regions. Alzheimer's disease deaths were more common in California, the County, and the HHSA Regions than they were in the United States overall.

Table 2. Leading Causes of Death[1,2] Among San Diego County Residents, North Central Region, 2015.

Rank	North Central Region	San Diego County	California	United States
1	Malignant Neoplasms	Malignant Neoplasms	Diseases of the Heart	Diseases of the Heart
2	Diseases of the Heart	Diseases of the Heart	Malignant Neoplasms	Malignant Neoplasms
3	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease	Chronic Lower Respiratory Diseases
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Accidents/Unintentional Injuries
5	Accidents/Unintentional Injuries	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
6	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Accidents/Unintentional Injuries	Alzheimer's Disease
7	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
8	Intentional Self-Harm (Suicide)	Intentional Self-Harm (Suicide)	Influenza and Pneumonia	Influenza and Pneumonia
9	Essential Hypertension And Hypertensive Renal Disease	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Nephritis, Nephrotic Syndrome and Nephrosis
10	Influenza and Pneumonia	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)

Note: Diseases ranked 1 and 2 make up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 are within 5% of one another for San Diego County and each of the six HHSA Regions.

[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the San Diego County residents for 2015.

[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

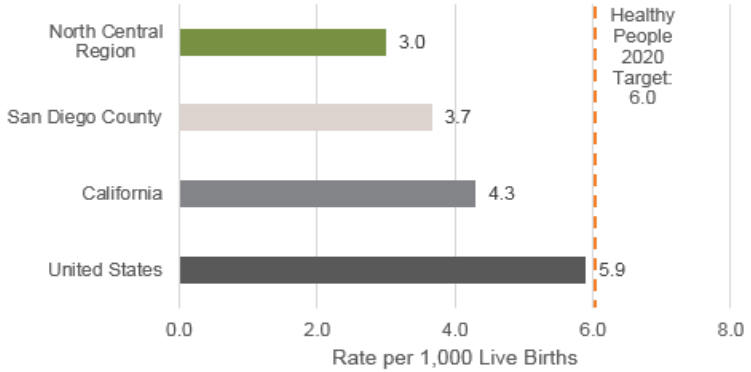
[§] Not shown for fewer than 5 deaths.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System.
Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, June, 2018.

Infant Mortality

The Centers for Disease Control and Prevention (CDC) define infant mortality as the death of an infant before his or her first birthday, while defining the rate of infant mortality as the number of those infant deaths per 1,000 live births in the same year.[1] It is common practice to consider the infant mortality rate (IMR) as a representative indicator of population health.[2] It is theorized that using IMR as an indicator might mirror other factors of population health such as social well-being, rates of illness and disease, economic development, general living conditions and others.[3] It has also been used as a proxy measure for access and quality of pre-term and post-term medical care, for both the mother and infant.[4] In 2016, the top three causes of infant mortality in the United States were congenital malformations, low birth weight and Sudden Infant Death Syndrome.[2] The infant mortality rate in North Central Region in 2015 was 3.0 deaths per 1,000 live births, well below the Healthy People 2020 Target. This was lower than the County overall (3.7 per 1,000 live births). The infant mortality rate in North Central Region in 2015 was also lower than California (4.3 deaths per 1,000 live births), and the United States as a whole (5.9 deaths per 1,000 live births) (Figure 10). Overall, the infant mortality rate has decreased in the North Central Region, San Diego County, and California between 2000-2015 (Figure 11).

Figure 10. Overall Infant Mortality Rate, North Central Region Comparison, 2015.



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

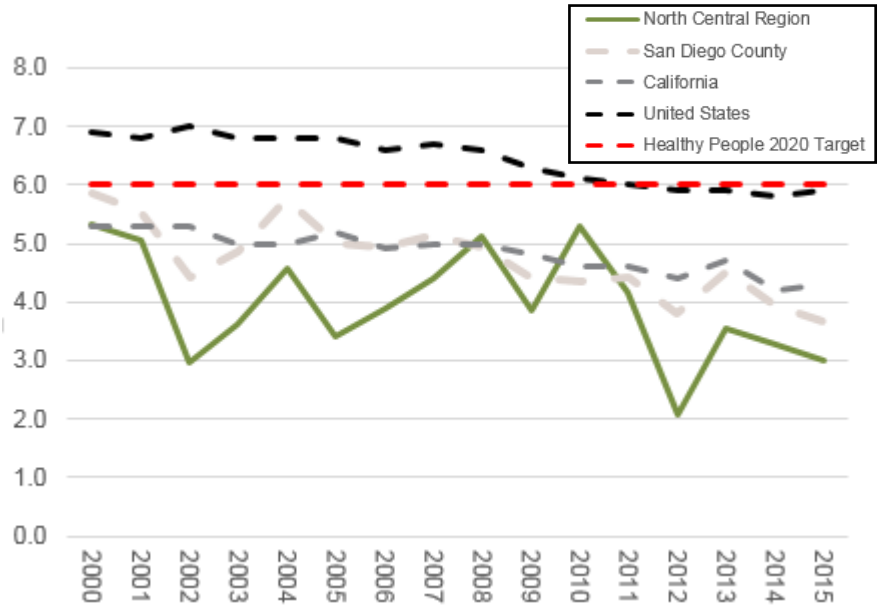
1. Centers for Disease Control and Prevention (CDC). Infant Mortality. Reproductive Health. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Published 2017.

2. Kochanek KD, Murphy SL, Xu J, Arias E. Mortality in the United States, 2016. NCHS Data Brief. doi:10.1056/NEJM184002260220306

3. Reidpath DD. Infant mortality rate as an indicator of population health. *J Epidemiol Community Heal*. 2003;57(5):344-346. doi:10.1136/jech.57.5.344

4. Fry-Johnson YW, Levine R, Rowley D, Agboto V, Rust G. United States black:white infant mortality disparities are not inevitable: Identification of community resilience independent of socioeconomic status. *Ethn Dis*. 2010;20(1 SUPPL.1):1-10.

Figure 11. Overall Infant Mortality Rate, North Central Region Comparison, 2000-2015.



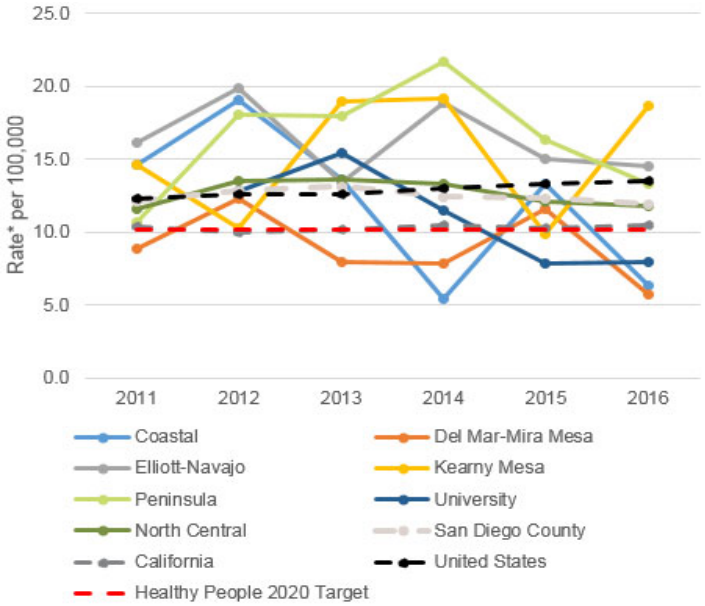
Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

MORBIDITY AND MORTALITY

Suicide

In 2016, North Central Region had a comparable suicide rate to San Diego County overall, higher than California, lower than the United States as a whole, and over the Healthy People target (10.2 per 100,000 population). In the Kearny Mesa SRA, the suicide rate was highest compared to the other SRAs. The rates were lowest in the Del Mar-Mira Mesa, Coastal, and University SRAs (Table 3). Between 2011-2016, rates in Kearny Mesa and Peninsula SRAs increased, while the rates in Coastal, Del Mar-Mira Mesa, and Elliott -Navajo decreased. The rate in North Central Region remained relatively stable between 2011-2016 (Figure 12). North Central Region, Elliott-Navajo, Kearny Mesa, and Peninsula all had suicide death rates higher than the Healthy People 2020 Target in 2016 (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicide death by the year 2020).

Figure 12. Suicide*, North Central Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Note: Miramar had no values for 2011-2016, and is therefore not shown on the figure above.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014 -2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 3. Suicide*, North Central Region, 2016.

Geography	2016 Suicide Death Rate*
Coastal	6.3
Del Mar-Mira Mesa	5.7
Elliott-Navajo	14.5
Kearny Mesa	18.7
Miramar	§
Peninsula	13.3
University	7.9
North Central Region	11.8
San Diego County	11.9
California	10.5
United States	13.5
Healthy People 2020 Target	10.2

**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than five events.
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Unintentional Injury

Unintentional injuries include any accident that results in cutting or piercing of the skin, drowning or submersion, falls, or motor vehicle accidents. Nationally, more than 3 million people are hospitalized, 27 million people are treated in emergency departments and released, and over 192,000 die as a result of violence and unintentional injuries each year. The cost of both fatal and nonfatal injury in the U.S. in 2013 was $671 billion, in both medical and work loss costs, according to the CDC.

Unintentional injury is related to community because most unintentional injuries are preventable through safety measures, both on the part of the individual (i.e. seat belt use) and of the community (e.g. safe sidewalks and intersections).

In 2016, all SRAs within North Central Region, and North Central Region as a whole, had rates of unintentional injury death below San Diego County and the United States overall (Table 4). The rate of unintentional injury death in San Diego County, North Central Region, and all the SRAs within North Central Region were below the Healthy People 2020 target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce unintentional injury death by the year 2020). The SRA with the highest unintentional injury death rate was Coastal; the lowest was University. Between 2011-2016, the unintentional injury death rate increased in the University SRA. The Coastal, Del Mar-Mira Mesa, Elliott-Navajo, Kearny Mesa, and Peninsula SRAs, along with North Central Region as a whole, experienced a decrease between 2011-2016 in the unintentional injury death rate (Figure 13).

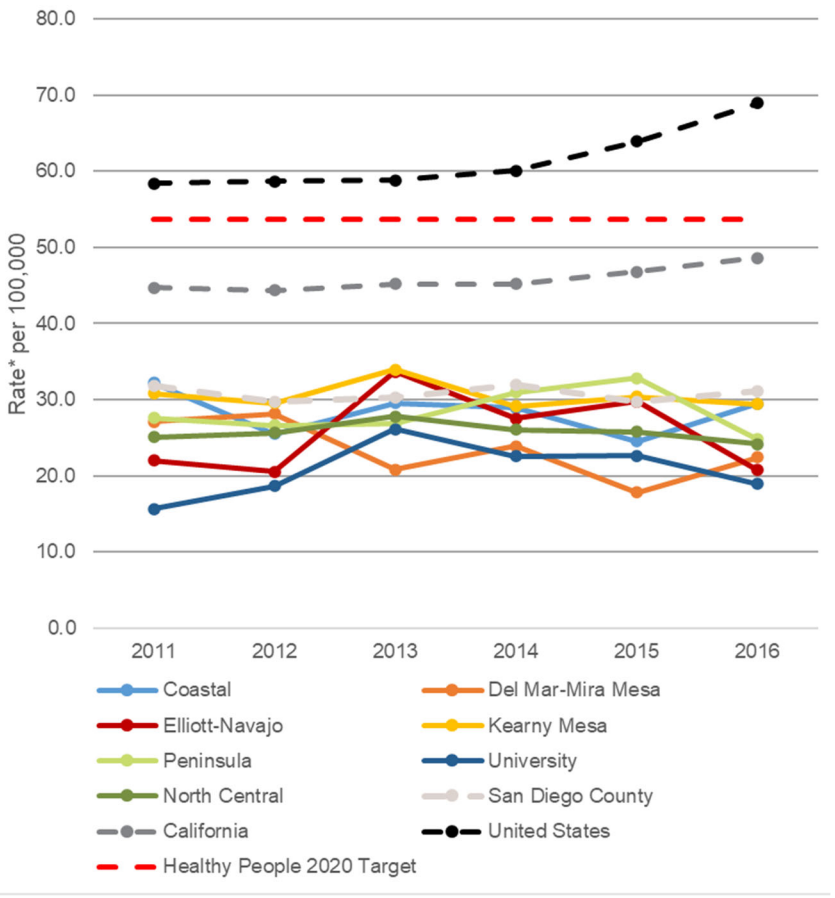
Table 4. Unintentional Injury Death Rate*, North Central Region, 2016.

Geography	2016 Unintentional Injury Death Rate*
Coastal	29.5
Del Mar-Mira Mesa	22.4
Elliott-Navajo	20.8
Kearny Mesa	29.4
Miramar	§
Peninsula	24.8
University	18.9
North Central Region	24.2
San Diego County	31.1
California	48.6
United States	69.0
Healthy People 2020 Target	53.7

**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than five events.

Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 13. Unintentional Injury Death Rate*, North Central Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Rates not calculated for fewer than five events.
Note: Miramar had no values for 2011-2016, and is therefore not shown on the figure above.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017. CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System -Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

AREAS OF INFLUENCE

Live Well San Diego Areas of Influence and Indicators

Areas of Influence

The following pages show data by Area of Influence, or factors that influence quality of life. The *Live Well San Diego* Areas of Influence and Indicator Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Table 5).

Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to "live well."

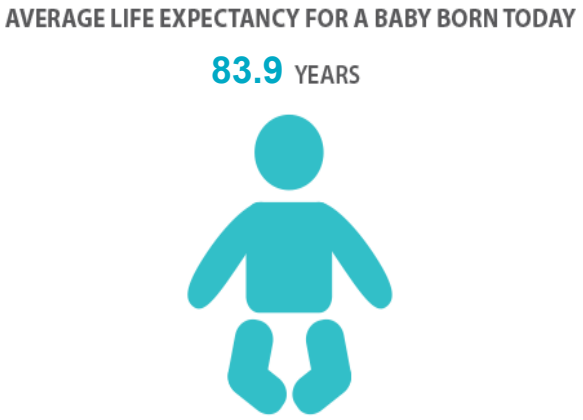
Table 5. Indicators by Area of Influence.

Areas of Influence	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community

HEALTH

Area of Influence: Health

The health of an individual influences their ability to "live well." Improving health and supporting healthy choices is essential to Building Better Health in San Diego County. Two of the Top 10 indicators measuring progress for *Live Well San Diego* fall under the Health area of influence. The first, life expectancy, refers to the measure of length of life expected at birth, and describes the overall health status of a population. The second, quality of life, describes the percent of the population that is sufficiently healthy and able to live independently. Other measures that contribute to quality of life include disability status, and health insurance coverage. An individual's disability status can create barriers to education, employment, and ability to live independently, thus influencing their quality of life. Access to care – both preventive medicine services and treatment for disease – is essential to a high quality of life. Both disability status and access to care influence a person's health and therefore influence their quality of life.

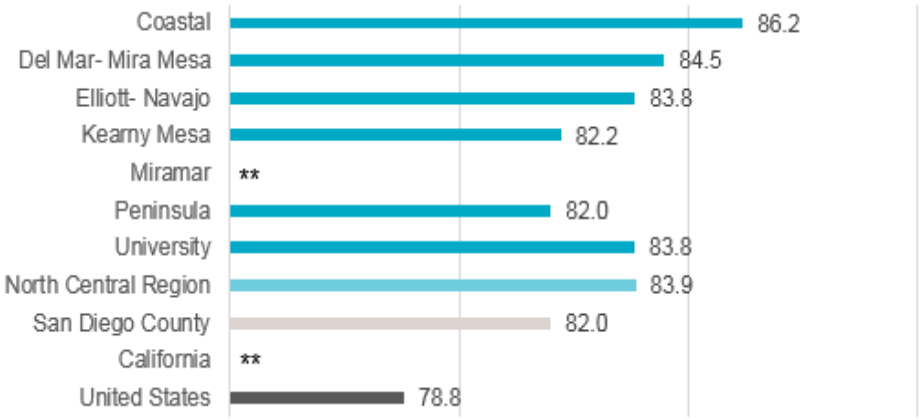


Live Well San Diego Indicator #1: Life Expectancy

Life expectancy at birth is measured as the average number of years a baby born today is expected to live if current mortality patterns continue throughout his or her lifetime.

San Diego County:	California:	United States:
82.0 Years	**	78.8 Years

Figure 14. Life Expectancy, North Central Region, 2015.



*** Data not available.*
Source: Life Expectancy: U.S. and State data from the United States Centers for Disease Control and Prevention, FastStats.
County and Regional data prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, 2015. Accessed 09/2017.

In 2015, Life Expectancy in North Central Region was 83.9 years, which was higher than San Diego County overall, and higher than the United States as a whole. The SRA with the highest life expectancy in North Central Region was Coastal at 86.2 years. The SRA with the lowest life expectancy was Peninsula, at 82.0 years (Figure 14).

Live Well San Diego Indicator #2: Quality of Life

Quality of life is measured as the percentage of the population sufficiently healthy to live independently. The ability to live independently has a positive impact on physical, mental, emotional, and social well-being.

In North Central Region, 19 out of 20 people were healthy enough to live independently (meaning the individual did not have any physical, mental, or emotional condition that impacted their ability to live independently).

The SRA with the lowest quality of life was Kearny Mesa (95.2% of residents able to sufficiently live independently. The SRAs with the highest quality of life were Miramar and University (Figure 15).

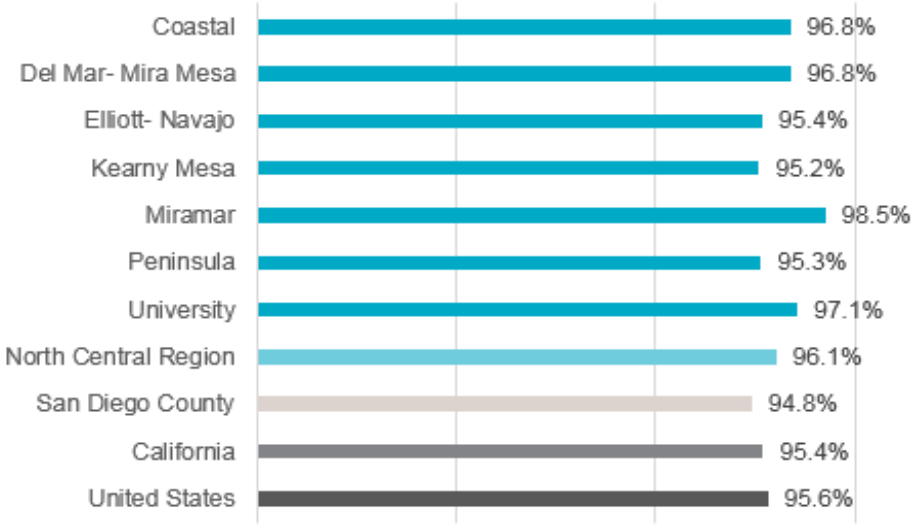
**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*

NORTH CENTRAL REGION: 96.1%

San Diego County:	California:	United States:
94.8%	95.4%	95.6%

The percentage of people who were able to live independently was higher in North Central Region (96.1%) than it was in San Diego County overall (94.8%), and slightly higher than California (95.4%) and the United States as a whole (95.6%).

Figure 15. Quality of Life, North Central Region, 2015.



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

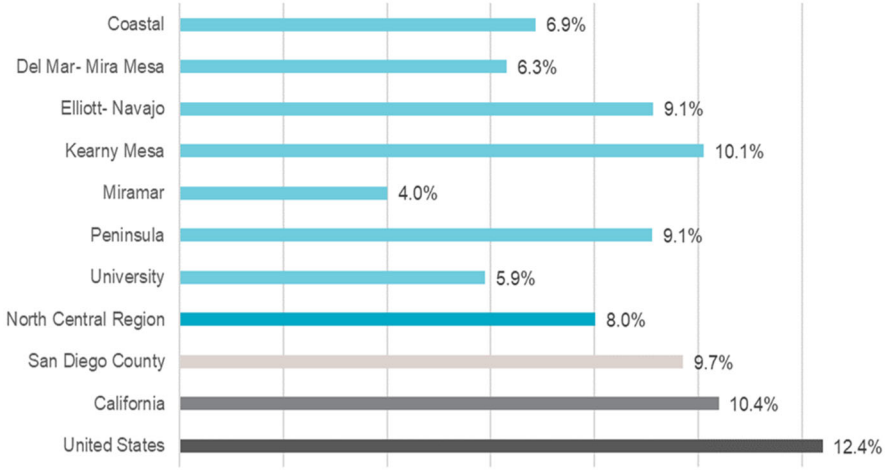
Supporting Indicators

Disability Status

Disability is defined as a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business. Disability also contributes to an individual's ability to live independently. In 2015, 50,027 residents in North Central Region reported having a disability.

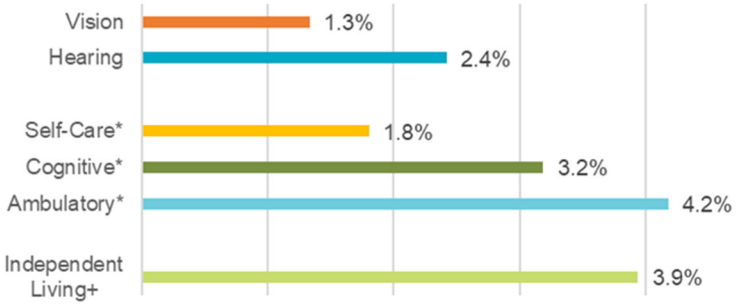
In 2015, 8.0% of residents in the North Central Region had some kind of disability. The SRA with the highest percentage of residents with a disability was Kearny Mesa (10.1%). The SRA with the lowest percentage of disabled residents was Miramar (4.0%). North Central Region overall had a lower percentage of residents with a disability than San Diego County, California, and the United States as a whole (Figure 16).

Figure 16. Disability Status, North Central Region, 2015.



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 17. Disability Status by Type, North Central Region, 2015.



**Cognitive, Ambulatory, and Self-Care excludes population under 5 years.*
[+]Independent living disabilities only calculated for 18+ population.
Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

The most prevalent type of disability in North Central Region was ambulatory, meaning the person had serious difficulty walking or climbing stairs (4.2%). Another 3.9% of residents (age 18 and over) had an independent living difficulty, meaning that they had trouble doing errands alone, such as visiting a doctor's office, or shopping, due to a physical, mental, or emotional condition (Figure 17).

Internal Health Assessment

In this section, the results of additional internal and external health assessments are described. The purpose of this section is to help paint a more complete picture of the health of San Diego residents.

HIV/AIDS Assessment

Human Immunodeficiency Virus, or HIV, is a virus that weakens a person's immune system by destroying important cells that fight disease and infection. Acquired Immunodeficiency Syndrome, or AIDS, refers to an advanced HIV infection, and is diagnosed when immune cell counts drop below a certain threshold, or a person with an HIV infection acquires another opportunistic infection due to their severely weakened immune system.

Since 2011, the incidence rates (new diagnoses) of HIV have increased in North Central Region. In 2013, the rate at which new cases of HIV were diagnosed was 6.8 cases per 100,000 people (Figure 18). The HIV incidence rate in North Central Region from 2011-2013 was lower than the rate in San Diego County, California, and the United States.

Between 2010-2014, there were 2,438 new HIV diagnoses in the County, 13% of which were in the North Central Region. Of those newly diagnosed cases during that time period, 8% were female.

Of persons living with HIV/AIDS in the North Central Region between 2010-2014, 62% were white, 11% were black, 20% were Hispanic, and an additional 7% were either Asian/Pacific Islander, Native American, or their race/ethnicity was unknown (Figure 19).

External Health Assessment

Oral Health Assessment

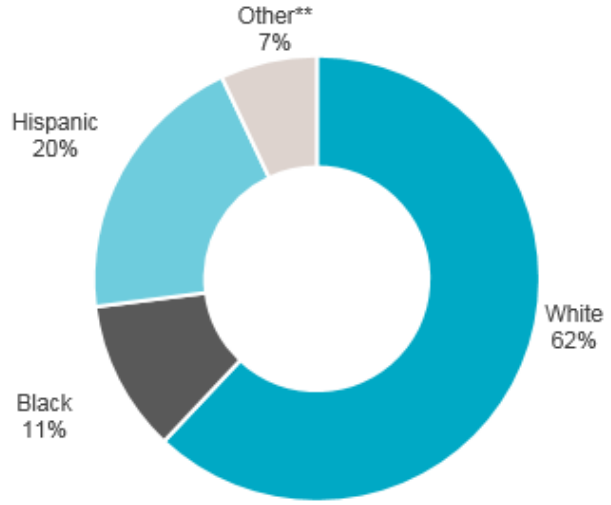
Assembly Bill 1433 requires schools to distribute the Oral Health Assessment (OHA) Form to parents who are registering their child in public school, in either kindergarten or first grade.

Figure 18. HIV Incidence, North Central Region, 2010-2013.

Note: California and United States have nearly identical incidence rates and are represented by one line.
United States Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention. HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf. Accessed December 2017.
California Source: California Department of Public Health, Center for Infectious Diseases, Office of AIDS, Sacramento, California. California HIV Surveillance Report—2015. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California%20HIV%20Surveillance%20Report%20-%202015%20(Final%20Version%20Submitted%20for%20Approval).pdf. Accessed December 2017.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), retrieved December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

The form collects general demographic information about the student from the parent, and information about dental caries and decay from a licensed dental professional. Schools must collect the Oral Health Assessment Forms by May 31 of the school year and are responsible to report totals to their district. All Regions are required to collect this data.

Figure 19. Persons Living with HIV/AIDS, by Race/Ethnicity, North Central Region, 2010-2014.



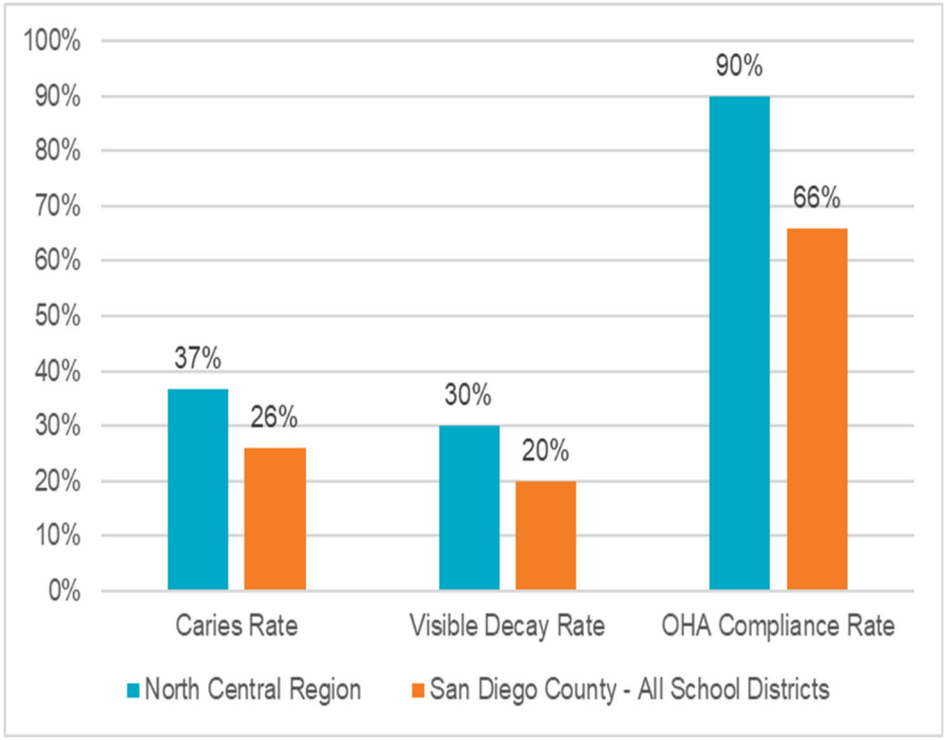
***Includes Asian/Pacific Islander, Native American, and Unknown.*
Note: Percentages may not total to 100% due to rounding.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), HIV Epidemiology report 2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

The summary report submitted by each district contains information about the number and percentage of children with an OHA on file, which is also called the compliance rate, for the current school year. Once reports are submitted to the local Child Health and Disability Prevention (CHDP) Program, data are analyzed. Although the following results provide insight on current oral health issues among school children, findings should be interpreted with caution because of potential data accuracy and reporting issues. All school districts are required to participate.

In North Central Region, all participating schools were part of the San Diego Unified School District. Overall, out of 148 eligible kindergartners and first graders in North Central Region during the 2017-2018 school year, 133 (90%) participated in the oral health assessment (Figure 20). Approximately 37% (49) were experiencing dental caries. Of those who participated, 30% (40) were experiencing dental decay.

Compared to the County overall, participating students in the North Central Region had higher rates of dental caries (37%; County 26%). Participating students in the North Central Region had higher rates of decay (30%; County 20%) than the County overall. The compliance (participation) rate in North Central Region was higher than the County overall (90%; County 66%).

Figure 20. Oral Health Assessment (OHA) Results, North Central Region, 2017-2018.



Note: In geographies where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.
Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

KNOWLEDGE

Area of Influence: Knowledge

KNOWLEDGE

Knowledge and access to education play an important part in the ability of an individual to "live well." Learning throughout the lifetime, for all individuals, impacts their health status. Education is measured by looking at the percentage of the population aged 25+ that currently has a high school diploma or GED. Graduation from high school is required for individuals to either further their education by going on to college, or in most cases, to get a job. Both of these factors influence the health of an individual.

19 IN 20 STUDENTS GRADUATE FROM HIGH SCHOOL

NORTH CENTRAL REGION: 95.0%

San Diego County:	California:	United States:
85.5%	81.8%	86.7%

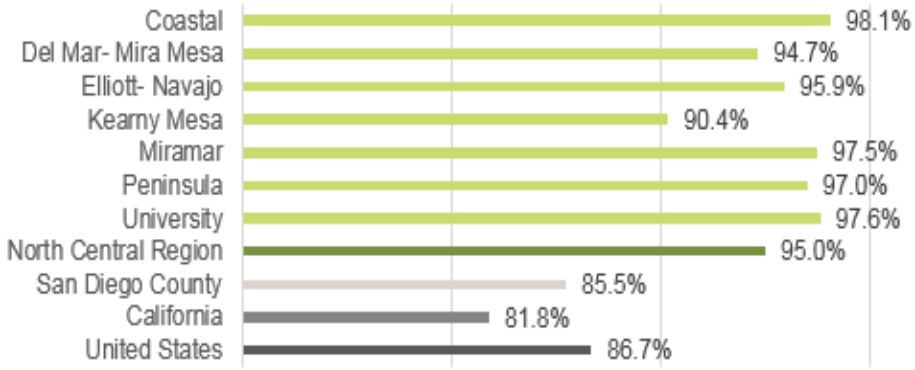
Live Well San Diego Indicator #3: Education

Education is measured as the percentage of the population with a high school diploma or equivalent. Education has a beneficial influence on a variety of economic, social and psychological factors which impact the health and well-being of a population.

In North Central Region, 95.0% of adults aged 25 and over had a high school diploma or equivalent. This was higher than the County as a whole, California, and the United States overall in 2015.

Within the North Central Region, the SRA with the highest percentage of residents aged 25 and over with a high school diploma was Coastal (98.1%). The SRA with the lowest percentage of residents aged 25 and over with a high school diploma was Kearny Mesa (90.4%; Figure 21).

Figure 21. Education, North Central Region, 2015.



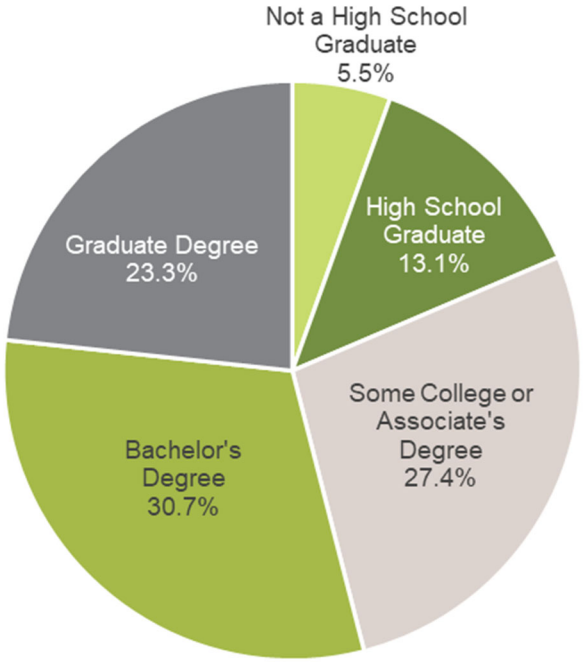
"Education" refers to percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1501. Accessed 04/2017.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Supporting Indicators

Overall Educational Attainment

About four-fifths of North Central Region residents had at least some college education, with three-tenths having some college or an associates degree, three-tenths having a bachelors degree, and one-quarter having a graduate degree (Figure 22).

Figure 22. Overall Educational Attainment, North Central Region, 2015.

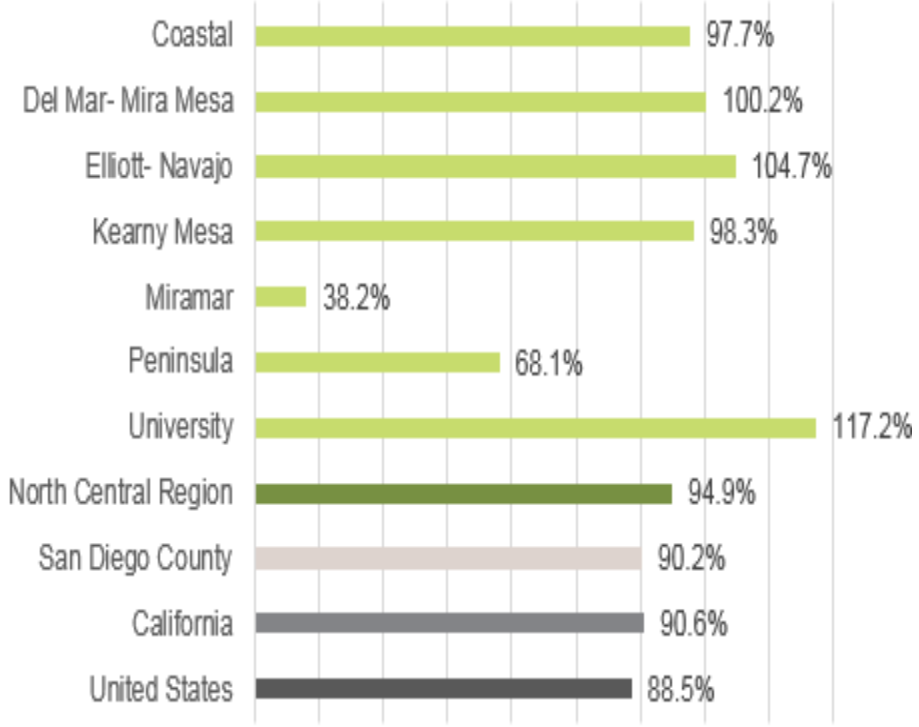


"Education" refers to percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1501. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

School Enrollment

In 2015, 94.9% of school-aged residents (aged 3-24 years) were enrolled in school in the North Central Region. This figure was higher than enrollment in San Diego County (90.2%), California (90.6%), and the United States as a whole (88.5%) (Figure 23).

Figure 23. School Enrollment, North Central Region, 2015.



NOTE: Miramar and peninsula both house military bases, which have high numbers of college-age young adults who are not enrolled in any higher education program.
"School enrollment" refers to enrollment in regular school, either public or private, which includes nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1401. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

STANDARD OF LIVING

Area of Influence: Standard of Living

STANDARD OF LIVING

The Standard of Living Area of Influence concerns residents having enough resources to live a quality life. Important indicators include unemployment rate because having a steady job and making enough money to live a quality life are both crucial to an individual's standard of living. San Diego County is an expensive place to live, as the cost of housing here is higher than it is in most other urban areas across the United States. Housing affordability is measured by the percentage of individuals who spend less than 30% of their income on housing. Being able to afford adequate housing and still being able to afford other necessities (health care, food, transportation, etc.) reflects an individual's ability to "live well."

Live Well San Diego Indicator #4: Unemployment Rate

Unemployment rate is measured as the percentage of the total labor force that is unemployed. The rate of unemployment has a strong negative influence on the financial health and overall well-being of a population.

NORTH CENTRAL REGION

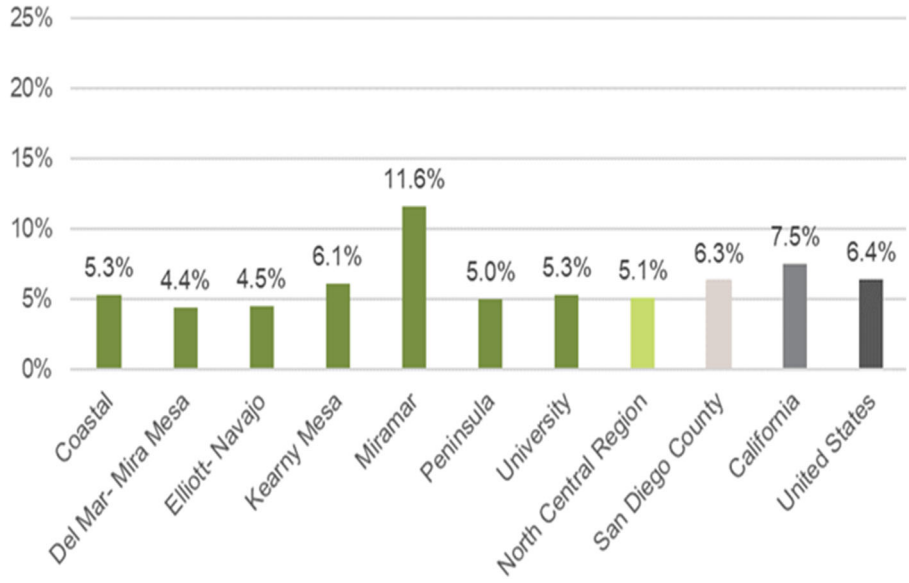
5.1 % OF PEOPLE IN THE TOTAL LABOR FORCE ARE UNEMPLOYED

San Diego County:	California:	United States:
6.3%	7.5%	6.4%

In 2015, 5.1% of North Central Region residents eligible and seeking work were unemployed. The unemployment rate for North Central Region was lower in 2015 than it was in either San Diego County (6.3%), the State of California (7.5%), or the United States as a whole (6.4%). (Figure 24).

The SRA in the North Central Region with the lowest unemployment rate was Del Mar-Mira Mesa (4.4%). The SRA with the highest unemployment rate was Miramar (11.6%).

Figure 24. Population Unemployed, North Central Region by Subregional Area, 2015



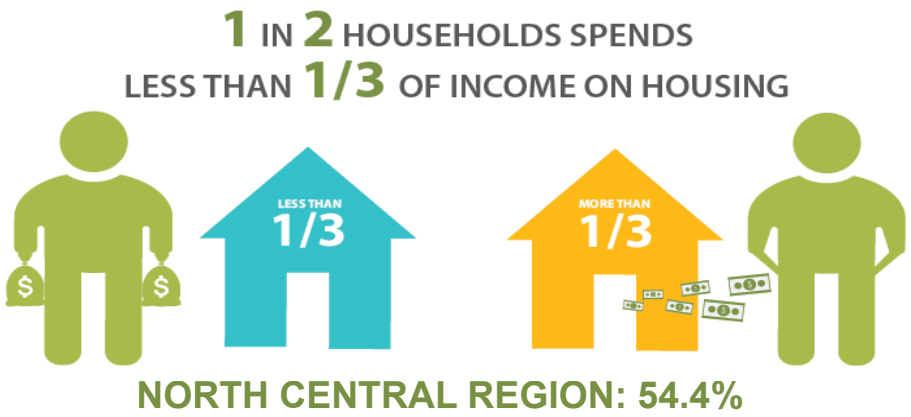
"Unemployment" refers to the population unemployed, of those eligible and seeking work.

Source: 2015 Unemployment Rate. ESRI Community Analyst.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

STANDARD OF LIVING

Live Well San Diego Indicator #5: Income

Income is measured as the percentage of the population spending less than one-third of income on housing. Households who spend more than one-third of household income for housing may have difficulty paying for necessities such as food, transportation, or medical care.



San Diego County: 51.8%

California: 53.5%

United States: 62.9%

In North Central Region, a large proportion of residents (54.4%) spent less than one-third of their income on housing, which was higher than in San Diego County (51.8%), and California (53.5%), but lower than the United States overall (62.9%).

Within North Central Region, the SRA with the highest proportion of the population spending less than 30% of their household income on housing was Del Mar-Mira Mesa, at nearly two-thirds. The SRA with the lowest proportion was Miramar, where only one in ten spent less than one-third of their income on housing (Figure 25).

Figure 25. Households Spending Less Than One-Third of Income on Housing, North Central Region, 2015.

Does not include cash rent or those with zero or negative income.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2503.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2017.

Supporting Indicators

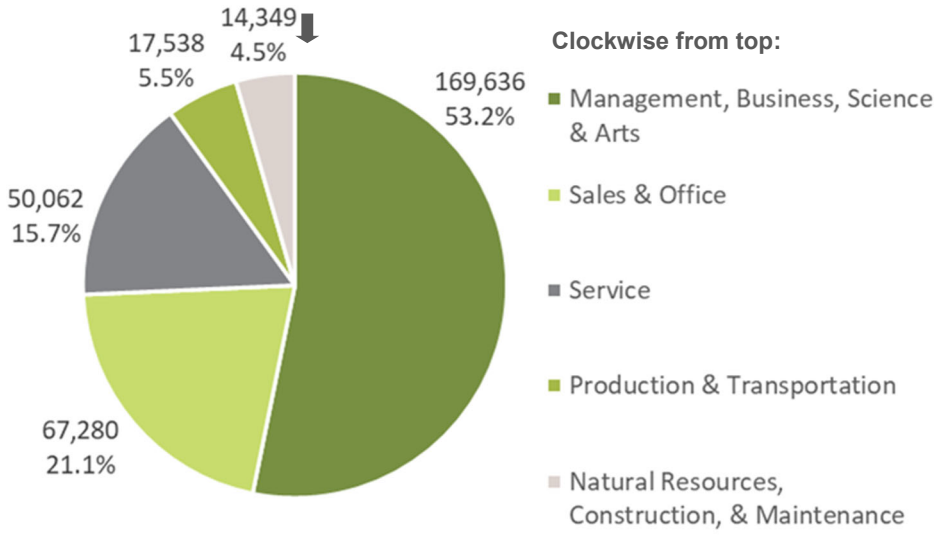
Occupation

A person's educational attainment likely influences their career. Industry and occupation determine level of income, which in turn reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Certain industries and occupations come with inherent environmental or occupational risks, which may influence an individual's health.

Management, business, science & arts includes any occupation in business, finances, computer engineering, architecture, life science-related jobs, as well as community and social services, legal, education, arts, and healthcare professionals and techs. *Service* refers to healthcare support, protective services such as firefighting and law enforcement, food preparation and service, custodial and maintenance, and personal care. Sales and office refers to anything related to sales or office and administrative support. *Natural resources, construction, and maintenance* refers to farming, fishing, forestry, construction, extraction, installation, maintenance and repair. *Production and transportation* includes anything related to production, transportation or material moving.

STANDARD OF LIVING

Figure 26. Labor Force by Occupation, North Central Region, 2015.



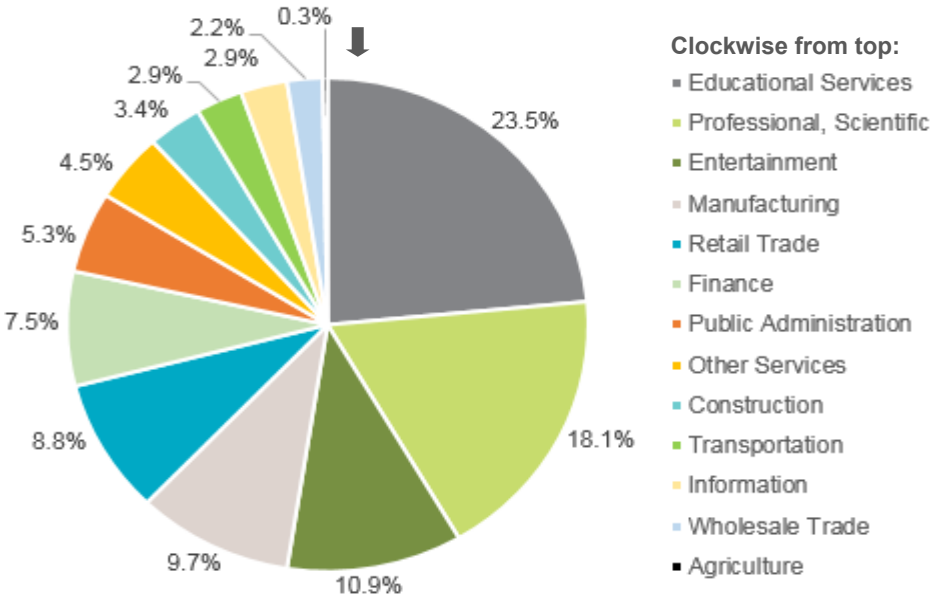
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

In North Central Region, over one-half of people who are over the age of 16 and employed in a civilian capacity were involved in the management, business, sciences and arts sectors. The sector with the least involvement was the natural resources, construction, and maintenance occupations. (Figure 26).

Industry

When broken down further by industry, a more detailed picture of the sectors employing the most North Central Region residents emerges. The industry employing the highest percentage of residents was the educational services, which includes the health care and social assistance industries, at just under 1 in 4 employed civilians. The next largest industry was the professional and scientific industry, at just over 1 in 6 residents. The least populous industry was agriculture, with less than 1 in 300 of the eligible population employed (see Figure 27).

Figure 27. Occupation by Industry, North Central Region, 2015.

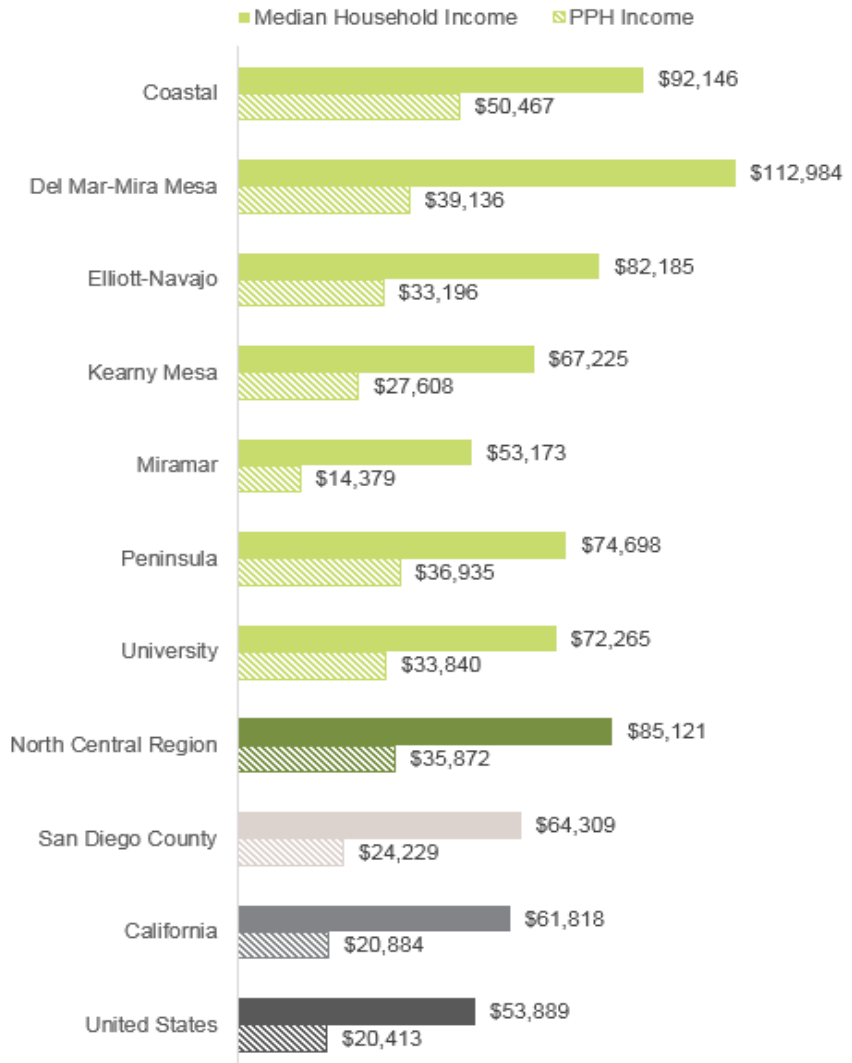


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Median Household Income and Person Per Household Income

Income reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Household income includes income earned by the householder and all other people 15 years and older in the household, whether or not they are related to the householder. Median household income is determined by looking at the distribution of income across all households, including those with no income, and picking the point at which half the distribution falls below it, and half the distribution falls above it.

Figure 28. Income, North Central Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03, DP04.

Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

The median household income in North Central Region was over $85,000 per year. This was higher than San Diego County as a whole, California, and the United States overall (Figure 28).

Per person household (PPH) income is determined by taking the median and dividing it by the average number of people per household, which was 2.37 people in North Central Region. The PPH Income in North Central Region was about $36,000 per year (Figure 28).This is higher than San Diego County, California, and the United States overall.

Socioeconomic status is defined as a composite measure that typically incorporates economic, social, and work status. Economic and social status are measured by income, and work status is measured by occupation; each status is considered an indicator, and these indicators are related but do not overlap.

Cost of Living

According to the Consumer Price Index compiled by the U.S. Bureau of Labor Statistics, prices for goods, services and shelter rose 1.7% within the first six months of 2017. It was noted that the increase was primarily influenced by rising costs of shelter.[†] According to a study by Cushman and Wakefield, only 26% of households in San Diego can afford median-priced homes.[§]

In 2015, the median rent in North Central Region was $1,786 per month. The most expensive SRAs to rent in were Miramar and Del Mar-Mira Mesa; the least expensive was Kearny Mesa. The median rent in North Central Region was higher than San Diego County, California, and significantly higher than the United States as a whole (Figure 30, next page).

In the United States, the median house value was below $200,000. In North Central Region, the median house value was over $597,000. The SRA with the highest median house value was Coastal, at over $912,000. The SRA with the lowest median house value was Kearny Mesa, at just over $437,000. The median house value in North Central Region was higher than San Diego County, higher than the State, and significantly higher than the United States as a whole (Figure 31, next page).

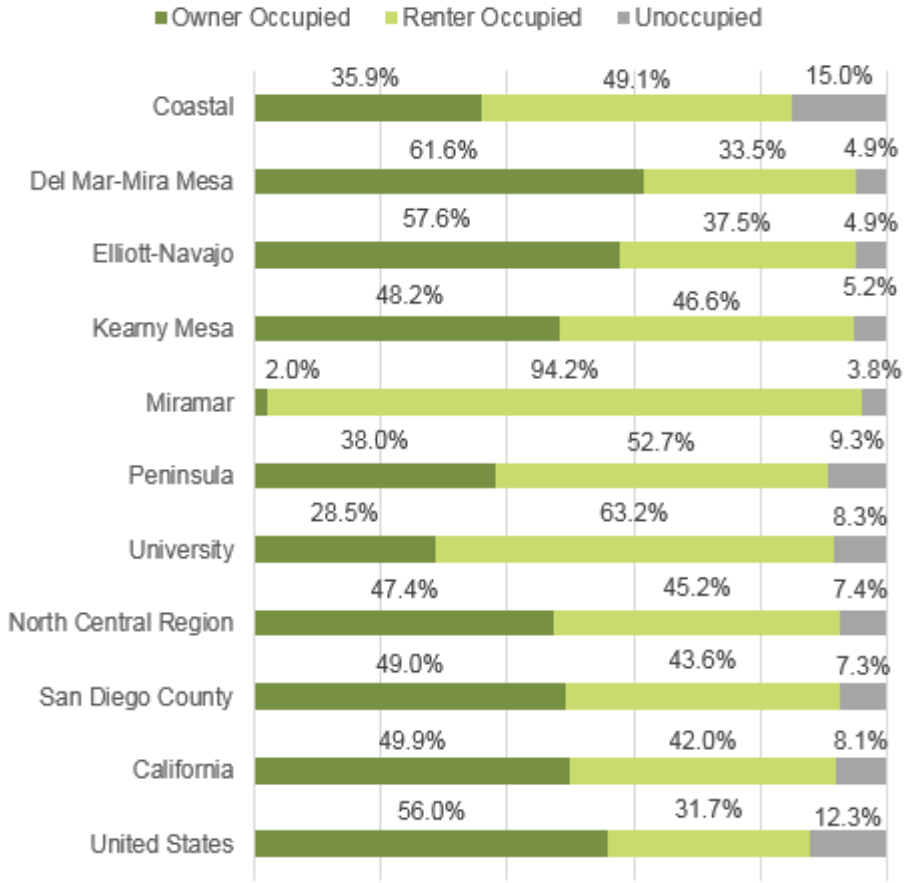
In North Central Region, nearly half of householders lived in the home they owned. Just under half of housing units were rented, and 7.4% remained vacant. The SRA with the

[†] United States Department of Labor, Bureau of Labor Statistics. Consumer Price Index, San Diego—First Half 2017. https://www.bls.gov/regions/west/news-release/2017/consumerpriceindex_sandiego_20170714.htm#tableA. Accessed July 23, 2018.

[§]Cushman & Wakefield. San Diego MARKETBEAT Multi-Family Spring 2018. http://www.cushmanwakefield.com/en/research-and-insight/unitedstates/san-diego-multifamily-snapshot. Accessed June 25, 2018.

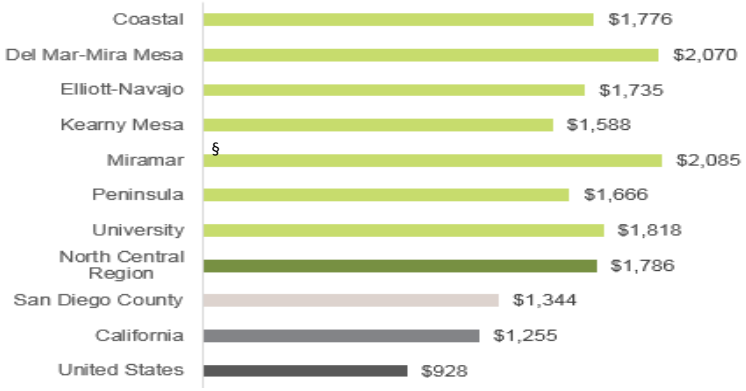
highest percentage of those renting was in Miramar, with most housing units occupied as rentals. The SRA with the highest percentage of owner-occupied units was Del Mar-Mira Mesa with over three in five units owner occupied (Figure 29).

Figure 29. Housing Occupancy, North Central Region by Subregional Area, 2015.



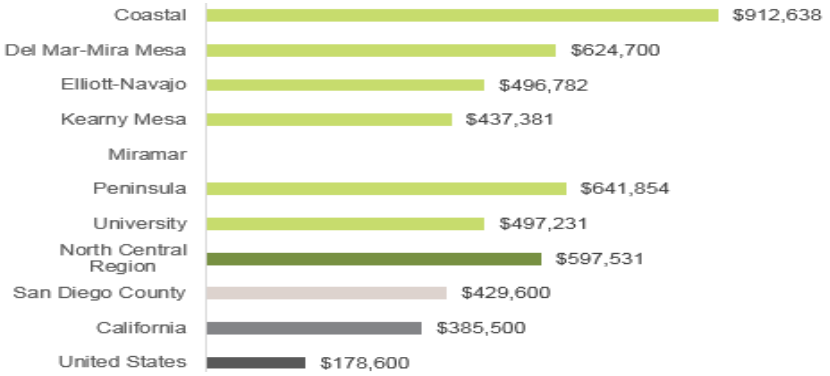
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 30. Median Gross Rent, North Central Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 31. Median House Value, North Central Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
§ Unstable estimates
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

STANDARD OF LIVING

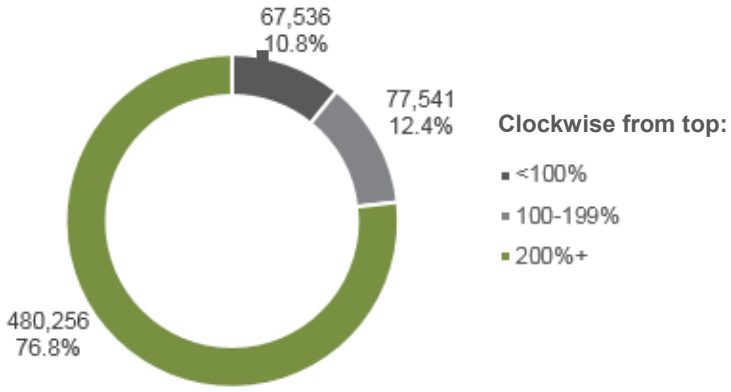
Poverty is determined to be when a person or group of people lack human needs because they cannot afford them – including basic necessities such as clean water, adequate nutrition, health care, education, clothing, and shelter. Families or people with income below a certain limit are considered to be below the poverty level. Poverty level for a household is determined, in part, by the number of people in the household who must be supported by the combined household income.

In North Central Region, 1 in 10 people lived below the poverty line (Figure 32). It is generally accepted that in order to be able to afford basic necessities, an individual or household must be at or above 200% of the poverty level. With that standard, nearly one-quarter of the population was living without adequate financial resources.

Public Program Participation

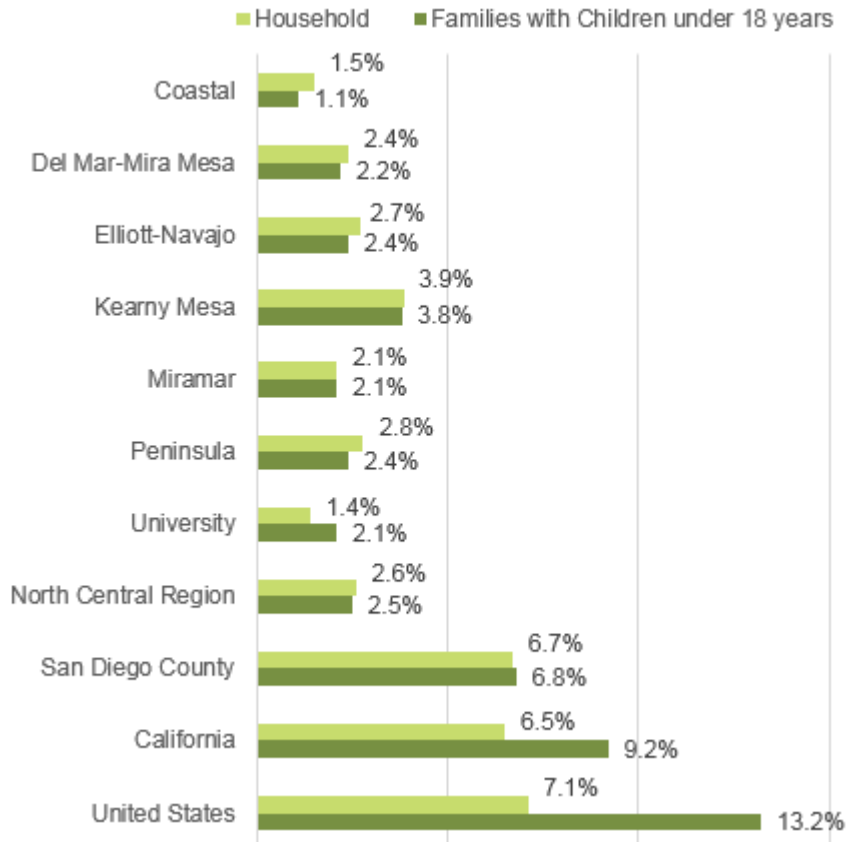
Many San Diegans rely on public assistance to make ends meet. In 2015, 2.6% of households within the North Central Region received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 2.5% received CalFresh benefits. The SRA with the greatest percentage of families with children under 18 receiving benefits was Kearny Mesa. The SRA with the greatest proportion of households receiving CalFresh benefits was also Kearny Mesa (Figure 33).

Figure 32. Population by Poverty Level, North Central Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table B17024.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 33. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, North Central Region, 2015.

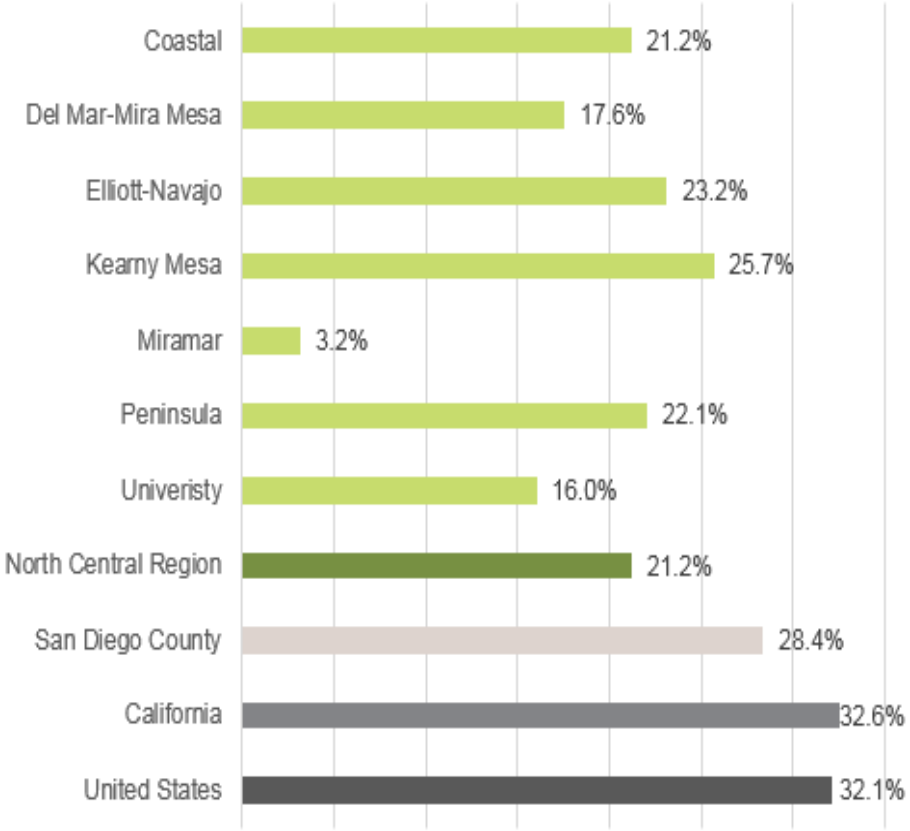


Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B22022.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2017.

STANDARD OF LIVING

Public health insurance coverage is another indicator of public program participation. Of the 625,000 people living in North Central Region, two in five residents relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or VA health care coverage; Figure 34).

Figure 34. Public Health Insurance Coverage, North Central Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2704.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

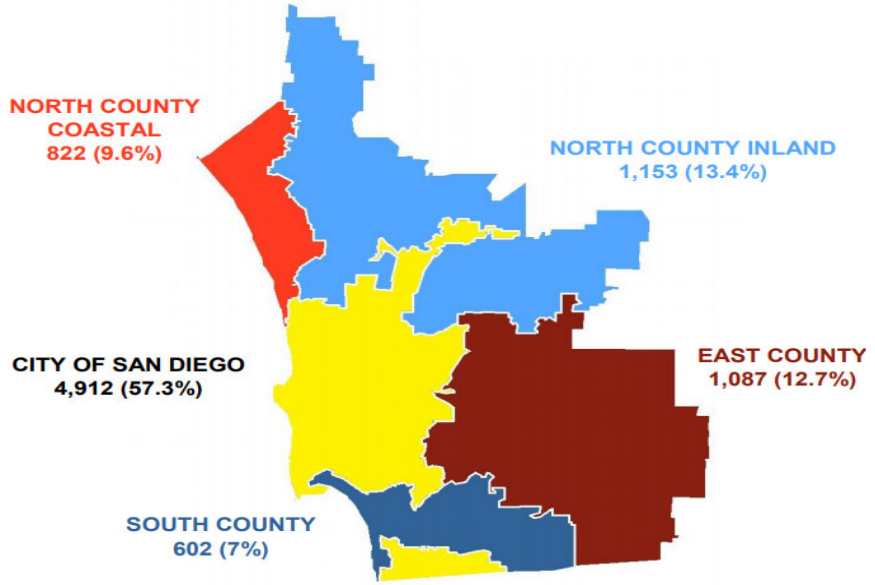
External Standard of Living Assessment

In this section, the results of an additional standard of living assessment is described.

18 WEALLCOUNT: San Diego's Annual Point-in-Time Count

On January 26, 2018, 8,576 individuals were counted as homeless in San Diego County during San Diego County's annual WEALLCOUNT Homeless Point-In-Time count. Of those, 4,990 (58.2%) were unsheltered, and 3,586 (41.8%) were considered to be sheltered (spent the night in homeless shelter or program). About 57% of those counted were within the City of San Diego, whose boundaries approximate the combined Central and North Central Regions together.

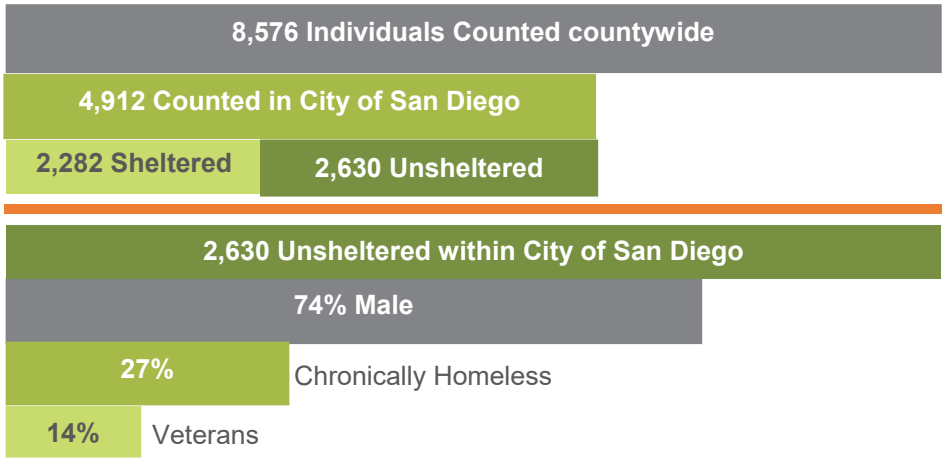
Figure 35. 2018 Point-in-Time Count: Regional Breakdown.



Source: San Diego County Regional Task Force On The Homeless. 2018 WE ALL Count Annual Report. https://www.rtfhsd.org/wp-content/uploads/2017/06/2018-WPoint-in-Time-Count-Annual-Report.pdf. The breakdown by region for the homeless count is not the same as HHSA regions in that the boundaries for the City of San Diego approximate Central and North Central Regions combined.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

COMMUNITY

Figure 36. Point-In-Time Count Results, North Central Region, 2018.



Source: San Diego County Regional Task Force On The Homeless. 2017 WEALLCOUNT Annual Report. http://www.rtfhsd.org/wp-content/uploads/2017/07/comp-report-final.pdf. Prepared by: Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Nearly two-thirds of the 4,912 counted within the City of San Diego were unsheltered. Approximately 3 in 4 were male. More than 1 in 10 were veterans (Figure 36).

Of the unsheltered population, 27% (708 individuals) were chronically homeless as defined by the U.S. Department of Housing and Urban Development (HUD). To be chronically homeless means than an individual has experienced homelessness for a year or longer, or who has experienced at least four episodes of homelessness in the past year, and also has a diagnosed disability that prevents them from maintaining work or housing. Of the unsheltered population, 14% (367) were veterans.

Area of Influence: Community

The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment.

Conflict resolution programs are keeping youth out of the detention system, environmentally-conscious buildings and events are creating community pride, and community gardens are beautifying the environment and improving local access to healthy foods. Partners are training residents to be advocates for change in their own neighborhoods, and the community as a whole benefits as a result.

Live Well San Diego indicators that measure progress towards this area of influence include Security: Crime Rate; Physical Environment: Air Quality; and Built Environment: Distance to Park. Expanded indicators cover other aspects of security, physical and built environment. Living in a crime-free or low-crime area reduces stress and increases an individual's ability to go outside and interact with their environment, leading to better health outcomes. Air quality influences lung health. Many residents of San Diego County live in highly urban areas where there is not much open space – having a park nearby provides an opportunity to be physically active and leads to lower risk of diseases associated with a sedentary lifestyle.

Live Well San Diego Indicator #6: Security (Crime Rate)

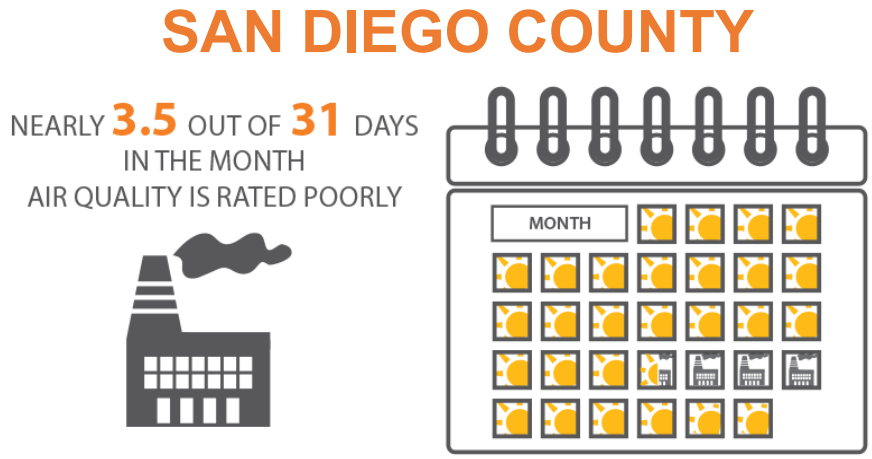
Security/crime rate is measured as the number of crimes per 100,000 people. Crime, including violent and property crimes, can have a significant impact on well-being of the population, and contributes to premature death and disability, poor mental health, and lost productivity.

Source: 2016 Overall Crime rate per 100,000 population. Consists of Violent Crime: Murder and Non-negligent Manslaughter, Forcible Rape, Robbery, and Aggravated Assault AND Property Crime: Burglary, Larceny-Theft, and Motor Vehicle theft (Arson included). US Department of Justice- Federal Bureau of Investigation's Uniform Crime Reporting Statistics. 2016. Original Date: 8/22/2012. Accessed on: 9/2017.

Live Well San Diego Indicator #7: Physical Environment (Air Quality)

Physical environment/air quality is measured as the ratio of days that air quality is rated unhealthy. Air pollution affects more people than any other pollutant. Lower levels of air pollution in a Region correlate with better respiratory and cardiovascular health of the population.

In San Diego County, the air quality was rated poorly on 11.5% of days.



Source: 2016. San Diego, State and Nation from EPA AirData System. http://www.epa.gov/airdata/ad_rep_con.html. May include exceptional events. Accessed 8/2017.

Live Well San Diego Indicator: Built Environment (Distance to Park)

Built environment/distance to park is measured as the percentage of the population living within a quarter mile of a park. Access to parks and recreation services has been shown to have positive health impacts, including the physical, social, and mental aspects of health.

3 IN 4 PEOPLE LIVE WITHIN A QUARTER MILE OF A PARK

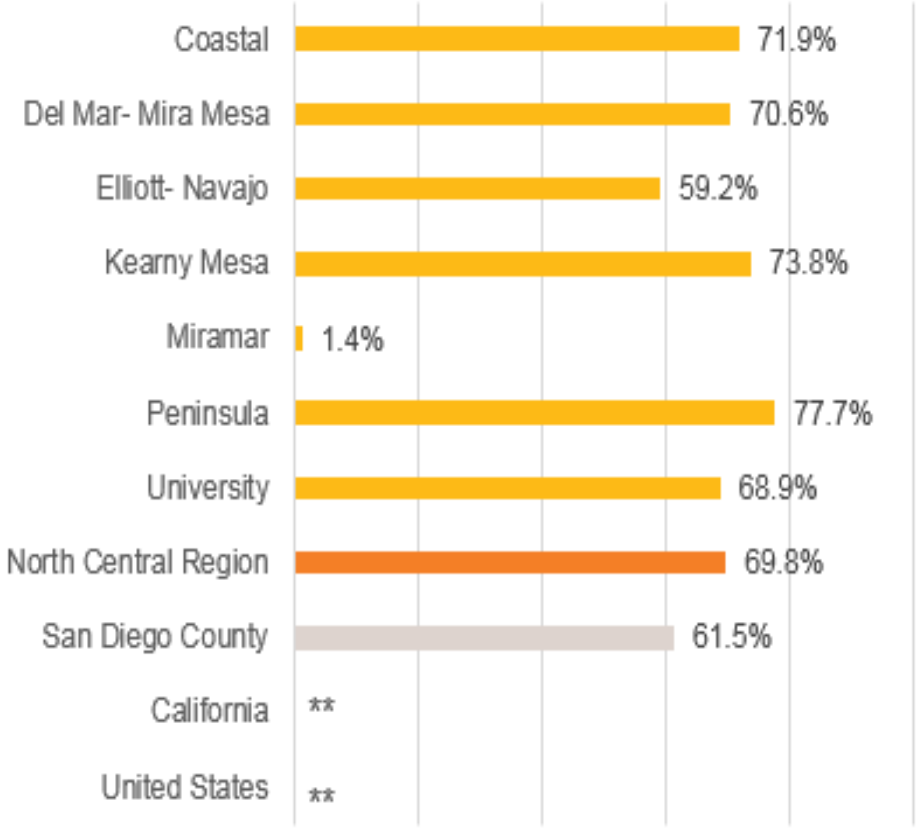
NORTH CENTRAL REGION: 69.8%

SAN DIEGO COUNTY:	CALIFORNIA:	UNITED STATES:
61.5%	**	**

*** Data Not Available*
Source: Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). 2015 County Business Patterns data set. censtats.census.gov/. Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

The North Central Region had more than three-quarters of its residents living within a quarter mile of a park. This was higher than San Diego County overall (Figure 37). The SRA with the highest percentage was Peninsula, where more than three-quarters of residents live within a quarter mile of a park. The SRA with the lowest percentage was Miramar. Miramar is primarily a military base, so this percentage is not representative of physical activity

Figure 37. Percentage of Population Living within One-Quarter Mile of a Park or Community Space, North Central Region by Subregional Area, 2017.



*** Data Not Available*
Source: Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). 2015 County Business Patterns data set. censtats.census.gov/. Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

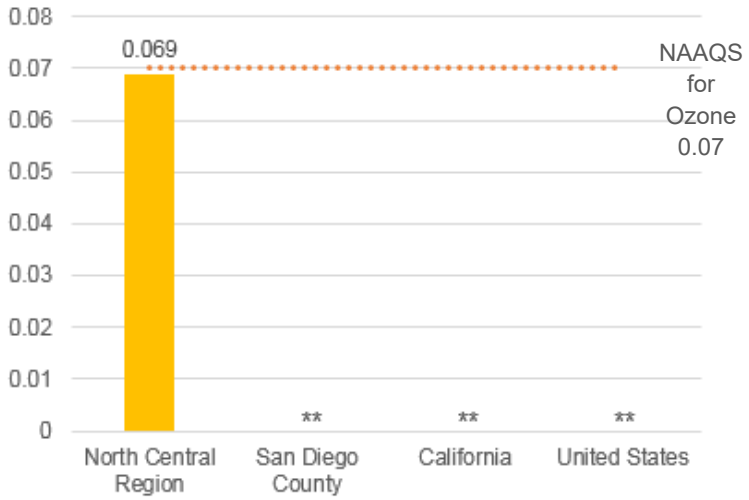
Air Quality

Ozone- One type of pollutant that contributes to air quality is ozone. Higher temperatures increase ground-level ozone, one type of secondary air pollutant as a result of chemical reactions taking place at power plants, and within motor vehicles, ultimately creating smog and pollution. Ozone affects those with cardiovascular and respiratory difficulties, such as asthma, and contributes to related mortality, emergency room visits, and hospitalizations. Ozone concentrations are higher where there are heavy vehicle traffic, coal-fired power plants, and industrial processes occurring.

Figure 38 shows ozone concentration in North Central Region. The Design Value, or DV, is a statistic describing the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS). If the DV is less than the standard, then the area is in attainment of the standard (or that area, on average, meets the standard). The DV was less than the standard at the North Central Region monitoring station.

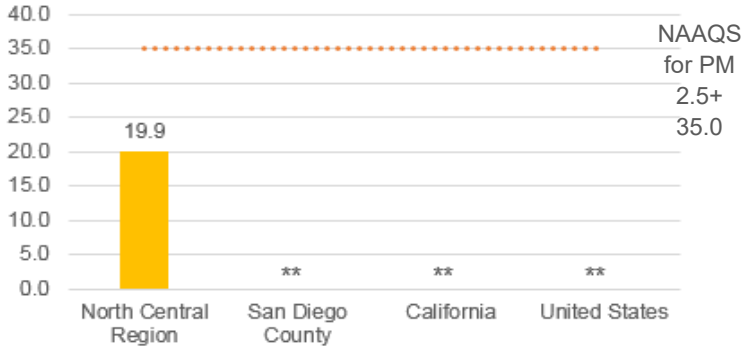
PM 2.5 Concentration- PM 2.5, or particulate matter 2.5 microns or less in diameter, includes pollutants such as combustion particles, organic compounds, metals, and any other fine particulate matter, and is capable of reaching deep into the lungs and causing cancers and other diseases. PM 2.5 levels are higher in areas where heavy equipment is used, burning activities occur, and industrial facilities are located. According to Figure 39, the North Central Region had an average PM 2.5 concentration well below the National Ambient Air Quality Standard for the United States. This means that there was less PM 2.5 in the air than is allowed by the Environmental Protection Agency (EPA).

Figure 38. Ozone Concentration, North Central Region, 2014-2016.



*** Data Not Available*
Note: 2014-2016 3-year average of the 4th high 8-hour ozone concentration. When the Design Value (DV) is less than or equal to the standard, then we are in attainment of the standard. Original Date: 4/17/2013. Accessed on: 8/2017.
Source: United States Environmental Protection Agency. NAAQS table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 39. PM 2.5 Concentration, North Central Region, 2014-2016.



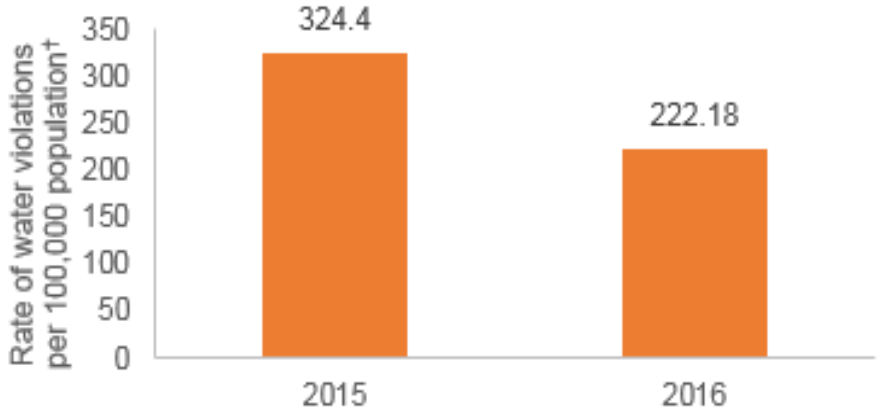
*** Data Not Available*
Source: 2014-2016 San Diego Air Pollution District Data. Particulate Matter 2.5—here we use a 3-year average of the 98th percentile of collected samples for a 24-hour standard. Not all Regions are represented. Original date: 4/17/2013. Accessed on: 8/2016.
+United States Environmental Protection Agency (EPA). NAAQS Table. Hhttps://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Water Quality

Environmental health affects the health of the population. Climate change is part of environmental health, and is defined as major changes in the earth's temperature, rainfall, snow and wind patterns. Climate change affects many areas of life, including health, water resources, food production, agriculture, forestry, wildlife, and energy supply.

Water quality is measured by tracking water quality violations. The actual indicator is rate of violations per year for federally regulated drinking water contaminants per 100,000 people (Figure 40).

Figure 40. Water Quality, San Diego County, 2015-2016.



†Rate of total water violations per 100,000 population for federally regulated drinking water contaminants and other drinking water violations. Data is not comparable to data collected prior to 2013 as EPA has done quality assurance on their system and increased reporting in many states. 2015 EPA water violations from SDWISFED Drinking Water Data. Original Date: 1/26/2012. Accessed on: 8/2016.

Geography

Geography has come to the forefront of the discussion on health equity. The idea that "place matters" has become more commonplace in recent years. Together, there are 18 incorporated cities and towns, as well as several unincorporated communities. Several community types exist throughout the County – some more urban, some more rural. Data are collected and reported out by the 41 Subregional Areas (SRAs) in San Diego County. San Diego County has an area of over 4,200 square miles and over 70 miles of coastline. Substantial differences in health indicators and health-related behaviors exist in the different areas of the County. More information on how geography affects health can be found in the *Identifying Health Disparities to Achieve Health Equity in San Diego County: Geography* **at** HE_Geography_FINAL.pdf (sandiegocounty.gov).

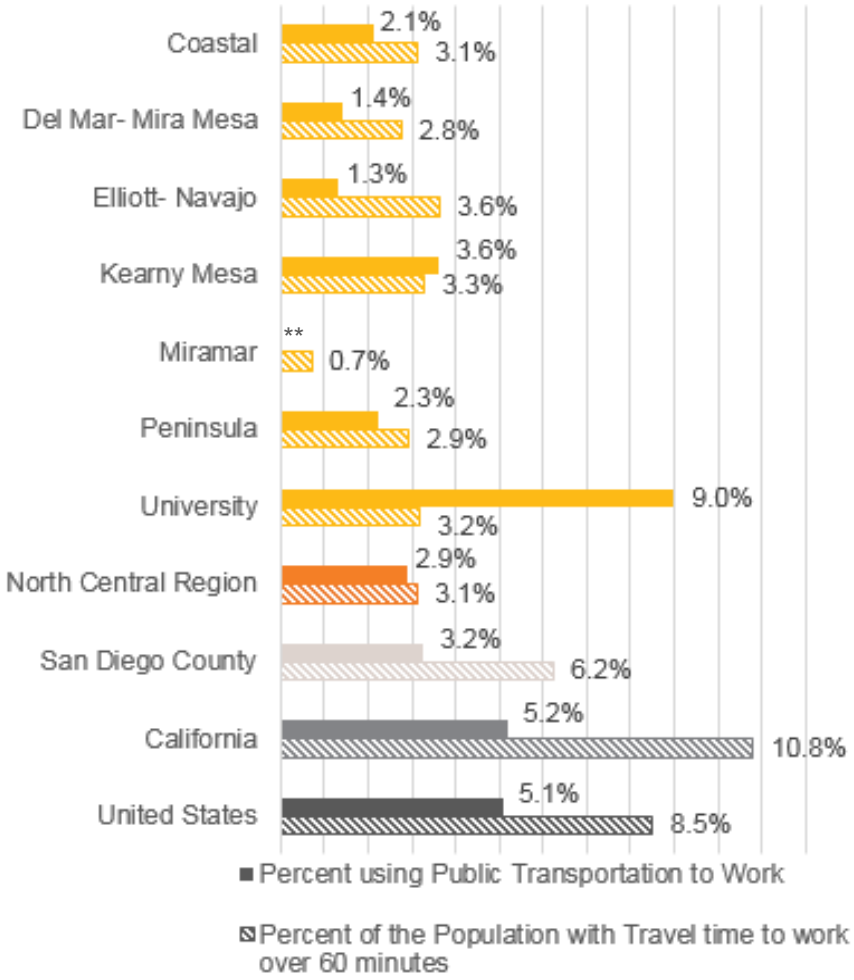
Public Transportation and Commute to Work

Active transportation, or walking and using public transportation to get around, is related to the built environment and the individual's perception of safety, as well as the availability of public transit. This indicator measures the percent of population using public transportation to get to work.

A slightly lower percentage of those living in the North Central Region used public transit to get to work than those in San Diego County, California, and the United States as a whole. The SRA with the highest proportion of residents using public transit to work was University. The SRA with the lowest proportion was Del Mar-Mira Mesa.

Commute to work can be measured as the average travel time to work. It is also interesting to see how much of the population spend more than an hour commuting to work. In the North Central Region, 3.1% of residents commuted 60 minutes or more to get to their workplace. This was lower than San Diego County, the State of California, and the United States as a whole. The SRA with the greatest proportion of residents commuting 60 minutes or more to get to work was Elliott-Navajo at 3.6%. The SRA with the lowest proportion was in Miramar, at 0.7% (Figure 41).

Figure 41. Commute to Work, North Central Region, 2015.



***Data Not Available.*
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03, B08012. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Area of Influence: Social

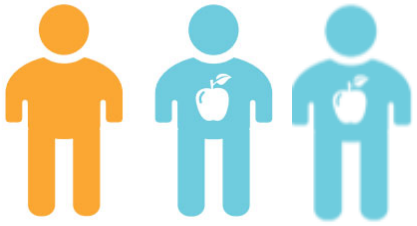
SOCIAL

The Social Area of Influence concerns residents helping one another. San Diegans help one another and contribute to their communities by volunteering to serve others who may be less fortunate, by contributing to charitable organizations, and by being politically active and voting in Local, State and Federal elections. There are also vulnerable populations within the County who benefit from the help that others provide.

Vulnerable populations in San Diego include those who live below 200% poverty level who may also be experiencing food insecurity. Food insecurity refers to individuals and families who are unable to afford enough food on a regular basis. In turn, they may not have access to healthier foods essential for good nutrition, and this impacts the health and well-being of the population.

Communities thrive when people get to know their neighbors and are invested in the well-being of the people they interact with every day. *Live Well San Diego* partners encourage community connections and engaged citizens. New residents are finding hope through refugee and survivor programs, foster youth and families are discovering resiliency through training and education, seniors are receiving comfort and nourishment through meal delivery services, and volunteers are gaining greater purpose by giving back to their neighbors.

NORTH CENTRAL REGION: 30.7%



1 IN 3 PEOPLE WITH LOW-INCOME* EXPERIENCE FOOD INSECURITY

*Low-income is 200% or below the Federal Poverty Level (FPL)

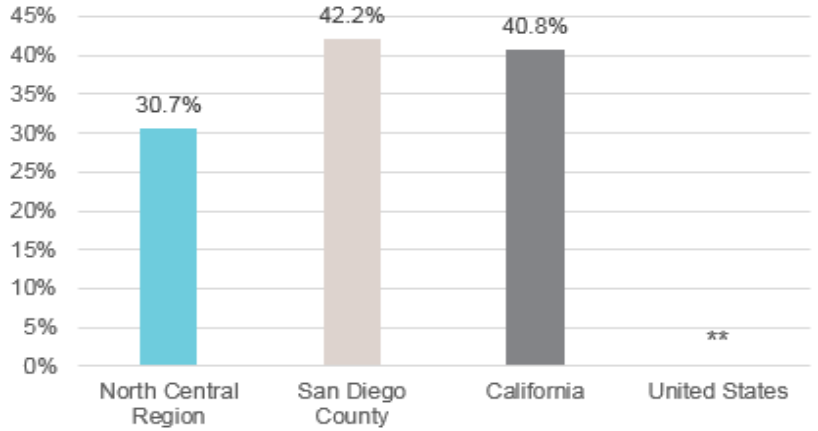
San Diego County:	California:	United States:
42.2%	40.8%	**

*** Data Not Available*

Live Well San Diego Indicator #9: Vulnerable Populations (Food Insecurity)

Food insecurity is measured as the percentage of the low income (income at or below 200% of the federal poverty level) population who have reported inability to purchase enough food on a regular basis, based on survey data. Food insecurity affects not only current health status, but also physical, mental, and social development.

Figure 42. Food Insecurity, North Central Region, 2014-2015.



*** Data Not Available*
Source: 2014-2015 UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 9/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #10: Community Involvement (Volunteerism)

Volunteerism is measured as the percentage of the population who volunteer. Volunteering creates a meaningful, positive impact on the community, and benefits the volunteers themselves.

Data is not available by Region, so the figure for San Diego County overall is provided. A higher percentage of individuals in San Diego County volunteered compared to the State and the Nation.

SAN DIEGO COUNTY: 33.2%

California: 23.0% **United States: 24.9%**

Source: Percent of residents who volunteer. Data from 2015 from Corporation for National and Community Service. Original Date: 1/24/2013. Accessed on: 6/2017.

Supporting Indicators

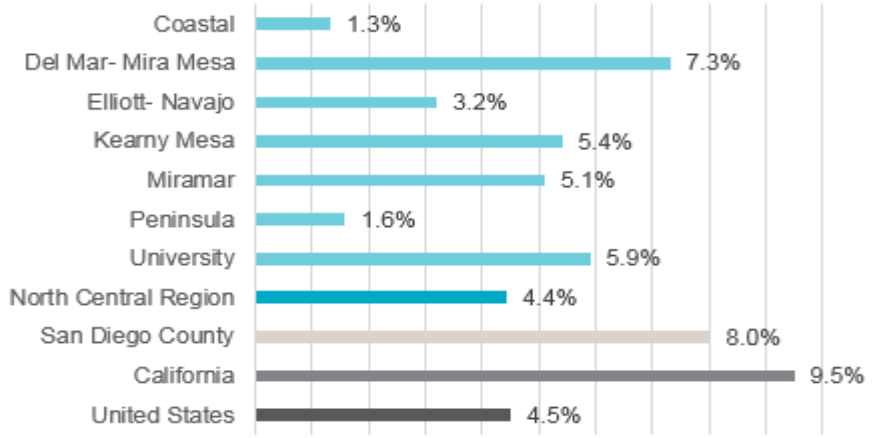
Linguistic Isolation

Linguistic isolation refers to those residents who are isolated because they are unable to communicate effectively in English. Those who cannot effectively communicate in English may have trouble talking to people who provide social services and medical care. They may also not hear or understand important information when there is an emergency – such as an accidental chemical release, or spill. As a result, those who do not communicate well in English may be less likely to get the health care or safety information that they need.

A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well."

In North Central Region overall, about 1 in 25 households were linguistically isolated (see Figure 43). The SRA with the highest percentage of linguistically isolated households was Del Mar-Mira Mesa. The SRA with the lowest percentage of linguistically isolated households was Coastal.

Figure 43. Linguistic Isolation, North Central Region, 2015.



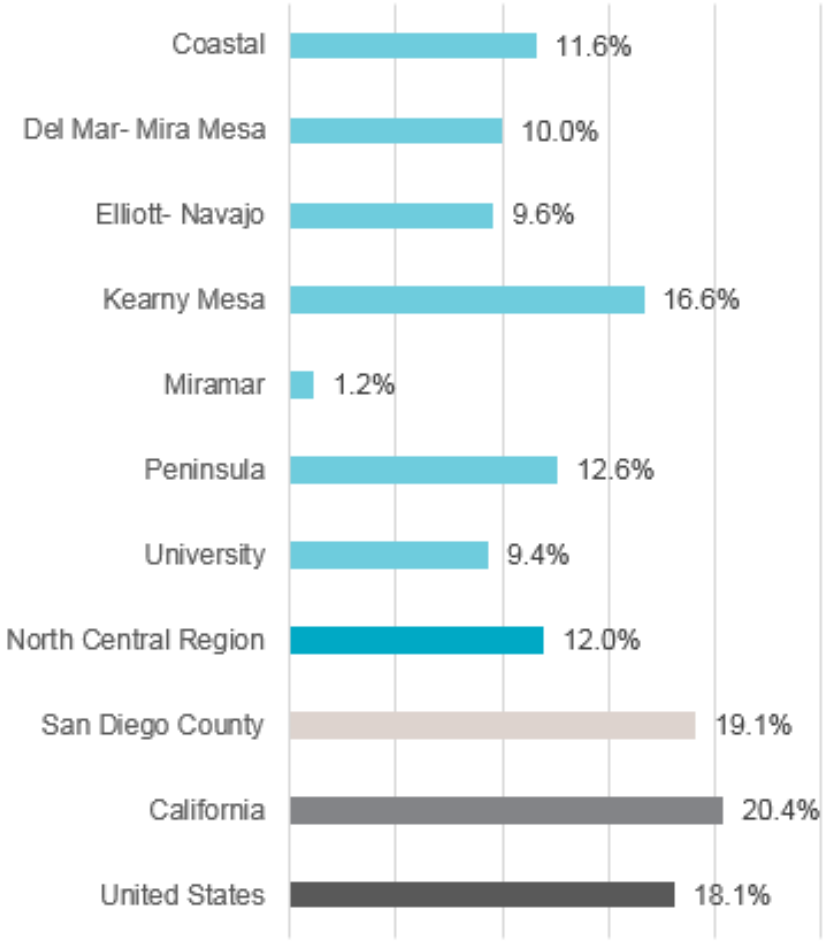
Percent of population considered linguistically isolated. A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who may speak only English.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table S1602. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Health Insurance Status

An individual's ability to live well is influenced by their ability to access the health care system, for both urgent medical issues and preventive care. This indicator measures the lack of health insurance for the non-elderly adult population, or those aged 18 to 64. Children and the elderly often are more likely to be eligible for public health insurance programs, such as Medi-Cal and Medicare, than those adults who fall between the ages of 18 and 64.

About 1 in 8 adults ages 18-64 were lacking health insurance in the North Central Region, which was lower than the 1 in 5 in the County overall. The SRA within the North Central Region with the highest percent of uninsured adults was Kearny Mesa. The SRA within the North Central Region with the lowest percent of uninsured adults was Miramar (Figure 44).

Figure 44. Lack of Health Insurance (Ages 18-64), North Central Region by Subregional Area, 2015.



Note: Percent of population not currently covered by health insurance, ages 18-64.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table S2701. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

For the most current data, be sure to visit:

Community Health Statistics (sandiegocounty.gov) and

Data & Results (livewellsd.org)

North County Regions
Community Health Assessment

TABLE OF CONTENTS

North County Regions Community Leadership Team 4

Introduction 8

Community Health Status Assessment

Demographics.....9

Morbidity and Mortality.....12

Community Health Status Assessment by Area of Influence.....24

Health.....25

Knowledge.....31

Standard of Living.....35

Community.....46

Social.....53

COMMUNITY LEADERSHIP TEAM MEMBERS

Co-Chairs:

- Chuck Matthews, Deputy Director, HHSA North Coastal & North Inland Regions
- Don Stump, Executive Director, North County Lifeline
- Greg Anglea, Chief Executive Officer, Interfaith Community Services

Some members are also *Live Well San Diego* Recognized Partners which is indicated with an asterisk (*).

COMMUNITY LEADERSHIP TEAM MEMBERS BY SECTOR

Businesses:

- Altman Plants*
- Cafe Merlot*
- Cardiff 101 Main Street Association*
- Daily Harvest Express*
- Dirty Dogs*
- Encinitas 101 MainStreet Association*
- Encinitas Chamber of Commerce*
- Fallbrook Chamber of Commerce*
- Fashion Week San Diego*
- Fidelity Security Solutions, LLC*
- homePERQs*
- Heritage Senior Care*
- Leucadia 101 Main Street Association*
- Lifestyles INFOCUS*
- North San Diego Business Chamber*
- Oceanside Chamber of Commerce*
- Palomar Health*
- Rock Steady Boxing San Diego*
- San Diego Gas & Electric*
- San Marcos Chamber of Commerce*
- The Patio Playhouse*
- The Super Dentists*
- Vista Chamber of Commerce*

Schools:

- Bastyr University California*
- Bella Mente Montessori Academy*
- Bonsall Unified School District*
- Borrego Springs Unified School District*
- California State University, San Marcos*
- Cardiff School District*
- Carlsbad Unified School District*
- Del Mar Union School District*
- Encinitas Union School District*
- Escondido Union High School District*
- Escondido Union School District*
- Fallbrook Union Elementary School District*
- Julian Union Elementary School District*
- Julian Union High School District*
- MiraCosta Community College District*
- Oceanside Unified School District*
- Ramona Unified School District*
- San Dieguito Union High School District*
- San Marcos Unified School District*
- San Pasqual Union School District*
- Solana Beach School District*
- Spencer Valley Elementary School District*
- The Classical Academies*
- The League of Amazing Programmers*
- Vallecitos School District*
- Vista Unified School District*

COMMUNITY LEADERSHIP TEAM MEMBERS

- Warner Unified School District*

Cities & Governments:

- City of Carlsbad*
- City of Del Mar*
- City of Encinitas*
- City of Escondido*
- City of Oceanside*
- City of San Marcos*
- City of Solana Beach*

Community and Faith-Based Organizations:

- 1to1 Movement*
- Adapt-Functional Movement Center*
- Academy of Integrative Health and Medicine*
- African American Association of County Employees*
- Agua Hedionda Lagoon Foundation*
- All Star Vets*
- Borrego Community Health Foundation*
- California Center for the Arts- Escondido*
- California Indian Legal Services*
- Casa De Amparo*
- Center for Community Solutions*
- Center for World Music*
- Community Alliance for Healthy Minds*
- Community Housing Works*
- Community Resource Center*
- Encinitas Community Garden*
- Escondido Community Child Development Center*
- Escondido Education COMPACT*
- FAB (Fashion Art Business) Authority*
- Facilitating Access to Coordinated Transportation, Inc.*
- Fallbrook Healthcare District*
- Fallbrook Land Conservancy*
- Fallbrook Wellness Directory*
- Financial Coach 4 U*
- Green Oak Ranch*
- Halau Hula O Ka'eo*
- HealthRIGHT 360*
- Healthy Day Partners*
- Hope through Housing Foundation*
- Integral Communities*
- Interfaith Community Services*
- Junior Achievement of San Diego County*
- Lake San Marcos Community Association*
- Lean and Green Kids*
- Leap to Success*
- Live Well San Diego Lions Club*
- Lux Art Institute*
- MAAC*
- Move Your Feet Before You Eat Foundation*
- Neighborhood Healthcare*
- North County African American Women's Association*
- North County Community Action Network*
- North County Eco Alliance*
- North County Health Services*
- North County LGBTQ Resource Center*
- North County Lifeline*
- North County Philanthropy Council*

COMMUNITY LEADERSHIP TEAM MEMBERS

- Poway OnStage*
- ProduceGood*
- Puppy Prodigies*
- Ramona HEART Mural Project*
- Ramona Valley Vineyard Association*
- Rancho Bernardo Community Council*
- Rancho Bernardo High School Foundation/Broncos Baseball*
- Rancho Bernardo High School Friends of the Library*
- San Diego Children's Discovery Museum*
- San Diego County Farm Bureau*
- San Dieguito River Park Joint Powers Authority*
- Solana Center for Environmental Innovation*
- Straight from the Heart, Inc.*
- Surfing Madonna Oceans Project*
- Sustainable Surplus Exchange*
- TERI*
- The Continuing Education Center of Rancho Bernardo*
- The Elizabeth Hospice*
- The Escondido Creek Conservancy*
- The Fellowship Center*
- The Shine Project Foundation*
- Traveling Stories*
- TransFamily Support Services *
- VETality Corp*
- Vista Community Clinic*

OTHER VALUED PARTNERS

- Alliance for Regional Solutions
- Caster Family Center, University of San Diego
- Fallbrook Family Health Center/Community Health Systems Inc.
- North Inland Community Prevention Program
- North County Gang Commission
- Safe Families for Children
- San Diego Department of Child Support Services
- San Diego County Sheriff's Department
- San Dieguito Alliance for Drug Free Youth
- San Marcos Prevention Coalition
- Tri-City Wellness & Fitness Center
- U.S. Census Bureau

NORTH COUNTY REGIONS (2015)

Demographics

Almost **2** in **5** residents were Hispanic in both North Coastal and North Inland Regions.

Another **1** in **2** residents are white.

Health

Average life expectancy
for a baby born today was 82.7 **in North Inland and North Coastal Regions.**

Knowledge

7 in **8** residents (87.5%) **graduated from high school** in the North Coastal Region, compared to **6** in **7** (84.9%) in the North Inland Region.

Standard of Living

$76,311
North Inland Region had a **higher median household income** than North Coastal Region at **$72,950.**

$1,646
North Coastal Region had the **second highest median gross rent** of all the HHSA Regions.

Nearly **2** in **3** households in North Inland Region were **owner-occupied**, the highest of all the HHSA Regions.

Over **1** in **4** residents (27.2%) relied on **public health insurance coverage** in North Inland Region, compared to 28.4% within the County overall.

Community

Fewer than **1** in **2** residents of North Inland Region (41.8%) lived within a **quarter mile of a park**, the lowest of all the HHSA Regions.

Social

Over **2** in **5** low-income residents (41.3%) experienced **food insecurity** in North Inland Region, compared to 42.2% within the County overall.

1 in **5** adult residents (18-64 years) were **uninsured** in North Inland Region, similar to the County overall at 19.1%.

INTRODUCTION

Introduction

Formation of Leadership Team

The North County Community Leadership Team was formed in January 2012 to help guide planning for health and safety priorities in the Region and to foster information sharing and connectivity among group members. This collaboration includes community leaders, stakeholders and residents that are engaged in community improvement efforts to help educate and mobilize communities, develop and address priority needs, identify resources and plan actions to improve the Region's health and well-being. These activities help to inform the Region's Community Health Improvement Plan (CHIP) which details key priorities, strategies, resources, projects and programs that can be leveraged to address the Building Better Health, Living Safely, and Thriving components of the *Live Well San Diego* vision specifically in North County.

Formation of Regions

In 1998, due to the size and diversity of the County, a new Regional service delivery system was created, enabling Regional general managers (now called Regional Directors) to better acquaint themselves with their individual communities, and develop partnerships to meet the unique needs of each one. In six HHSA Regions, staff provides services in an integrated fashion, close to families and communities, in collaboration with other public and private sector providers.

Community Leadership Team Structure and Planning Process

The North County Leadership Team is comprised of several members representing 51 businesses, schools, cities and government organizations, community based-organizations, and tribal partnerships. It is one group representing two service delivery Regions - North Coastal and North Inland. The entire team meets monthly and supports one steering committee with three focus areas: Health, Safety, and Thriving.

As part of their planning process, North County Leadership Team members received presentations from both County staff describing the health status of their Regions, but also Leadership Team members presenting on the organizations they represent and the services they provide. The information gleaned from these presentations was used to refine and align priority areas with existing efforts. The North County Leadership Team also held the North County Thriving Forum on April 27, 2017. The goal of this community forum was to gain community input on important issues contributing to the focus area of Thriving. Andy Pendoley from MIG, Inc, contracted in partnership with the County of San Diego's Land Use and Environment Group, served as the facilitator for the thriving forum. Mr. Pendoley also attended the May 16th, 2017 North County Leadership Team meeting to present his findings from the forum, and to facilitate continued discussion towards a Thriving work plan.

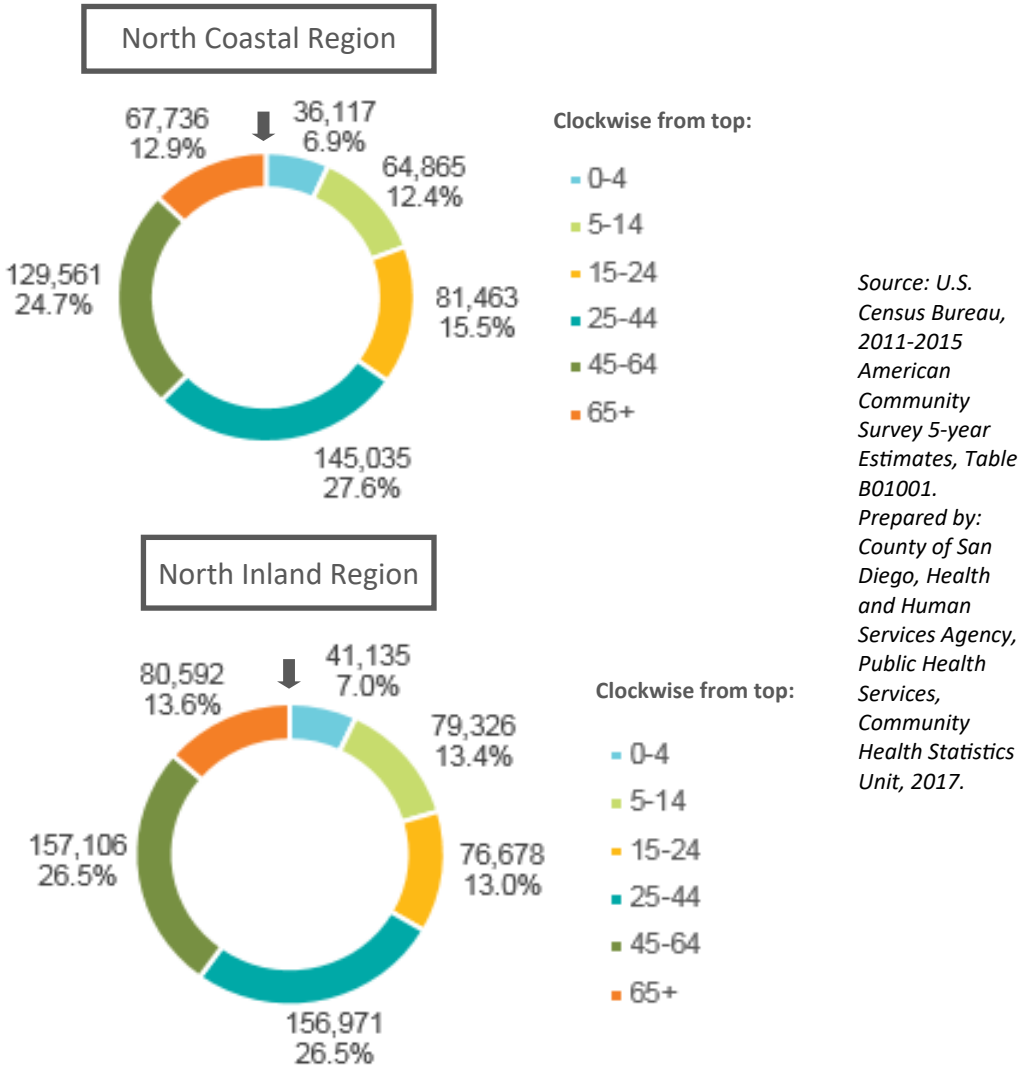
Community Health Status Assessments

Demographics

North County is the northern area of San Diego County, and consists of two Regions with cities, communities, organizations and residents that work together to promote a healthy, safe and thriving Region. The North Coastal Region had a population of nearly 525,000 and consists of six cities (Carlsbad, Del Mar, Encinitas, Oceanside, Solana Beach and Vista) and over a dozen more communities that stretch geographically from Del Mar in the south to the Orange County border in the north and east to include Vista and Rancho Santa Fe. The US Marine Corps' largest installation, Camp Pendleton, is located in the North Coastal Region. The North Inland Region had a population of nearly 592,000 residents, living in four cities (Escondido, Poway, San Marcos and the northern part of the City of San Diego) and dozens of smaller communities. The Region's diversity can be attributed to this vast geographic expanse, which includes suburban areas, remote desert communities, historic mountain towns, rural homes and farms, and Indian reservations.

According to the U.S. Census Bureau's American Community Survey, the populations in both the North Coastal and North Inland Regions were diverse. In both of the North County Regions, the majority of residents were between the ages of 25-44 (1 in 4), and ages 45-64 (1 in 4; Figure 1). There were nearly equal percentages of males and females in both Regions.

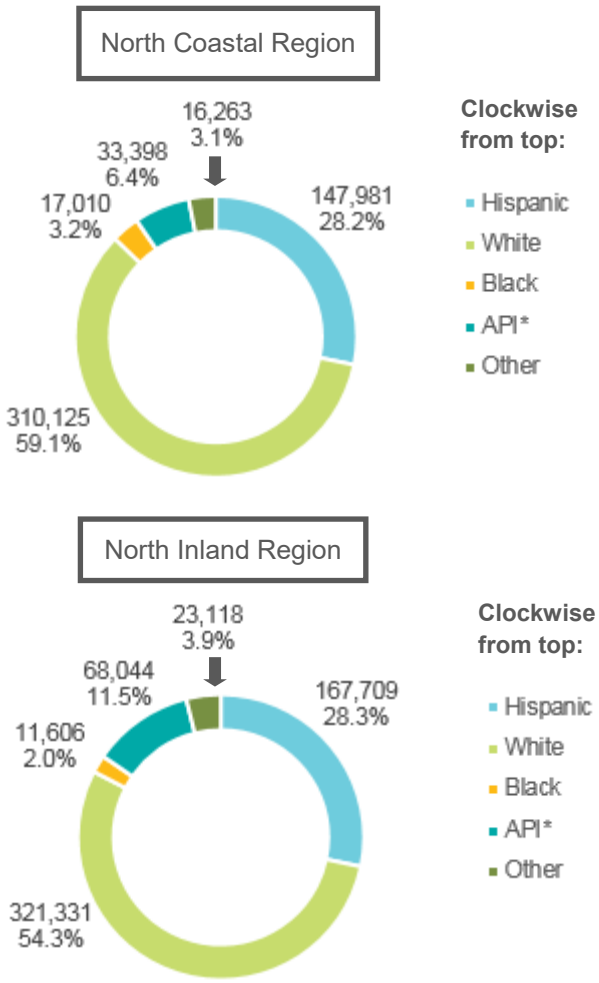
Figure 1. Population by Age Group, North County Regions, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001. Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

DEMOGRAPHICS

Figure 2. Population by Race/Ethnicity, North County Regions, 2015.

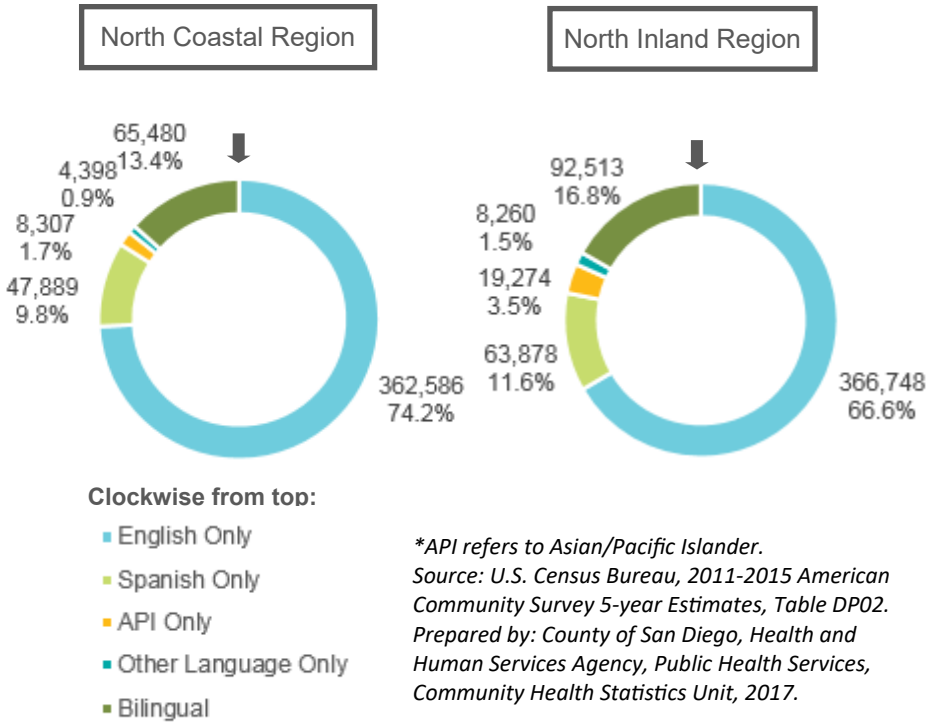


**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B03002.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Over one-fourth of the population in both North Coastal and North Inland Regions were Hispanic. Over half were white. In North Coastal Region, the remaining segment was split between black, Asian/Pacific Islander (API), and other race/ethnicity, with API accounting for half of what remained. In North Inland Region, API accounted for the majority of the remaining segment (Figure 2).

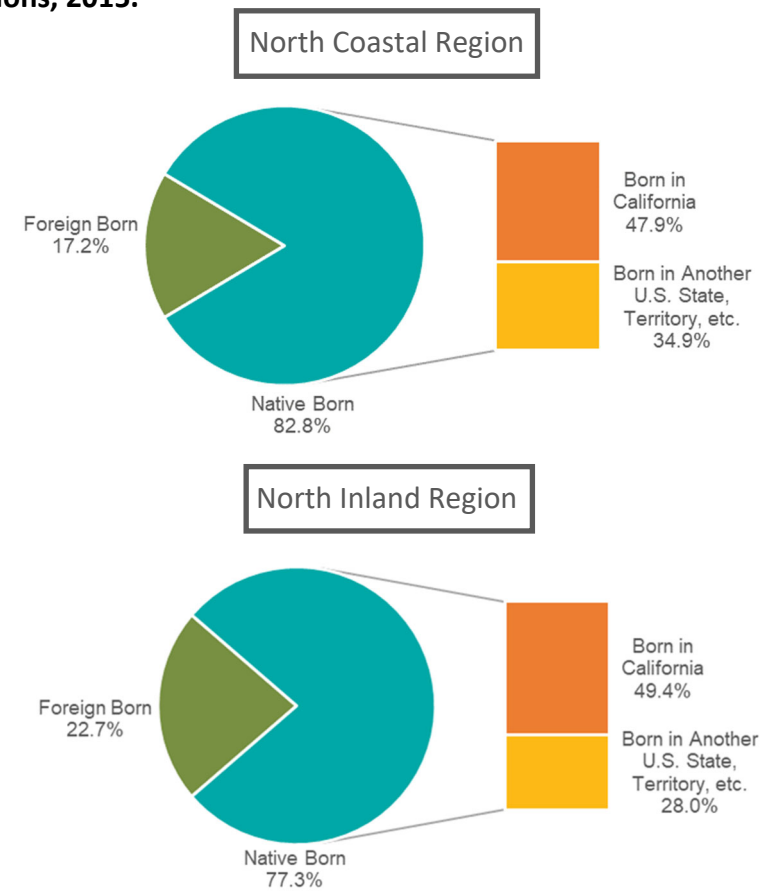
In the North Coastal Region, almost three-quarters of the population aged 5 years and older were English-only speakers. Almost 1 in 10 were Spanish-only speakers, and another 1 in 8 were bilingual. In the North Inland Region, two-thirds of the population spoke English only. Another 1 in 9 were Spanish only speakers, and 1 in 6 were bilingual. North Inland Region had a higher percentage of residents who spoke an Asian/Pacific Islander language than the North Coastal Region (Figure 3).

Figure 3. Population by Language Spoken at Home, North County Regions, 2015.



**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 4. Population by Nativity and Place of Birth, North County Regions, 2015.

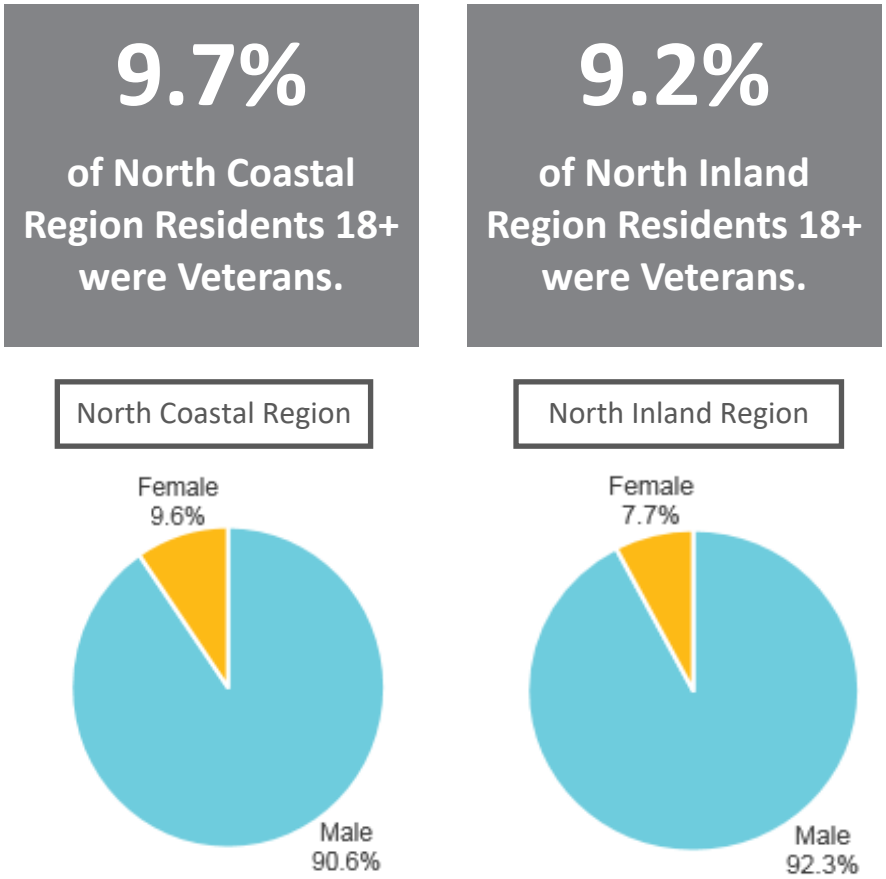


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B06001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

About 1 in 6 people living in the North Coastal Region were foreign-born. Of those who were born in the United States, more than half were born in California. Almost 1 in 4 people living in the North Inland Region were foreign-born. Of those who were born in the United States, nearly two thirds were born in California (Figure 4).

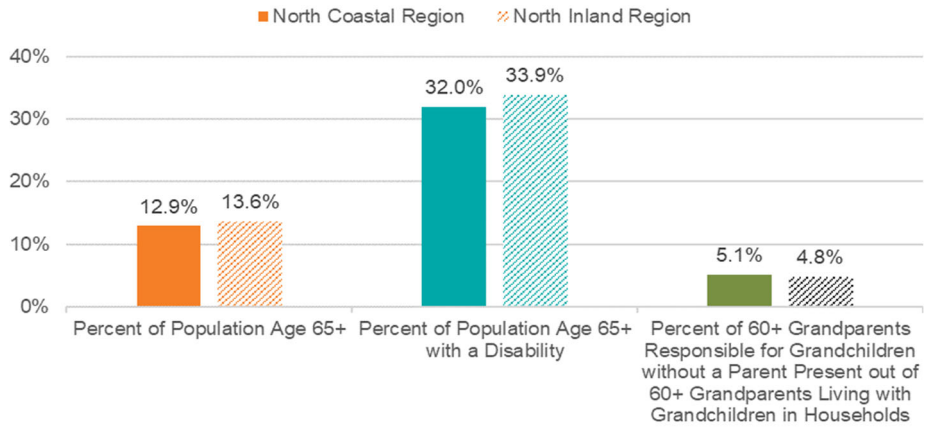
Approximately 1 in 10 North Coastal Region residents is a veteran. Of those residents who are veterans, about 1 in 10 are female. Approximately 1 in 11 North Inland Region residents was a veteran. Of those residents who were veterans, about 1 in 13 were female (Figure 5).

Figure 5. Veterans in the Population, North County Regions, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S2101.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 6. Characteristics of Older Adult Population, North County Regions, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

In the North Coastal Region, about 1 out of 8 residents were seniors (over the age of 65). Of those over the age of 65, almost 1 in 3 had some kind of a disability (hearing, vision, cognitive, self-care). Approximately 1 in 40 grandparents living with their grandchildren over the age of 60 in the North Coastal Region were solely responsible for raising a grandchild (no parent is present in the household; Figure 6).

In the North Inland Region, over 1 in 8 residents were seniors (over the age of 65). Of those over the age of 65, about 1 in 3 had some kind of a disability (hearing, vision, cognitive, self care). Approximately 1 in 30 grandparents living with their grandchildren over the age of 60 in the North Inland Region were solely responsible for raising a grandchild (no parent is present in the household; Figure 6).

Morbidity and Mortality

According to the Centers for Disease Control and Prevention, morbidity is defined as any departure, subjective or objective, from a state of physiological or psychological well-being, encompassing disease, injury, and disability. Mortality refers to death. In this section, conditions contributing to the greatest amount of morbidity and mortality are discussed.

First, the 3-4-50 concept is introduced and explained, with data relevant to each indicator presented. Next, prevention quality indicators, measures formulated and defined by the U.S. Department of Health & Human Services Agency for Healthcare Research and Quality, are presented. These indicators describe the rate of hospitalizations for conditions or complications that could have been prevented with adequate primary or outpatient care. Lastly, the leading causes of death by Region and County overall are presented, compared to those for California and United States as a whole.

The purpose of this section is to describe what conditions are contributing the most to the morbidity and mortality of people living in San Diego County.

3-4-50

Introduction

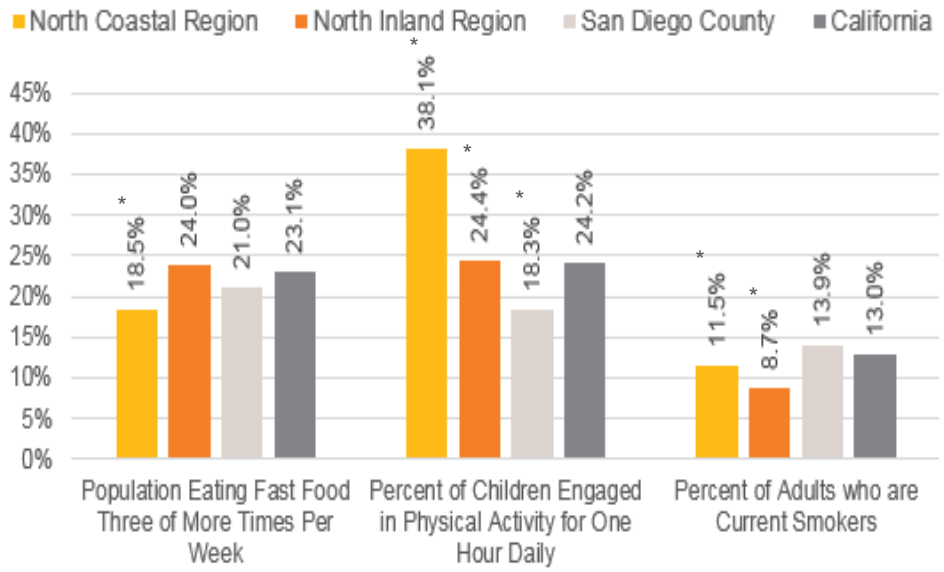
Chronic diseases are now among the leading causes of death and disability worldwide. This reflects an improvement in the prevention and treatment of infectious diseases as well as significant changes in dietary habits, physical activity levels, and tobacco use in the population.[1] Three behaviors (poor diet, physical inactivity, and tobacco use) contribute to four chronic diseases (cancer, heart disease and stroke, type 2 diabetes, and lung diseases such as asthma) that result in over 50 percent of all deaths worldwide. This is the foundation of the 3-4-50 concept.[2] The influence of these three unhealthy behaviors may be seen in San Diego County as these four chronic diseases are among the most common causes of death and disability in our Region.

The information discussed on the following pages is specific to North County Regions and their SRAs. For a more detailed explanation, please see the 3-4-50 section in the countywide document (page 31), or the 3-4-50 reports located at the following website:https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_health_statistics/3-4-50.html.

Three Behaviors

Diet, which is ultimately a personal choice, is one of the factors that can contribute to obesity. The physical environment, including lack of sidewalks and adequate lighting, posed challenges to walking. Smoking is the leading factor contributing to lung cancer and chronic obstructive pulmonary disease (COPD) deaths in the United States. Exposure to second hand smoke increases risk of heart disease and lung cancer in adults, and asthma attacks and respiratory infections in children.

Figure 7. Measures of Three Behaviors (Poor Diet, Physical Inactivity, and Smoking) Contributing to 3-4-50 Deaths, North County Regions, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In 2015 (Figure 7):

- Nearly 1 in 4 residents aged 2 and over ate fast food three or more times per week in North Inland Region. This was higher than the County and State overall.
- Nearly 2 in 5 children aged 2-11 in North Coastal Region engaged in physical activity for one hour daily. This was higher than the County and State overall.
- Nearly 1 in 8 adults were current smokers in the County, and in the State overall. Both percentages were higher than the North County Regions.

Four Diseases

Cancer is a term used to describe a group of diseases in which abnormal cells divide without control and invade other tissues.[3] Heart disease refers to any acute or chronic condition that involves the heart or its blood vessels: the muscle itself, valves, blood flow, and beating rhythm.[4] Stroke is a distinct type of cardiovascular disease, also called cerebrovascular disease. Specifically, stroke is a disease that affects the arteries leading to and within the brain. Diabetes mellitus is a serious disease in which the levels of blood glucose, or blood sugar, are above normal.[6] Asthma is a chronic inflammatory disease of the respiratory system which causes the airways of the lungs to constrict and become inflamed in response to certain triggers. Chronic Obstructive Pulmonary Disease (COPD) is a disease that makes it hard to breathe.[7]

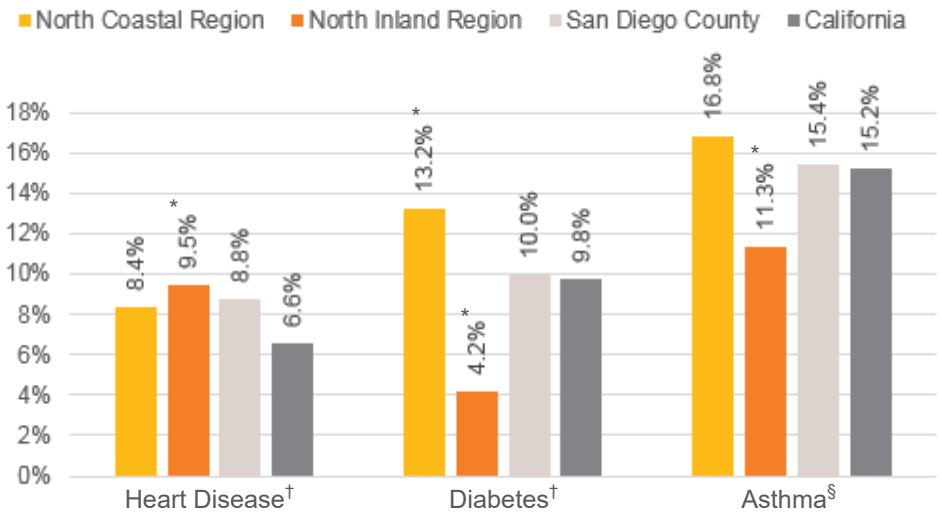
Figure 8 provides an estimate of the percent of adult residents who may be suffering from heart disease and diabetes. Estimates of asthma prevalence are for residents aged 1 and over. Estimates of cancer prevalence are not available through the same data source, and are therefore not comparable and not included in this analysis.
In 2015:

- 1 in 12 adult residents of North Coastal Region had ever been told they had heart disease. This was lower than the County, and higher than the State overall.
- 1 in 10 adult residents of San Diego County had ever been told they had diabetes. This was slightly higher than the State overall.
- 1 in 6 residents of North Coastal Region aged 1 and over had ever been diagnosed with asthma. This was higher than the County and the State overall.

References

1. World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).
2. 3Four50, www.3four50.com (Accessed July 2, 2010).
3. National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).
4. Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).
5. American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015).
6. American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).
7. Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).

Figure 8. Ever Diagnosed with a Disease Contributing to 3-4-50 Deaths, North County Regions, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
† Adults aged 18 and over.
§ Residents aged 1 year and over.
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

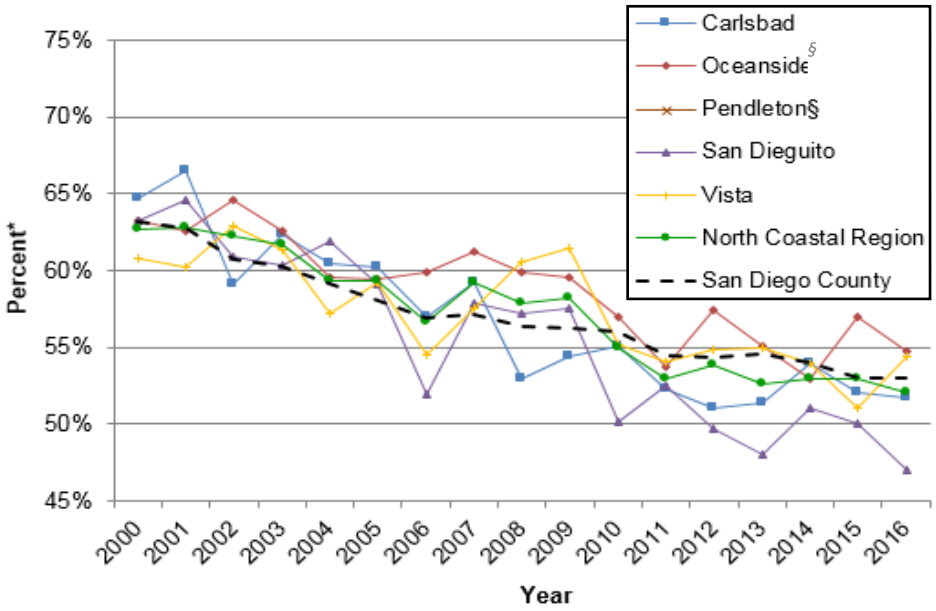
Over 50% of Deaths

Three behaviors - poor diet, physical inactivity and tobacco use - contribute to four major chronic diseases - cancer, heart disease, type 2 diabetes, and pulmonary disease - which are responsible for more than 50% of deaths worldwide. In San Diego County in 2016, 53% of deaths were due to these chronic diseases. In both North Coastal and North Inland Regions in 2016, 52% of deaths were due to 3-4-50 diseases (Table 1 and Table 2 respectively).

Compared to the County overall, North Coastal Region had a comparable percentage of deaths due to 3-4-50 diseases. The SRA with the highest 3-4-50 percentage in 2016 was Oceanside, at 55%. The SRA with the lowest percentage was San Dieguito, at 47%. The percentages for North Coastal Region and its SRAs decreased between 2000 to 2016 (Figure 9).

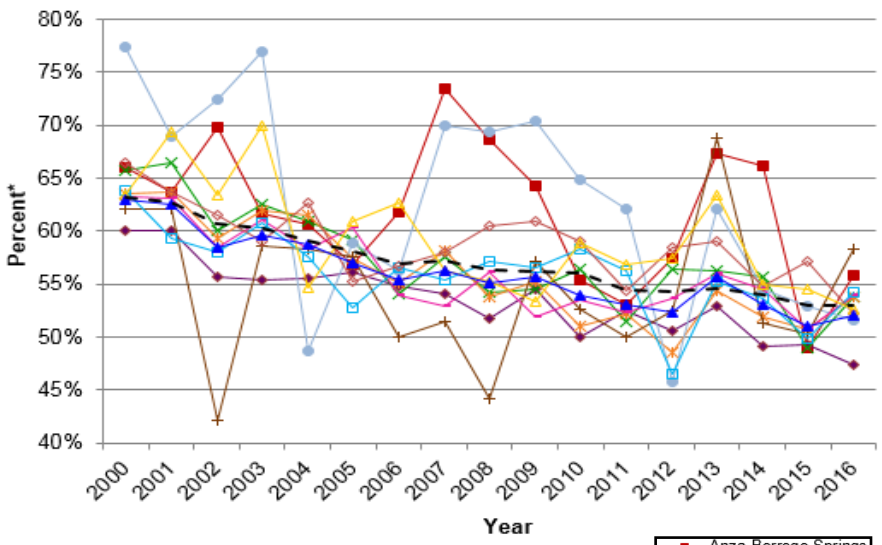
Compared to the County overall, North Inland Region had a comparable percentage of deaths due to 3-4-50 diseases. The SRA with the highest 3-4-50 percentage in 2016 was Pauma, at 58%. The SRA with the lowest percentage was Escondido, at 47%. The percentages for North Inland Region and its SRAs decreased between 2000 to 2016 (Figure 10).

Figure 9. 3-4-50 Death† Percentages* Among San Diego County Residents—North Coastal Region, 2000-2016.



**3-4-50 deaths as a percentage of all cause deaths.*
† 3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
§ Percent not calculated for fewer than 5 events.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 10. 3-4-50 Death† Percentages* Among San Diego County Residents—North Inland Region, 2000-2016.



†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Summary

Overall, the percentage of deaths due to 3-4-50 diseases is decreasing within the North Coastal and North Inland Regions, and within the County overall as well. While relatively low percentages of San Diegans residing in North Coastal and North Inland Regions are participating in the risk behaviors that lead to deaths from one of the 3-4-50 diseases, more work is needed to continue to lower the percentage of deaths due to chronic disease. Addressing 3-4-50 behaviors and diseases ultimately helps North Coastal and North Inland Region residents, and all San Diegans, to live well.

References

1. World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).
2. 3Four50, www.3four50.com (Accessed July 2, 2010).
3. National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).
4. Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).
5. American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015).
6. American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).
7. Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).

Leading Causes of Death

Introduction

The leading causes of death are mortality statistics useful for showing the relative burden of cause-specific mortality. The top 10 most common rankable causes of death are determined in San Diego County each year, based on rankable categories and reported underlying cause of death. Rankings show the most frequently occurring causes of death out of those rankable. It is important to note that rankings do not in any way depict risk of dying from one condition or another. Mortality rates for a specific cause of death may increase or decrease, but the rank of causes may not change over time.

Rankable causes of death are categories determined based on recommendations from the 1951 Public Health Conference on Records and Statistics. The original list had 64 selected causes of death; the list used for the 2015 rankings only had 51 categories. For more information on the categories and the conditions they encompass, please visit https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf.

Analysis

Table 3 (page 18) shows the Leading Causes of Death in North Coastal and North Inland Regions, San Diego County, California, and the United States as a whole. The top 5 leading causes of death in North Coastal Region, North Inland Region, and the County overall in 2015 were the same. Malignant Neoplasms were the leading cause of death, followed by Diseases of the Heart. Compared to the County overall, Intentional Self-Harm ranked higher in the North Coastal Region (#7 in North Coastal Region; #8 in San Diego County). Chronic Liver Disease and Cirrhosis was ranked higher in North Inland Region than in the County overall (#8 in North Inland Region; #9 in San Diego County).

Table 1. 3-4-50 Death[†] Percentages* Among San Diego County Residents— North Coastal Region, 2000-2016.

Geography	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Carlsbad	65%	66%	59%	62%	60%	60%	57%	59%	53%	54%	55%	52%	51%	51%	54%	52%	52%
Oceanside	63%	63%	65%	63%	60%	59%	60%	61%	60%	60%	57%	54%	57%	55%	53%	57%	55%
Pendleton[§]																	
San Dieguito	63%	65%	61%	60%	62%	59%	52%	58%	57%	58%	50%	53%	50%	48%	51%	50%	47%
Vista	61%	60%	63%	61%	57%	59%	55%	58%	61%	61%	55%	54%	55%	55%	54%	51%	54%
North Coastal Region	63%	63%	62%	62%	59%	59%	57%	59%	58%	58%	55%	53%	54%	53%	53%	53%	52%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

[†]3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
[§]Percent not calculated for fewer than 5 events.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2015 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Summary

Overall, the most common causes of death in 2015 were Malignant Neoplasms and Diseases of the Heart, ranking either first or second within each HHSA Region, the County overall, California, and the nation. Diseases ranked 1 and 2 make up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 are within 5% of one another for San Diego County and each of the six HHSA Regions. Alzheimer's disease deaths were more common in California, the County, and the HHSA Regions than it was in the United States overall.

Infant Mortality

The Centers for Disease Control and Prevention (CDC) define infant mortality as the death of an infant before his or her first birthday, while defining the rate of infant mortality as the number of those infant deaths per 1,000 live births in the same year.[1] It is common practice to consider the infant mortality rate (IMR) as a representative indicator of population health.[2] It is theorized that using IMR as an indicator might mirror other factors of population health such as social well-being, rates of illness and disease, economic development, general living conditions and others.[3] It has also been used as a proxy measure for access and quality of pre-term and post-term

1. Centers for Disease Control and Prevention (CDC). Infant Mortality. Reproductive Health. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Published 2017.

2. Kochanek KD, Murphy SL, Xu J, Arias E. Mortality in the United States, 2016. NCHS Data Brief. doi:10.1056/NEJM184002260220306

3. Reidpath DD. Infant mortality rate as an indicator of population health. *J Epidemiol Community Heal*. 2003;57(5):344-346. doi:10.1136/jech.57.5.344

4. Fry-Johnson YW, Levine R, Rowley D, Agboto V, Rust G. United States black:white infant mortality disparities are not inevitable: Identification of community resilience independent of socioeconomic status. *Ethn Dis*. 2010;20(1 SUPPL.1):1-10.

Table 2. 3-4-50 Death† Percentages* Among San Diego County Residents— North Inland Region, 2000-2016.

Geography	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Anza-Borrego Springs	66%	64%	70%	62%	61%	57%	62%	73%	69%	64%	55%	53%	57%	67%	66%	49%	56%
Escondido	60%	60%	56%	55%	55%	56%	55%	54%	52%	54%	50%	53%	51%	53%	49%	49%	47%
Fallbrook	66%	66%	60%	62%	61%	59%	54%	58%	54%	55%	56%	51%	56%	56%	56%	49%	54%
North San Diego	64%	64%	59%	62%	62%	57%	55%	58%	54%	55%	51%	52%	48%	54%	52%	51%	54%
Palomar-Julian	77%	69%	72%	77%	49%	59%	56%	70%	69%	70%	65%	62%	46%	62%	55%	53%	52%
Pauma	62%	62%	42%	59%	58%	58%	50%	52%	44%	57%	53%	50%	53%	69%	51%	50%	58%
Poway	63%	63%	58%	61%	58%	60%	54%	53%	56%	52%	54%	52%	54%	56%	54%	51%	54%
Ramona	64%	59%	58%	61%	58%	53%	57%	55%	57%	57%	58%	56%	47%	55%	54%	50%	54%
San Marcos	66%	64%	61%	59%	63%	55%	57%	58%	60%	61%	59%	54%	58%	59%	55%	57%	52%
Valley Center	63%	69%	63%	70%	55%	61%	63%	56%	55%	53%	59%	57%	57%	63%	55%	54%	53%
North Inland Region	63%	63%	58%	60%	59%	57%	55%	56%	55%	56%	54%	53%	52%	56%	53%	51%	52%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

MORBIDITY AND MORTALITY

Table 3. Leading Causes of Death[1,2] Among San Diego County Residents, North County Regions, 2015.

Rank	North Coastal Region	North Inland Region	San Diego County	California	United States
1	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Diseases of the Heart	Diseases of the Heart
2	Diseases of the Heart	Diseases of the Heart	Diseases of the Heart	Malignant Neoplasms	Malignant Neoplasms
3	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease	Chronic Lower Respiratory Diseases
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Accidents/Unintentional Injuries
5	Accidents/Unintentional Injuries	Accidents/Unintentional Injuries	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
6	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Accidents/Unintentional Injuries	Alzheimer's Disease
7	Intentional Self-Harm (Suicide)	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
8	Diabetes Mellitus	Chronic Liver Disease and Cirrhosis	Intentional Self-Harm (Suicide)	Influenza and Pneumonia	Influenza and Pneumonia
9	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Nephritis, Nephrotic Syndrome and Nephrosis
10	Influenza and Pneumonia	Influenza and Pneumonia	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)

Note: Diseases ranked 1 and 2 make up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 are within 5% of one another for San Diego County and each of the six HHSA Regions.

[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the San Diego County residents for 2015.

[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.

Not shown for fewer than 5 deaths.

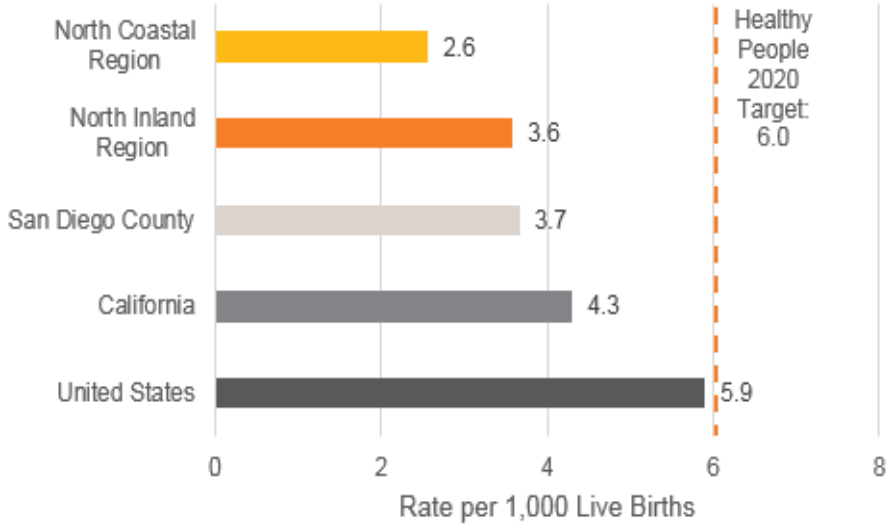
Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System.

Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, June, 2018.

medical care, for both the mother and infant.[4] In 2016, the top three causes of infant mortality in the United States were congenital malformations, low birth weight, and Sudden Infant Death Syndrome.[2]

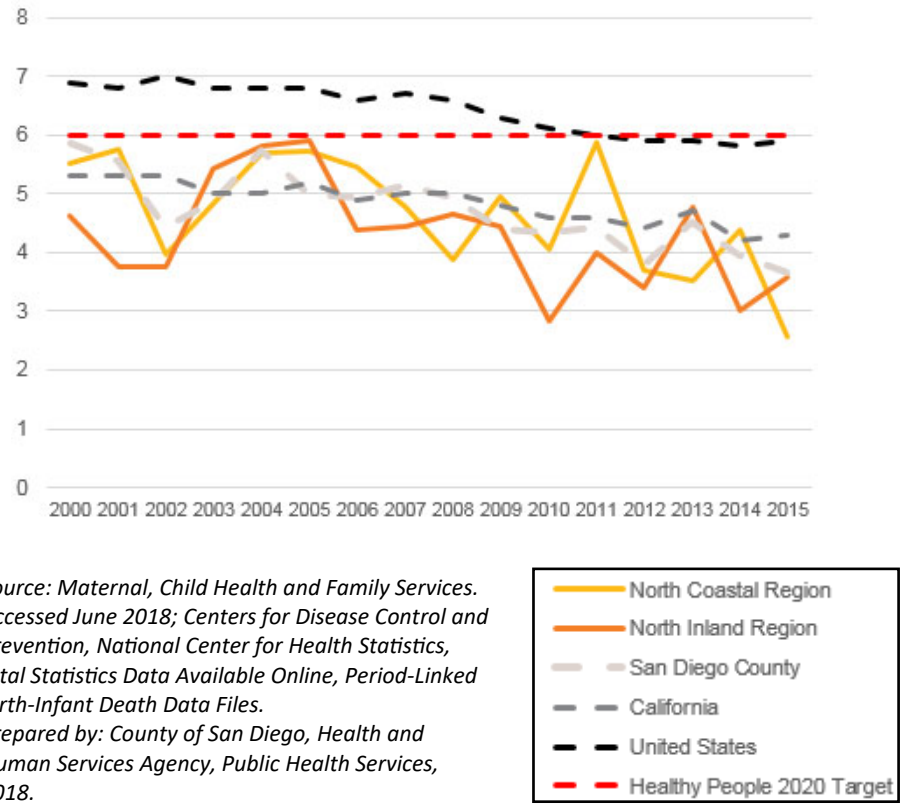
The infant mortality rate in North Coastal Region in 2015 was 2.6 deaths per 1,000 live births, and the infant mortality rate in North Inland Region was 3.6 per 1,000 live births. Both Regions had infant mortality rates well below the Healthy People 2020 Target. This was lower than the County overall (3.7 per 1,000 live births). The infant mortality rates in North Coastal Region and North Inland Region in 2015 were also lower than California (4.3 deaths per 1,000 live births), and the United States as a whole (5.9 deaths per 1,000 live births) (Figure 11). Overall, the infant mortality rates in North Coastal Region and North Inland Region decreased between 2000-2015 (Figure 12).

Figure 11. Overall Infant Mortality Rate, North County Regions Comparison, 2015.



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

Figure 12. Overall Infant Mortality Rate, North County Regions



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

Suicide

In 2016, North Coastal Region had a higher suicide rate than San Diego County overall and California, but lower than the United States as a whole. The suicide rate in North Coastal Region was over the Healthy People target (10.2 per 100,000 population). In the Oceanside SRA, the suicide rate was highest compared to the other SRAs. The rate in San Dieguito was lowest (Table 4).

Between 2011-2016, rates in the Oceanside and San Dieguito SRAs increased, while the rates in Carlsbad and Vista decreased. The rate in the North Coastal Region also increased between 2011-2016 (Figure 13). North Coastal Region, Oceanside, and Carlsbad all had suicide death rates higher than the Healthy People 2020 Target (a

goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicide death by the year 2020).

In 2016, North Inland Region had a lower suicide rate than San Diego County overall, California, and the United States as a whole. The suicide rate in North Inland Region was under the Healthy People target (10.2 per 100,000 population). In 2016 in the San Marcos SRA, the suicide rate was highest compared to the other SRAs. The rate in North San Diego was lowest compared to other SRAs (Table 5).

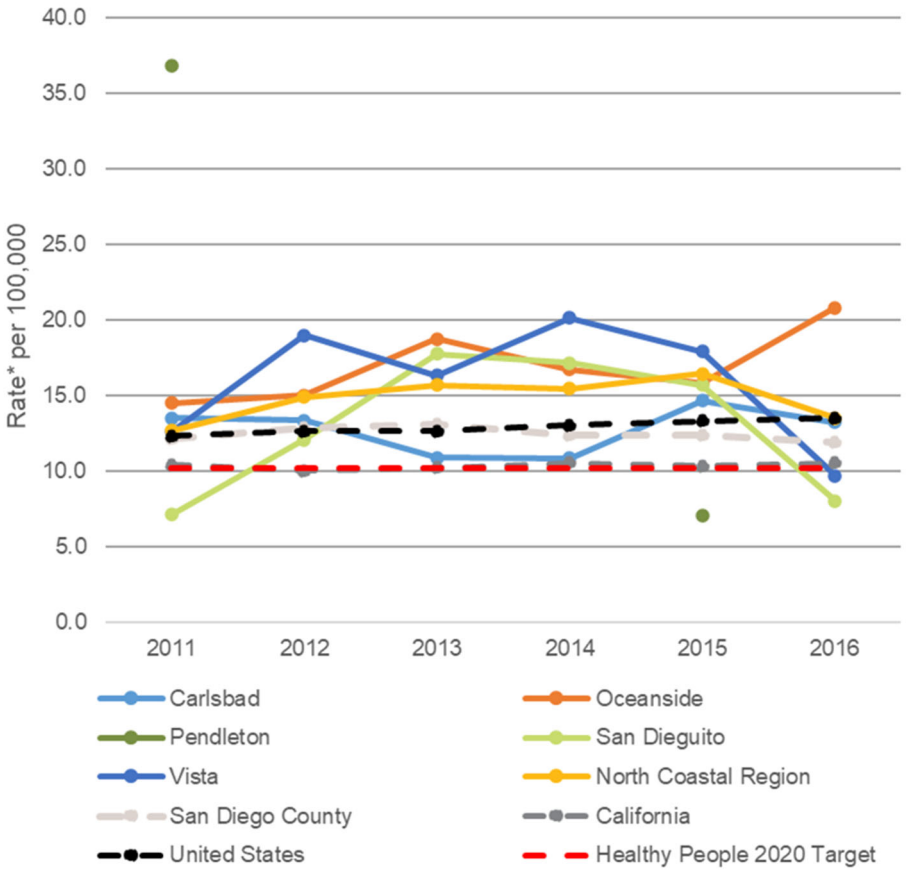
Between 2011-2016, rates in the Poway and San Marcos SRAs have increased, while the rates in Fallbrook and North San Diego have decreased. The rate in the North Inland Region did not change between 2011-2016 (Figure 14). North Inland Region

Table 4. Suicide*, North Coastal Region, 2016.

Geography	2016 Suicide Death Rate*
Carlsbad	13.2
Oceanside	20.8
Pendleton	§
San Dieguito	8.0
Vista	9.7
North Coastal Region	13.5
San Diego County	11.9
California	10.5
United States	13.5
Healthy People 2020 Target	10.2

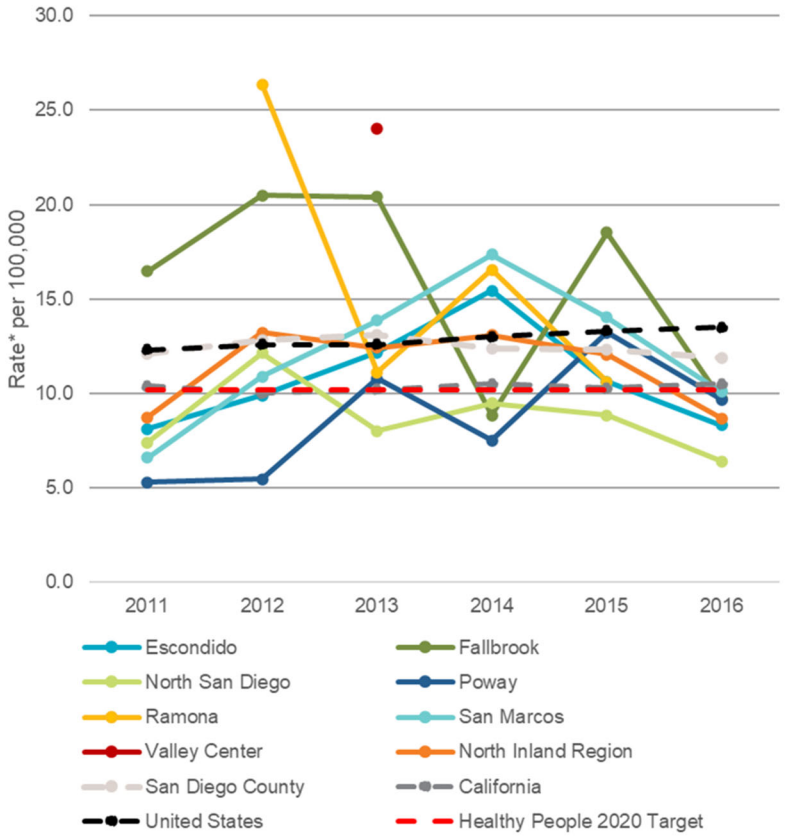
**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events.
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS); SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 13. Suicide*, North Coastal Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events.
Regional, Subregional, & County Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2016 California Vital Records Business Intelligence System (VRBIS); SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 14. Suicide*, North Inland Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events; SRAs with no values for 2011-2016 include Anza-Borrego Springs, Palomar-Julian, and Pauma.
Regional, Subregional, & County Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

and its SRAs all had suicide death rates in 2016 that were lower than the Healthy People 2020 Target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicide death by the year 2020).

Unintentional Injury

Unintentional injuries include any accident that results in cutting or piercing of the skin, drowning or submersion, falls, or motor vehicle accidents. Nationally, more than 3 million people are hospitalized, 27 million people are treated in emergency

Table 5. Suicide*, North Inland Region, 2016.

Geography	2016 Suicide Death Rate*
Anza-Borrego Springs	§
Escondido	8.3
Fallbrook	9.7
North San Diego	6.4
Palomar-Julian	§
Pauma	§
Poway	9.7
Ramona	§
San Marcos	10.1
Valley Center	§
North Inland Region	8.7
San Diego County	11.9
California	10.5
United States	13.5
Healthy People 2020 Target	10.2

**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events.

Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.

CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

departments and released, and over 192,000 die as a result of violence and unintentional injuries each year. The cost of both fatal and nonfatal injury in the U.S. in 2013 was $671 billion, in both medical and work loss costs, according to the CDC.[1]

Unintentional injury is related to community because most unintentional injuries are preventable through safety measures, both on the part of the individual (i.e. seat belt use) and of the community (e.g. safe sidewalks and intersections).

In 2016, all SRAs within North Coastal Region, and North Coastal Region as a whole, had rates of unintentional injury death below the State of California and the United States overall (Table 6). The rate of unintentional injury death in San Diego County, North Coastal Region, and all the SRAs within North Coastal Region were below the Healthy People 2020 target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce unintentional injury death by the year 2020). In 2016, the SRA with the highest unintentional injury death rate was Oceanside; the lowest was San Dieguito. Between 2011-2016, the unintentional injury death rate increased in Oceanside. The Carlsbad, San Dieguito, and Vista SRAs, and North Coastal Region overall, experienced a decrease between 2011-2016 in the unintentional injury death rate (Figure 15). North Inland unintentional injury death rates appear in Figure 16 and Table 7.

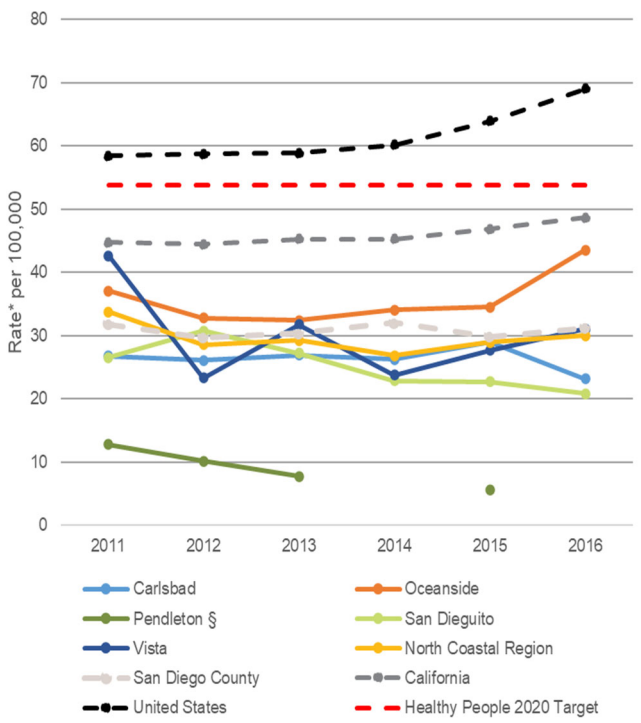
1.Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Retrieved from: https://www.cdc.gov/injury/wisqars/cost/index.html

Table 6. Unintentional Injury Death Rate*, North Coastal Region, 2016.

Geography	2016 Unintentional Injury Death Rate*
Carlsbad	23.1
Oceanside	43.5
Pendleton	§
San Dieguito	20.8
Vista	31.0
North Coastal Region	29.9
San Diego County	31.1
California	48.6
United States	69.0
Healthy People 2020 Target	53.7

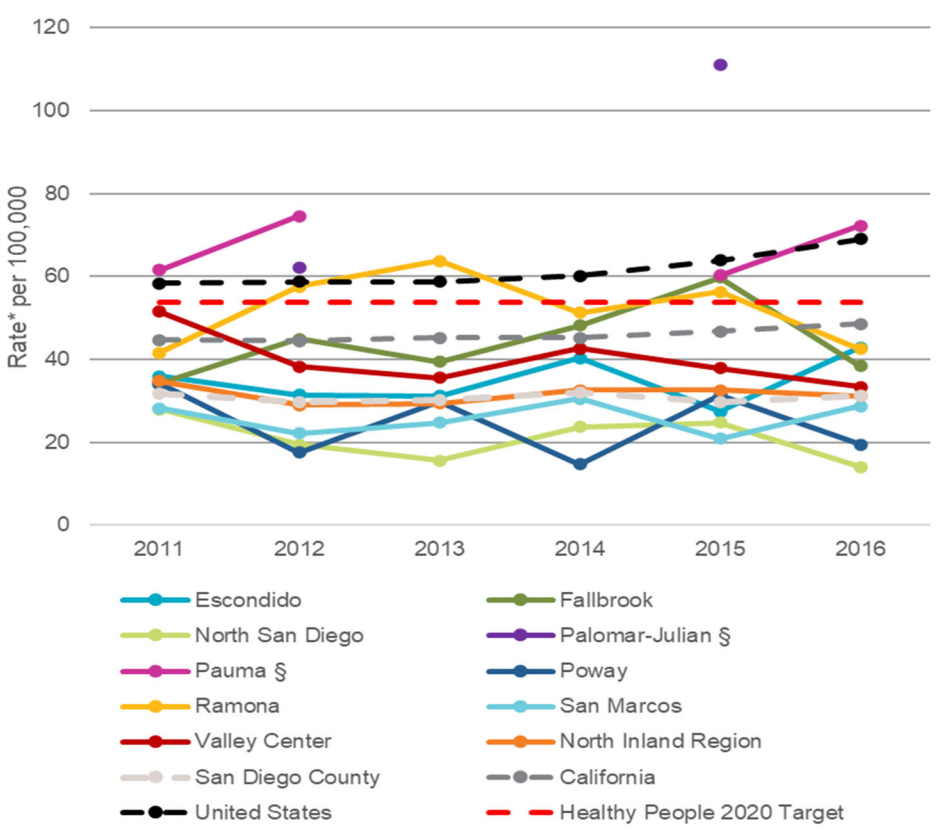
**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events.
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS); SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 15. Unintentional Injury Death Rate*, North Coastal Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events.
Regional, Subregional, & County Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS); SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 16. Unintentional Injury Death Rate*, North Inland Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events; SRAs with no values for 2011-2016 include Anza -Borrego Springs.
Regional, Subregional, & County Source: California Department of Public Health, 2000-2013 Death Statistical Master Files; 2014-2016 California Vital Records Business Intelligence System (VRBIS); SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/ NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 7. Unintentional Injury Death Rate*, North Inland Region, 2016.

Geography	2016 Unintentional Injury Death Rate*
Anza-Borrego Springs	§
Escondido	42.9
Fallbrook	38.4
North San Diego	14.0
Palomar-Julian	§
Pauma	72.2
Poway	19.5
Ramona	42.6
San Marcos	28.7
Valley Center	33.3
North Inland Region	31.2
San Diego County	31.1
California	48.6
United States	69.0
Healthy People 2020 Target	53.7

**All rates are age-adjusted; rate per 100,000.*
§Rates not calculated for fewer than 5 events.
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS); SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/ NCHS and Census, 2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

AREAS OF INFLUENCE

Live Well San Diego Areas of Influence and Indicators

Areas of Influence

The following pages show data by Area of Influence, or factors that influence quality of life. The *Live Well San Diego* Areas of Influence and Indicator Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Table 8).

Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to "live well."

Table 8. Indicators by Area of Influence.

Areas of Influence	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community Involvement

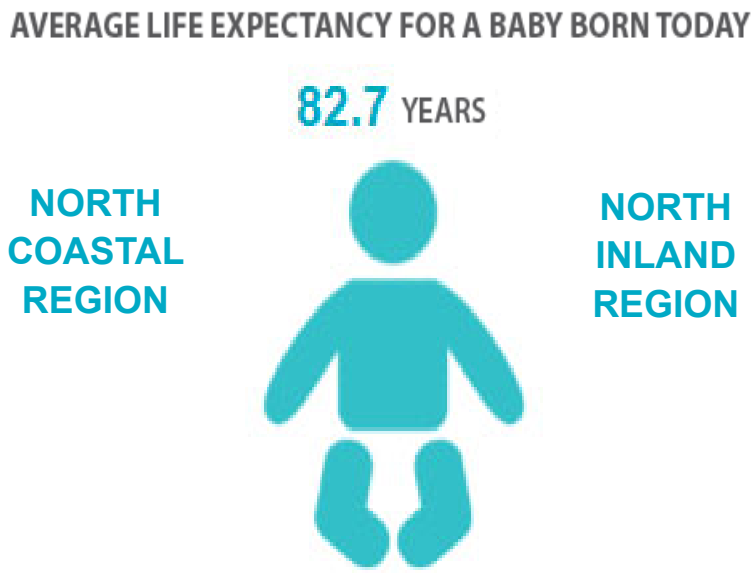
HEALTH

Area of Influence: Health

The health of an individual influences their ability to "live well." Improving health and supporting healthy choices is essential to Building Better Health in San Diego County. Two of the Top 10 indicators measuring progress for *Live Well San Diego* fall under the Health area of influence. The first, life expectancy, refers to the measure of length of life expected at birth, and describes the overall health status of a population. The second, quality of life, describes the percent of the population that is sufficiently healthy and able to live independently. Other measures that contribute to quality of life include disability status, and health insurance coverage. An individual's disability status can create barriers to education, employment, and ability to live independently, thus influencing their quality of life. Access to care – both preventive medicine services and treatment for disease – is essential to a high quality of life. Both disability status and access to care influence a person's health and therefore influence their quality of life.

Live Well San Diego Indicator #1: Life Expectancy

Life expectancy at birth is measured as the average number of years a baby born today is expected to live if current mortality patterns continue throughout his or her lifetime.



San Diego County: 82.0 Years

California: **

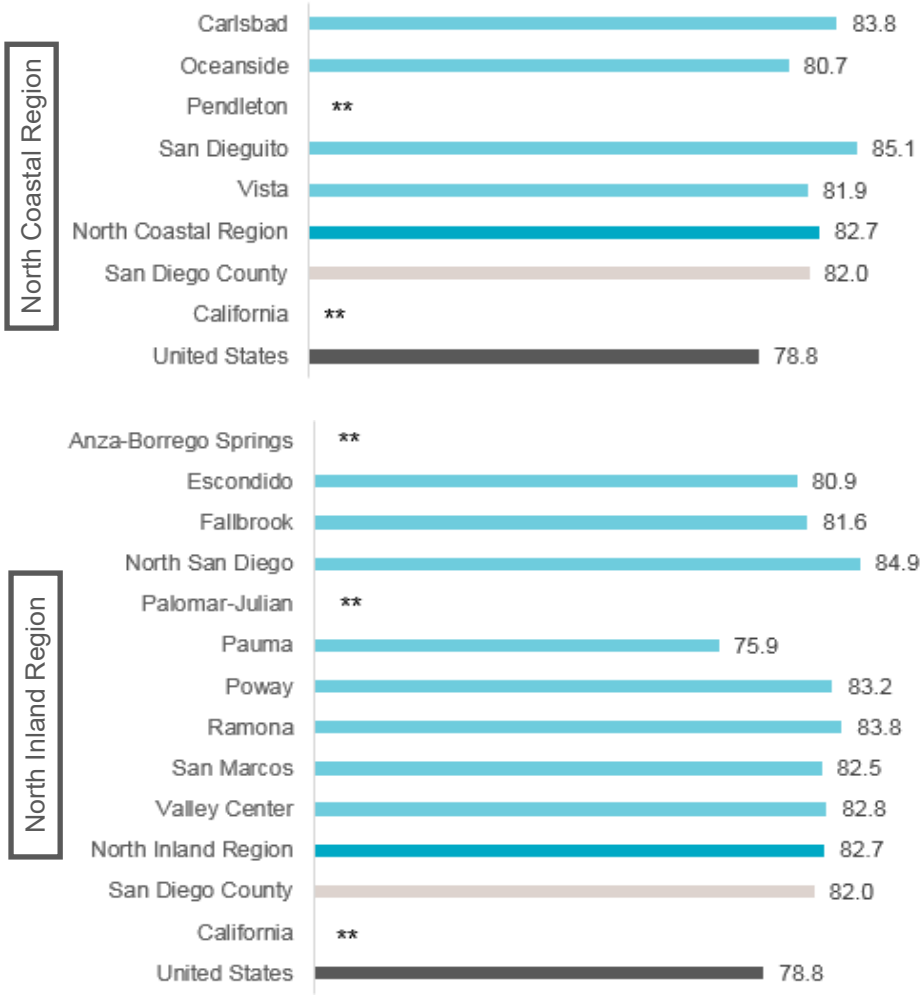
United States: 78.8 Years

Life Expectancy in both the North Coastal and North Inland Regions is 82.7 years, which was higher than San Diego County overall, and higher than the United States as a whole. Within North Coastal Region, the San Dieguito SRA had the highest life expectancy, at 85.1 years. Oceanside SRA had the lowest life expectancy, at 80.7 years. Within the North Inland Region, the North San Diego SRA had the highest life expectancy, at 84.9 years. Pauma SRA had the lowest life expectancy, at 75.9 years (Figure 17).

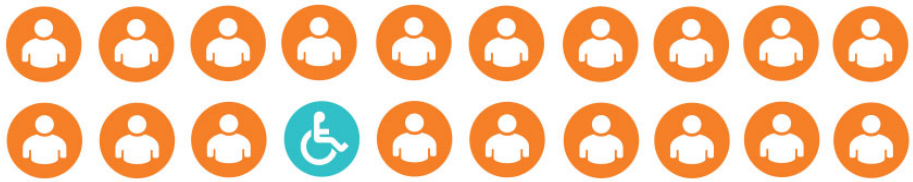
Live Well San Diego Indicator #2: Quality of Life

Quality of life is measured as the percentage of the population sufficiently healthy to live independently. The ability to live independently has a positive impact on physical, mental, emotional, and social well-being.

Figure 17. Life Expectancy by Subregional Area, North County Regions, 2015.



*** Data not available.*
Source: U.S. and State data from the United States Centers for Disease Control and Prevention, FastStats.
County and Regional data prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, 2015. Accessed 09/2017.



19 IN 20 PEOPLE ARE HEALTHY ENOUGH TO LIVE INDEPENDENTLY*

**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*

NORTH COASTAL REGION: 95.3%

NORTH INLAND REGION: 94.8%

San Diego County:	California:	United States:
94.8%	95.4%	95.6%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1811. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

In both North Coastal and North Inland Regions, 19 out of 20 people were healthy enough to live independently (meaning the individual does not have any physical, mental, or emotional condition that impacts their ability to live independently).

The percentage of people who were able to live independently was slightly higher in North Coastal Region (95.3%) than it was in San Diego County overall (94.8%), and slightly lower than California (95.4%) and the United States as a whole (95.6%). The same is true in North Inland Region. The percentage of people who are able to live independently was equivalent in North Coastal Region (94.8%) to San Diego County overall, and slightly lower than California (95.4%) and the United States as a whole (95.6%) (Figure 18).

Supporting Indicators

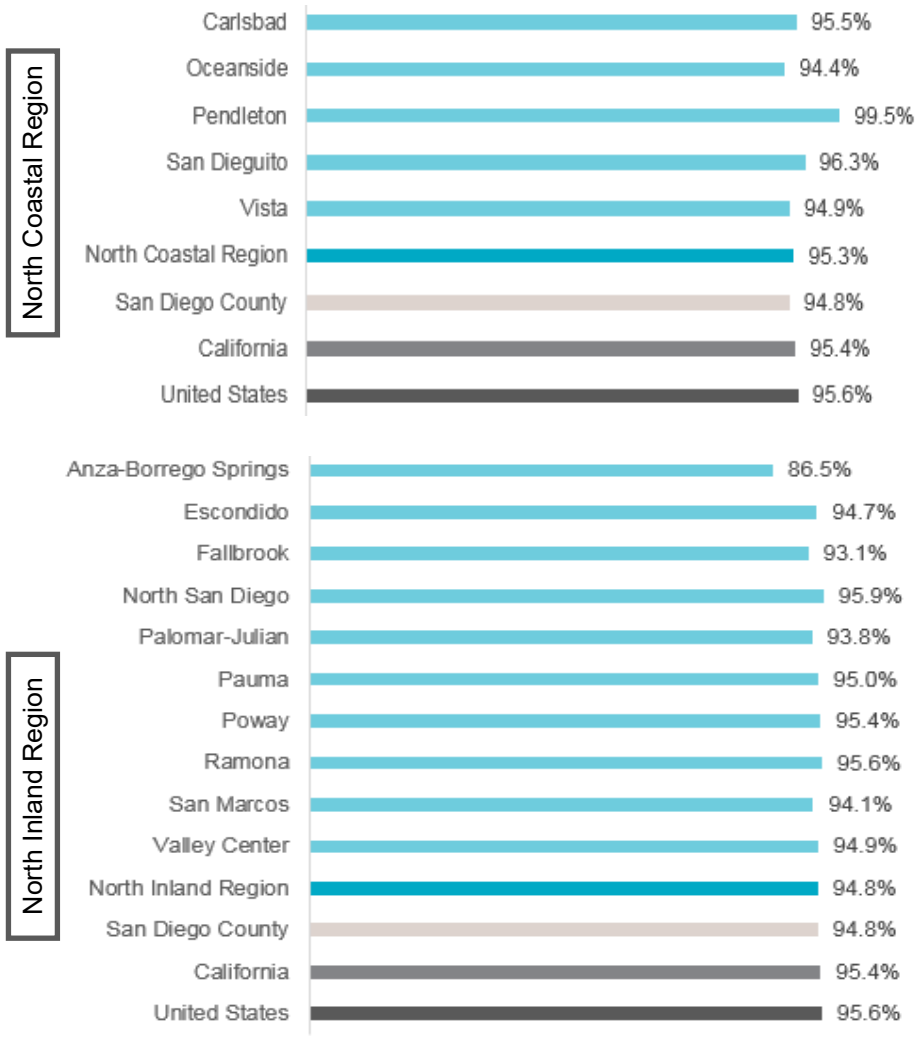
Disability Status

Disability is defined as a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business. Disability also contributes to an individual's ability to live independently. In 2015, 43,844 residents in North Coastal Region reported having a disability; In North Inland Region, 55,123 residents reported having a disability (Figure 19).

In North Coastal Region, approximately 1 in 12 residents had a disability. North Coastal Region had a similar proportion of residents who were disabled compared to the County overall. North Coastal Region and all its SRAs but Pendleton had percentages of residents with a disability lower than California and the United States overall. The SRA with the highest proportion of disabled residents was Oceanside, at over 1 in 10. The SRA with the lowest proportion of residents with a disability was Pendleton, at about 1 in 50.

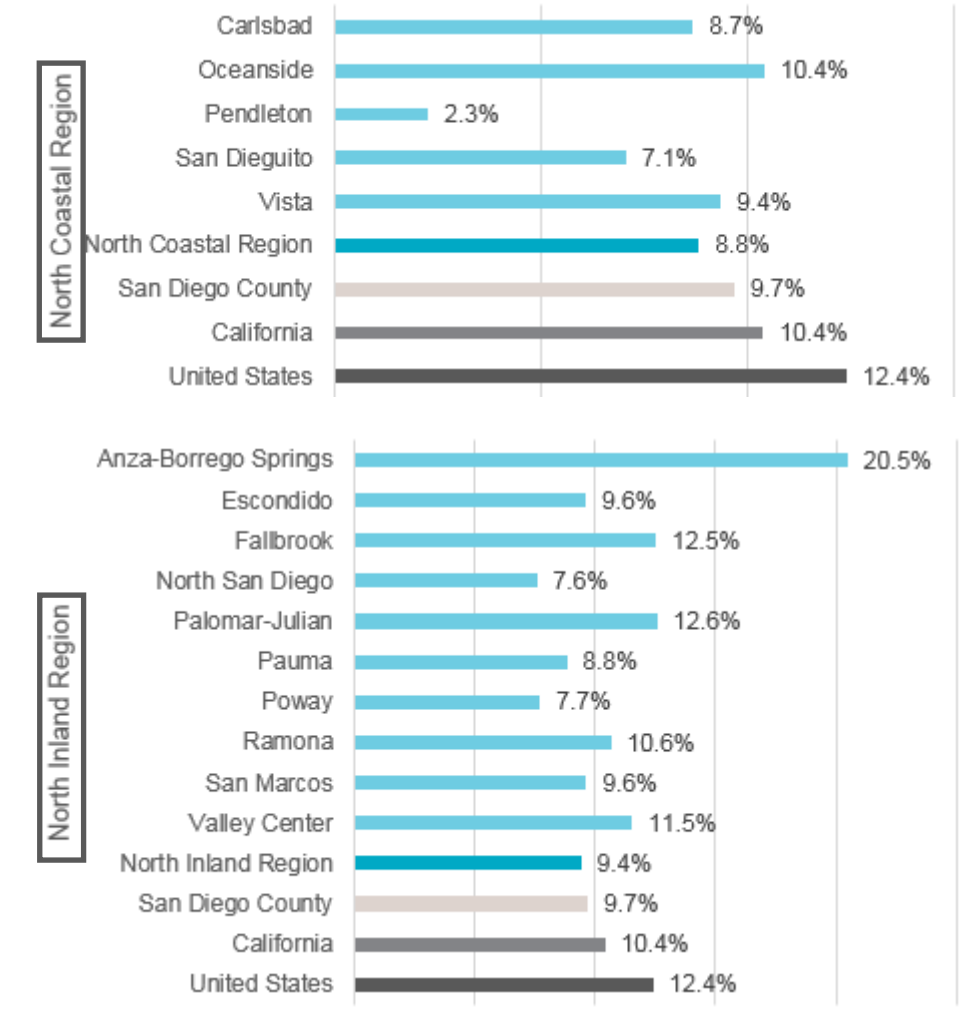
In North Inland Region, approximately 1 in 11 residents has a disability. North Inland Region had a similar proportion of residents who were disabled compared to the County overall. North Inland Region had a percentage of disabled residents lower than California and the United States overall. The SRA with the highest proportion of disabled residents was Anza-Borrego Springs, at over 1 in 5. The SRA with the lowest proportion of disabled residents was North San Diego, at about 1 in 13 (Figure 19). The most prevalent type of disability for residents ages 18 and over in North Coastal and North Inland Regions was ambulatory, meaning the person had serious difficulty walking or climbing stairs. The second most prevalent type of disability in the North

Figure 18. Quality of Life by Subregional Area, North County Regions, 2015.



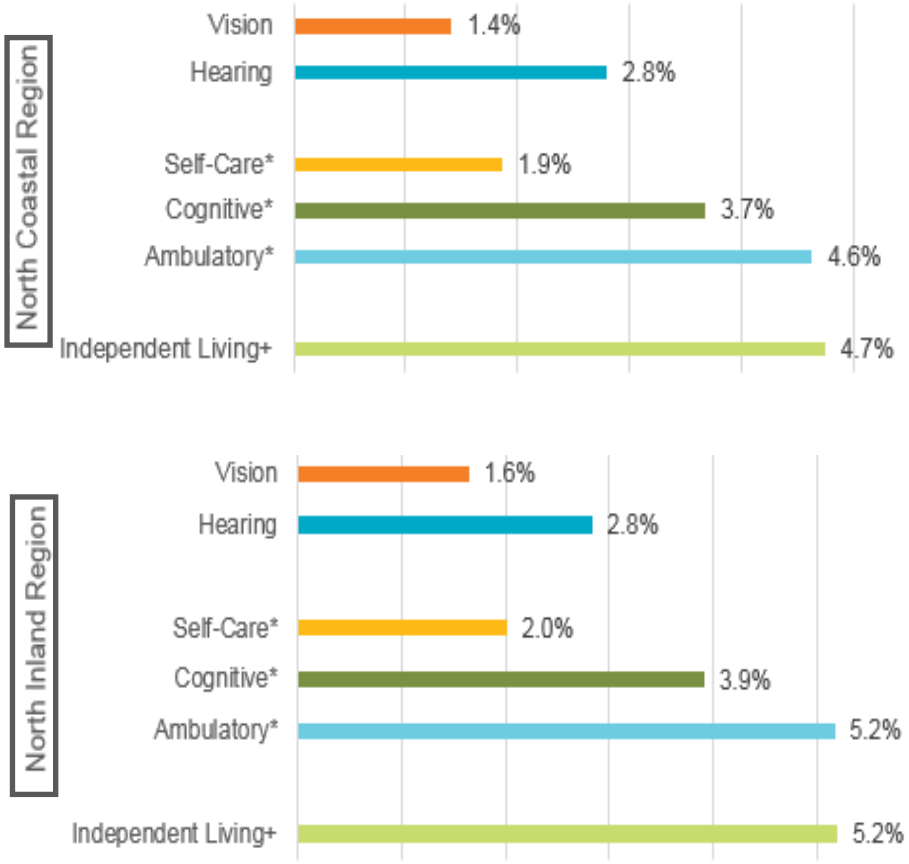
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2017.

Figure 19. Disability Status by Subregional Area, North County Regions, 2015.



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 20. Disability Status by Type, North County Regions, 2015.



Note: Percentage represents fraction out of total residents reporting disabilities (43,844 in North Coastal Region; 55,123 in North Inland Region). Percentages do not add to 100% because an individual may report having more than one kind of disability or difficulty.
**Cognitive, Ambulatory, and Self-Care excludes population under 5 years.*
+Independent living disabilities only calculated for 18+ population.
Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

County Regions was cognitive, meaning residents had serious difficulty concentrating, remembering, or making decisions due to a physical, mental, or emotional condition (Figure 20).

Internal Health Assessment

In this section, the results of additional internal and external health assessments are described. The purpose of this section is to help paint a more complete picture of the health status of San Diego residents.

HIV/AIDS Assessment

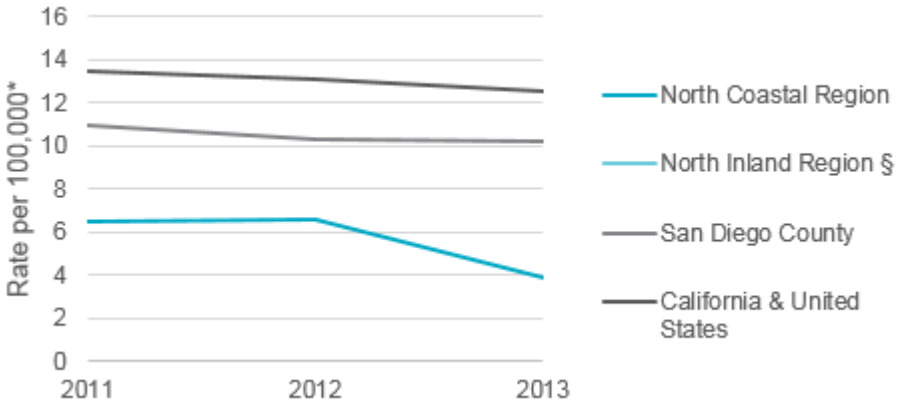
Human Immunodeficiency Virus, or HIV, is a virus that weakens a person's immune system by destroying important cells that fight disease and infection. Acquired Immunodeficiency Syndrome, or AIDS, refers to an advanced HIV infection, and is diagnosed when immune cell counts drop below a certain threshold, or a person with an HIV infection acquires another opportunistic infection due to their severely weakened immune system.

Since 2011, the incidence rates (new diagnoses) of HIV have declined in North Coastal Region. In 2013, the rate at which new cases of HIV were diagnosed was 3.9 cases per 100,000 people (Figure 21). The HIV incidence rate in North Coastal Region from 2011-2013 was consistently lower than the rate in San Diego County, California, and the United States.

Between 2010-2014, there were 2,438 new HIV diagnoses in the County, 9% of which were in the North Coastal Region, and 4% of which were in the North Inland Region. Of those newly diagnosed cases during that time period, 12% were female in North Coastal Region, and 17% were female in North Inland Region.

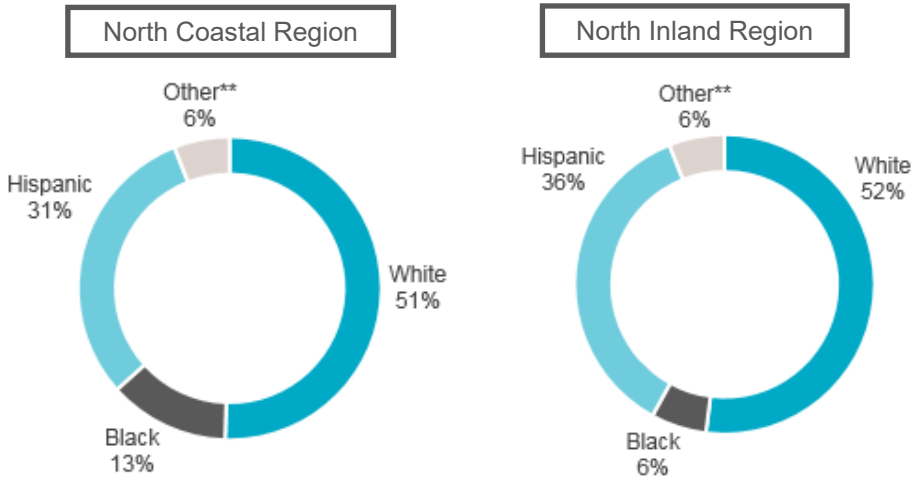
Of persons living with HIV/AIDS in the North Coastal Region between 2010-2014, 51% were white, 13% were black, 31% were Hispanic, and an additional 6% were either Asian/Pacific Islander, Native American, or their race/ethnicity was unknown. Of persons living with HIV/AIDS in the North Inland Region between 2010-2014, 52% were white, 6% were black, 36% were Hispanic, and an additional 6% were either Asian/Pacific Islander, Native American, or their race/ethnicity was unknown. (Figure 22).

Figure 21. HIV Incidence, North County Regions, 2010-2013.



Note: California and United States have nearly identical incidence rates and are represented by one line.
**Rate per 100,000 population.*
§Rates not calculated for less than 20 cases.
United States Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention. HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf. Accessed December 2017.
California Source: California Department of Public Health, Center for Infectious Diseases, Office of AIDS, Sacramento, California. California HIV Surveillance Report—2015. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California%20HIV%20Surveillance%20Report%20-%202015%20(Final%20Version%20Submitted%20for%20Approval).pdf. Accessed December 2017.
County and Regional Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), retrieved December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 22. Persons Living with HIV/AIDS, by Race/Ethnicity, North County Regions, 2010-2014.



***Includes Asian/Pacific Islander, Native American, and Unknown.*
Note: Percentages may not total to 100% due to rounding.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), HIV Epidemiology report 2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Health Assessment

Oral Health Assessment

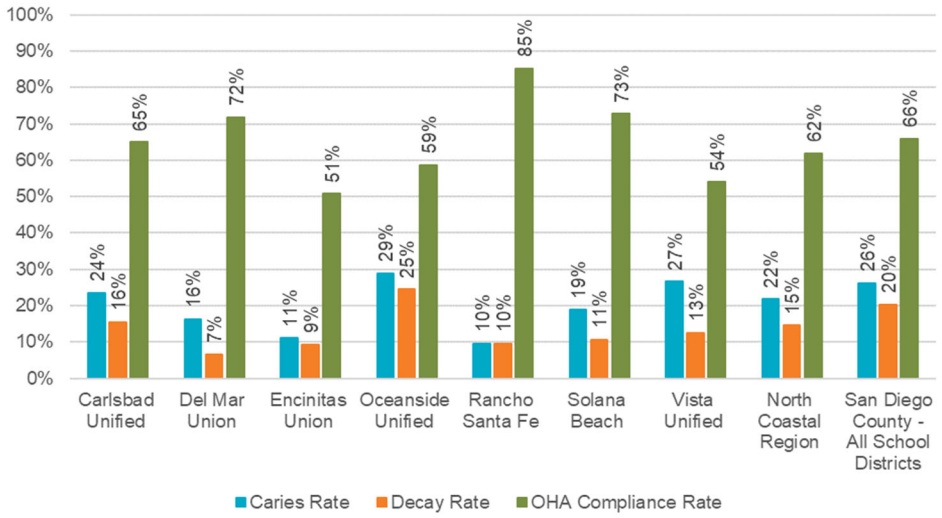
Assembly Bill 1433 requires schools to distribute the Oral Health Assessment (OHA) Form to parents who are registering their child in public school, in either kindergarten or first grade. The form collects general demographic information about the student from the parent, and information about dental caries and decay from a licensed dental professional. Schools must collect the Oral Health Assessment Forms by May 31 of the school year and are responsible to report totals to their district. All Regions are required to collect this data.

The summary report submitted by each district contains information about the number and percentage of children with an OHA on file, which is also called the compliance rate, for the current school year. Once reports are submitted to the local Child Health and Disability Prevention (CHDP) Program, data are analyzed. Although the following results provide insight on current oral health issues among school children, findings should be interpreted with caution because of potential data accuracy and reporting issues. All school districts are required to participate.

For this assessment, data for North Coastal and North Inland Region are presented separately due to the high number of school districts included in the North Inland Region (Figures 23 and 24).

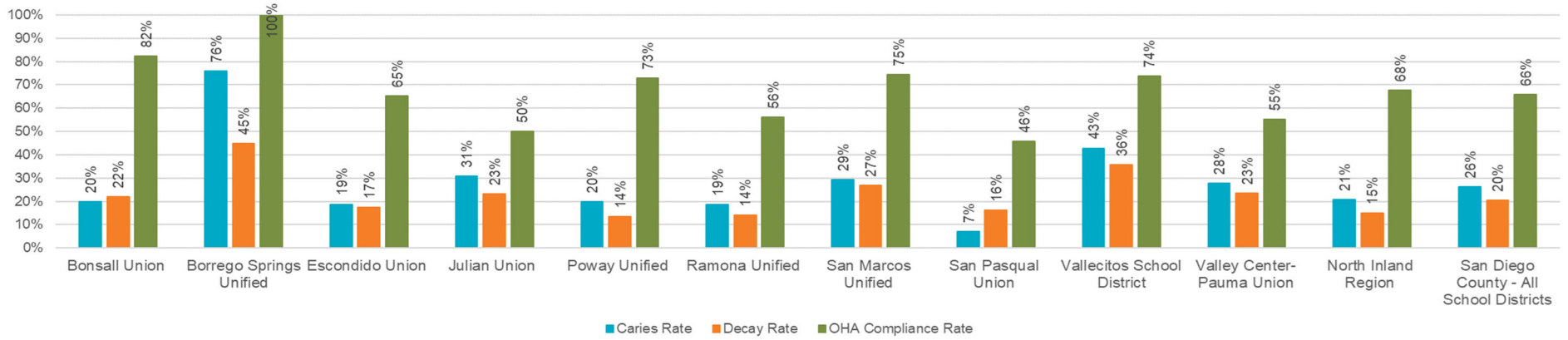
Out of 3,881 eligible kindergartners and first graders in North Coastal Region during the 2017-2018 school year, 2,403 (62%) participated in the oral health assessment (Figure 23). Approximately 22% (525) were experiencing dental caries. Of those who participated, 15% (349) were experiencing dental decay.

Figure 23. Oral Health Assessment (OHA) Results, North Coastal Region, 2017-2018.



Note: In geographies where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.
Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

Figure 24. Oral Health Assessment (OHA) Results, North Inland Region, 2017-2018.



Note: In geographies where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.
Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

Compared to the County overall, participating students in the North Coastal Region had lower rates of dental caries (22%; County 26%). Participating students in the North Coastal Region also had lower rates of decay (15%; County 20%) than the County overall. The compliance (participation) rate in North Coastal Region was lower than the County overall (62%; County 66%).

Out of 3,928 eligible kindergartners and first graders in North Inland Region during the 2017-2018 school year, 2,659 (68%) participated in the oral health assessment (Figure 24). Approximately 21% (554) were experiencing dental caries. Of those who participated, 15% (399) were experiencing dental decay.

Compared to the County overall, participating students in the North Inland Region had lower rates of dental caries (21%; County 26%). Participating students in the North Inland Region had lower rates of decay (15%; County 20%) than the County overall. The compliance (participation) rate in North Inland Region was higher than the County overall (68%; County 66%).

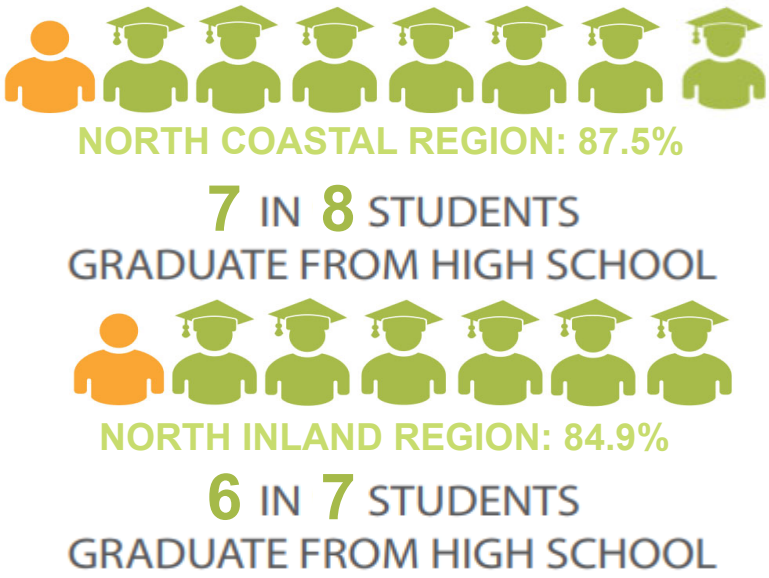
Area of Influence: Knowledge

Knowledge and access to education play an important part in the ability of an individual to "live well." Learning throughout the lifetime, for all individuals, impacts their health status. Education is measured by looking at the percentage of the population aged 25+ that currently has a high school diploma or GED. Graduation from high school is required for individuals to either further their education by going on to college, or in most cases, to get a job. Both of these factors influence the health of an individual.

Live Well San Diego Indicator #3: Education

Education is measured as the percentage of the population with a high school diploma or equivalent. Education has a beneficial influence on a variety of economic, social and psychological factors which impact the health and well-being of a population.

KNOWLEDGE



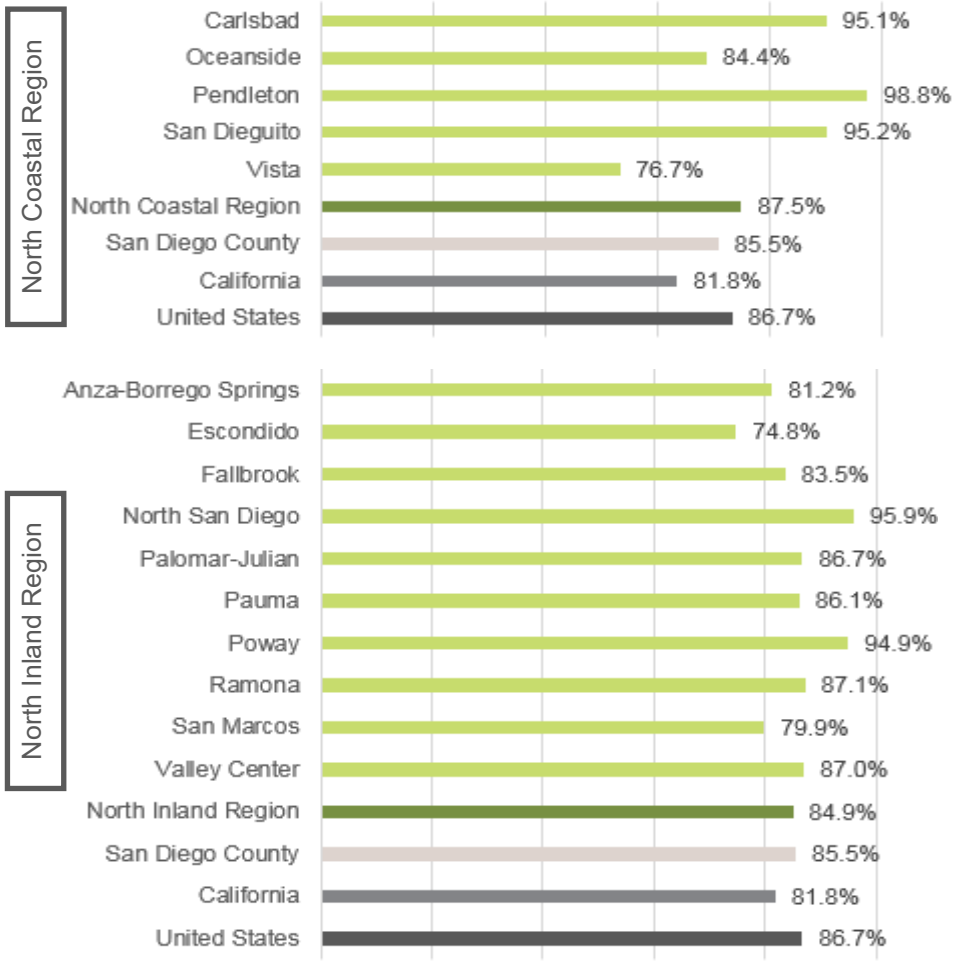
San Diego County:	California:	United States:
85.5%	81.8%	86.7%

In North Coastal Region, 87.5% of adults aged 25 and over had a high school diploma or equivalent. This estimate was higher than the County as a whole, California, and the United States overall in 2015. In North Inland Region, 84.9% of adults aged 25 and over had a high school diploma or equivalent. This estimate was lower than the County as a whole and the United States overall, but higher than California in 2015.

Within North Coastal Region, the SRA with the highest percentage of high school graduates was Pendleton, where 98.8% of residents reported having a high school diploma or equivalent. The SRA with the lowest percentage was Vista, where only 76.7% of residents had a high school diploma or equivalent (Figure 25).

Within North Inland Region, the SRA with the highest percentage of high school graduates was North San Diego, where 95.9% of residents reported having a high school diploma or equivalent. The SRA with the lowest percentage was Escondido, where only 74.8% of residents had a high school diploma or equivalent (Figure 25).

Figure 25. Education, North County Regions by Subregional Area, 2015.



"Education" refers to percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1501. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

Overall Educational Attainment

About seven-tenths of North Coastal Region residents had at least some college education, with one-third having some college or an associates degree, one-quarter having a bachelors degree, and one-seventh having a graduate degree (Figure 26).

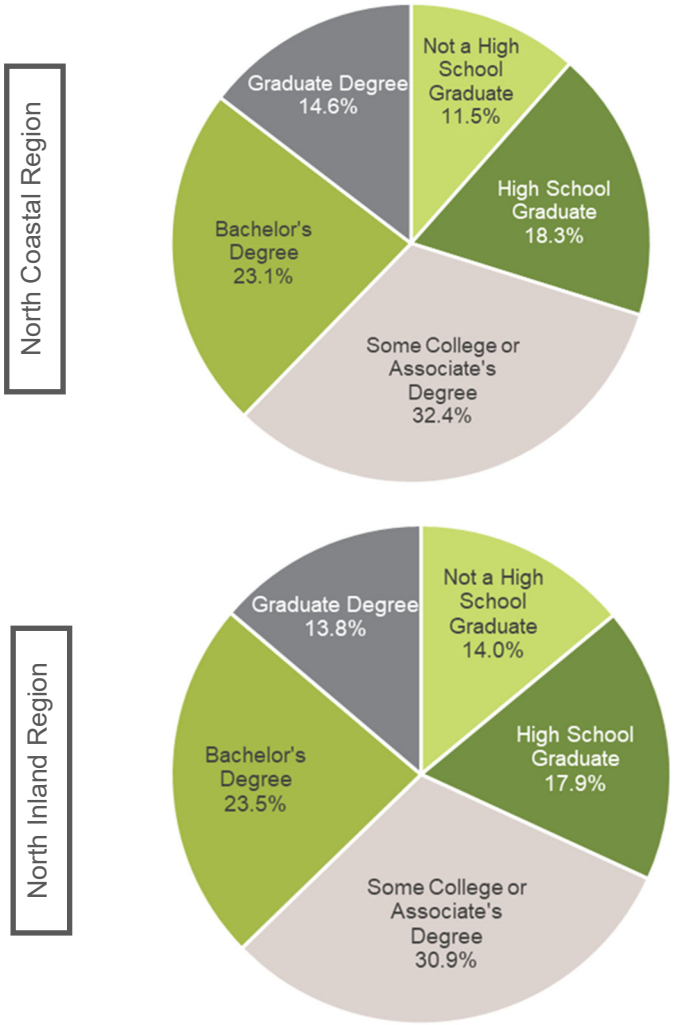
About seven-tenths of North Inland Region residents had at least some college education, with three-tenths having some college or an associates degree, one-quarter having a bachelors degree, and almost one-seventh having a graduate degree (Figure 26).

School Enrollment

In 2015, 86.5% of school-aged residents (aged 3-24 years) were enrolled in school in the North Coastal Region. This figure was lower than enrollment in San Diego County (90.2%), California (90.6%), and the United States as a whole (88.5%; Figure 27). The SRA with the highest school enrollment was San Dieguito. The SRA with the lowest school enrollment was Pendleton. It is important to note that the Pendleton SRA is primarily made up of the Camp Pendleton military base.

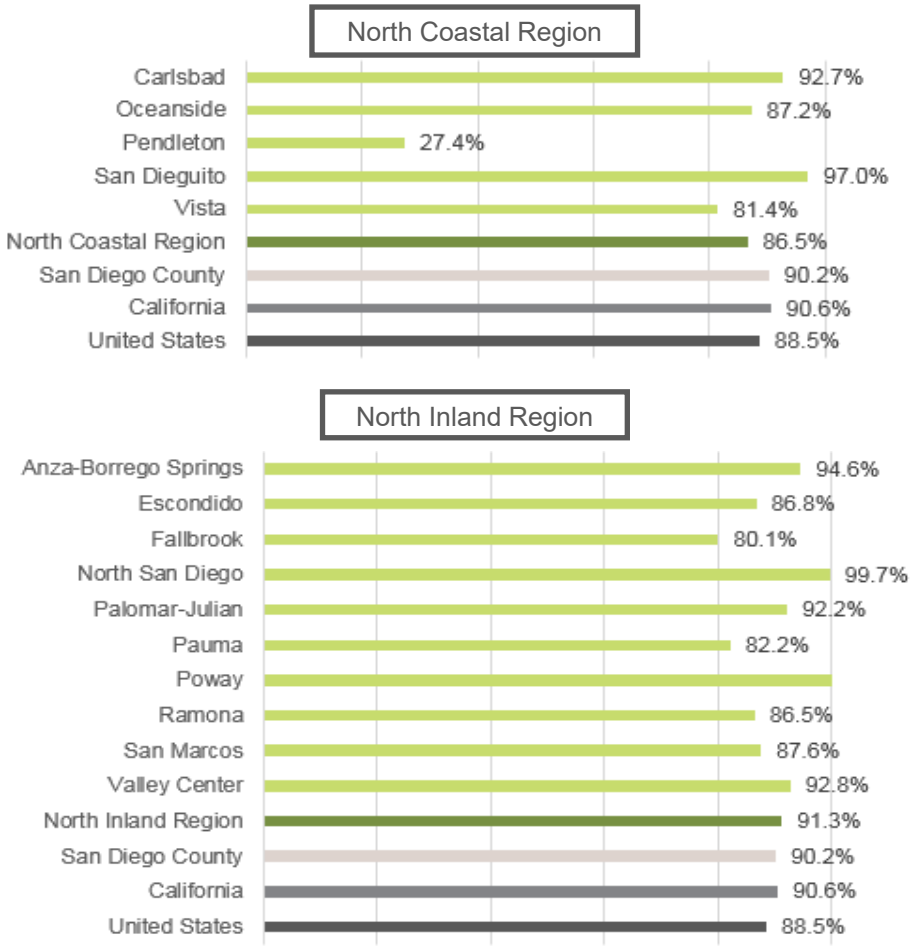
In 2015, 91.3% of school-aged residents (aged 3-24 years) were enrolled in school in the North Inland Region. This figure was higher than enrollment in San Diego County (90.2%), California (90.6%), and the United States as a whole (88.5%; Figure 27). The SRA with the highest school enrollment was North San Diego. The SRA with the lowest school enrollment was Fallbrook.

Figure 26. Overall Educational Attainment, North County Regions, 2015.



Note: "Educational Attainment" refers to the percent of population 25 years and older at the listed education level.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP02.
Prepared by: Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 27. School Enrollment, North County Regions by Subregional Area, 2015.



"School enrollment" refers to enrollment in regular school, either public or private, which includes nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1401. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Knowledge Assessment

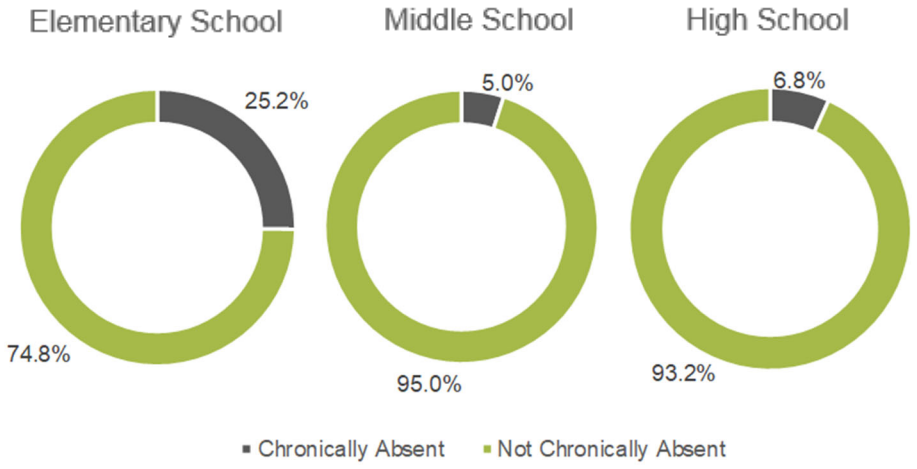
In this section, the results of an additional external knowledge assessment is described. The purpose of this section is to help paint a more complete picture of the health of San Diego residents.

United Way Vista Baseline Report: A Starting Point

The Vista Partnership for Children, anchored by the United Way, is focusing on three areas along the roadmap continuum in order to better prepare children for school and learning, and ultimately helping children to graduate from high school with skills and courses necessary for college admission within the University of California and California State University systems.

The purpose of the baseline report is to document the starting point in the Vista community's journey towards the goals stated above. All relevant data to documenting whether or not goals were met are contained within this report. The full report can be accessed here: https://uwsd.org/files/galleries/Vista_Baseline_Report.pdf

Figure 28. School Attendance, Vista Unified School District, School Year 2013-2014.



Source: Vista Unified School District; Vista Partnership for Children; The Children's Initiative.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

For the purposes of this assessment, two relevant indicators are discussed.

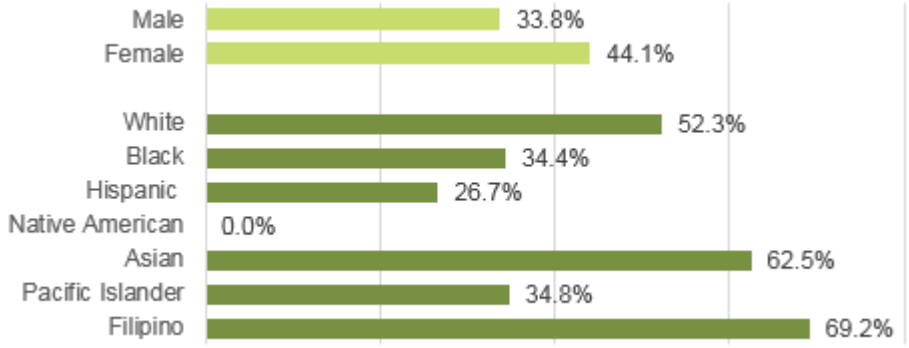
School Attendance

Attendance is a strong predictor of whether a child will succeed in school or not. Poor attendance in kindergarten puts students at risk for not graduating from high school later on. Chronic absenteeism is defined as missing more than nine days of school for elementary school students, and more than 17 days for middle and high school students. During the 2013-2014 school year, more than 25% of elementary school students were chronically absent (Figure 28).

A-G Course Requirements

A-G course requirements refer to high school courses that are required for admission to either the University of California or California State University systems. At the end of the 2012-2013 school year, less than half of female Vista Unified 12th grade graduates had completed these courses. About one-third of male 12th grade graduates had completed these courses. When separated out by Race/ Ethnicity, a higher proportion of Filipino students completed A-G course requirements (Figure 29).

Figure 29. A-G Course Requirement Completion Among 12th Grade Graduates, Vista Unified School District, 2012-2013.



Source: California Department of Education (CDE), Educational Demographic Unit. DataQuest [Data files]. Retrieved from http://data1.cde.ca.gov/dataquest; Vista Partnership for Children; The Children's Initiative.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Area of Influence: Standard of Living

STANDARD OF LIVING

The Standard of Living Area of Influence concerns residents having enough resources to live a quality life. Important indicators include unemployment rate because having a steady job and making enough money to live a quality life are both crucial to an individual's standard of living. San Diego County is an expensive place to live, as the cost of housing here is higher than it is in most other urban areas across the United States. Housing affordability is measured by the percentage of individuals who spend less than 30% of their income on housing. Being able to afford adequate housing and still being able to afford other necessities (health care, food, transportation, etc.) reflects an individual's ability to "live well."

Live Well San Diego Indicator #4: Unemployment Rate

Unemployment rate is measured as the percentage of the total labor force that is unemployed. The rate of unemployment has a strong negative influence on the financial health and overall well-being of a population.

In 2015, 6.1% of North Coastal Region residents eligible and seeking work were unemployed. The unemployment rate for North Coastal Region was lower in 2015 than it was in either San Diego County (6.3%), California (7.5%), or the United States as a whole (6.4%; Figure 30). The SRA with the highest unemployment rate was Pendleton, where 10.1% of people eligible and seeking work were unemployed.

In 2015, 5.5% of North Inland Region residents eligible and seeking work were unemployed. The unemployment rate for North Inland Region was lower in 2015 than it was in either San Diego County (6.3%), California (7.5%), or the United States as a whole (6.4%; Figure 30). The SRA with the highest unemployment rate was Palomar-Julian, where 8.6% of people eligible and seeking work were unemployed.

STANDARD OF LIVING

NORTH COASTAL REGION

6.1 % OF PEOPLE IN THE TOTAL LABOR FORCE ARE UNEMPLOYED

NORTH INLAND REGION

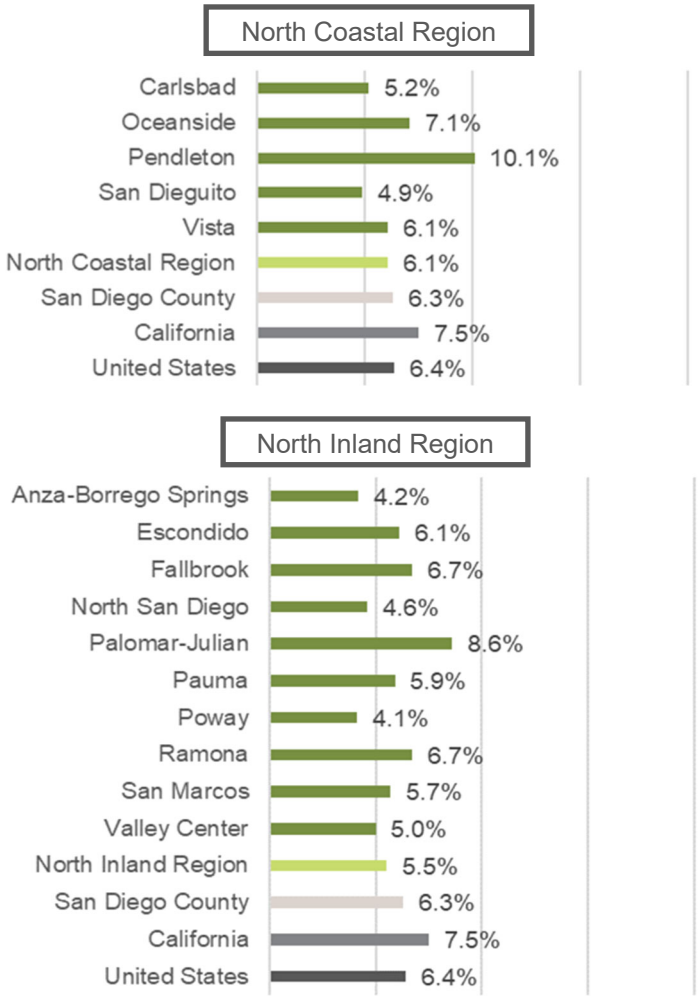
5.5 % OF PEOPLE IN THE TOTAL LABOR FORCE ARE UNEMPLOYED

San Diego County: **6.3%**

California: **7.5%**

United States: **6.4%**

Figure 30. Population Unemployed*, North County Regions by Subregional Area, 2015.

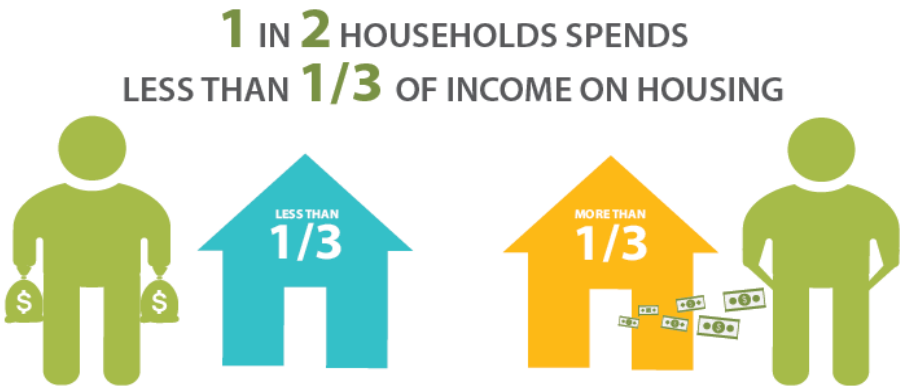


**"Unemployment" refers to the population unemployed, of those eligible and seeking work.*
Source: 2015 Unemployment Rate. ESRI Community Analyst.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

STANDARD OF LIVING

Live Well San Diego Indicator #5: Income

Income is measured as the percentage of the population spending less than 1/3 of income on housing. Households who spend more than 1/3 of household income for housing may have difficulty paying for necessities such as food, transportation, or medical care.



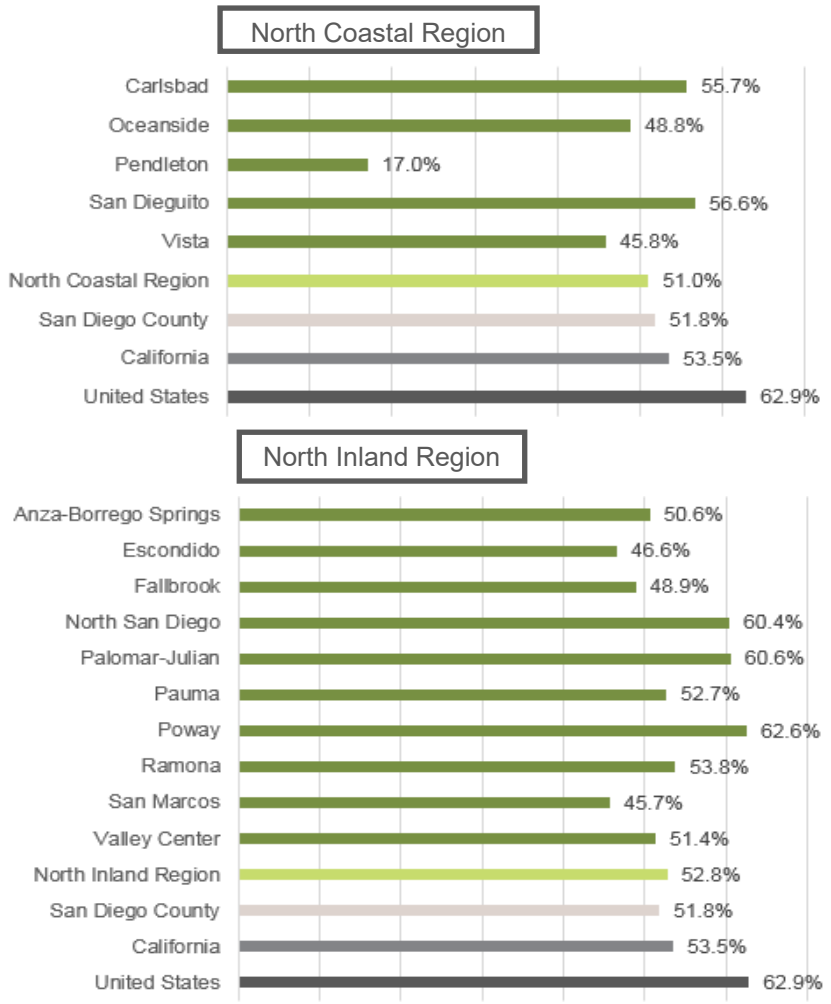
NORTH COASTAL REGION: 51.0%
NORTH INLAND REGION: 52.8%

San Diego County:	California:	United States:
51.8%	53.5%	62.9%

Does not include cash rent or those with zero or negative income.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table S2503.

In North Coastal Region, a large proportion of residents (51.0%) spent less than one-third of their income on housing, which was smaller than in San Diego County (51.8%), California (53.5%), and the United States overall (62.9%). About half of households in the North Coastal Region spent less than one-third of their income on housing, a pattern that holds true across all SRAs within the Region with the exception of the Pendleton SRA; it is important to note that the Pendleton SRA was primarily made up of the Camp Pendleton military base. The SRA with the highest percentage of households spending less than one-third of their income on housing within the North Coastal Region was San Dieguito (Figure 31).

Figure 31. Households Spending Less Than 30% of Income on Housing, North County Regions, 2015



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table S2503.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

In North Inland Region, a large proportion of residents (52.8%) spent less than one-third of their income on housing, which was higher than in San Diego County (51.8%), but lower than California (53.5%), and the United States overall (62.9%). About half of households in the North Inland Region spent less than one-third of their income on housing, a pattern that holds true across all SRAs within the Region. The SRA with the highest percentage of households spending less than one-third of their income on housing within the North Inland Region was Poway (Figure 31).

Supporting Indicators

Occupation

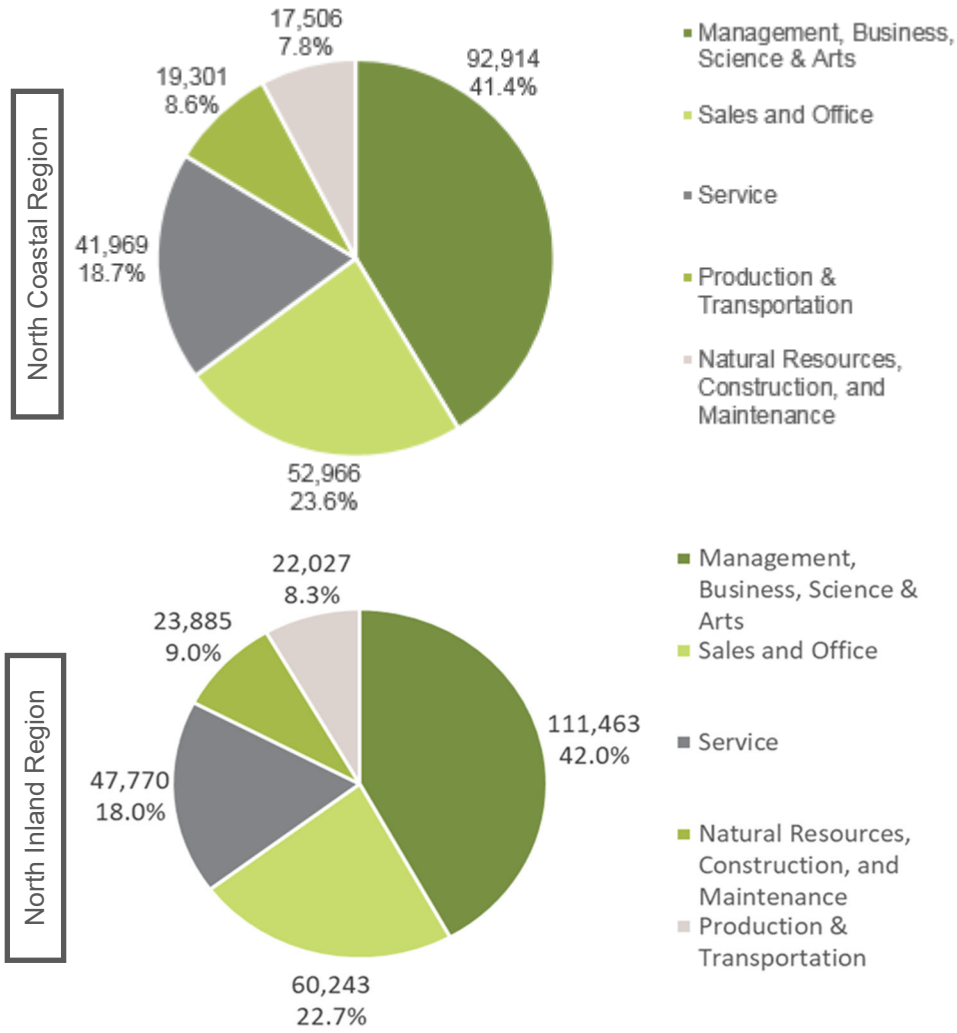
A person's educational attainment likely influences their career. Industry and occupation determine level of income, which in turn reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Certain industries and occupations come with inherent environmental or occupational risks, which may influence an individual's health.

Management, business, science, and arts includes any occupation in business, finances, computer engineering, architecture, life science-related jobs, as well as community and social services, legal, education, arts, and healthcare professionals and techs. *Service* refers to healthcare support, protective services such as firefighting and law enforcement, food preparation and service, custodial and maintenance, and personal care. *Sales and office* refers to anything related to sales or office and administrative support. *Natural resources, construction, and maintenance* refers to farming, fishing, forestry, construction, extraction, installation, maintenance and repair. *Production and transportation* includes anything related to production, transportation or material moving.

In North Coastal Region, over two-fifths of people who are over the age of 16 and employed in a civilian capacity were involved in the management, business, sciences and arts sectors. The sector with the least involvement is the natural resources, construction, and maintenance occupations (Figure 32).

In North Inland Region, over two-fifths of people who were over the age of 16 and employed in a civilian capacity were involved in the management, business, science and arts sectors. The sector with the least involvement was the production and transportation occupations (Figure 32).

Figure 32. Labor Force by Occupation, North County Regions, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Industry

When broken down further by industry, a more detailed picture of the sectors employing the most North County residents emerges.

In North Coastal Region, the industry employing the highest percentage of residents was the educational services, which includes health care and social assistance industries, at just under 1 in 5 of the employed civilian population. The next largest industry was the professional and scientific industry, including management, administrative, and waste management services, at over 1 in 7 residents. The least populous industry was agriculture, with only 1 in 60 of the eligible population employed (Figure 33).

In North Inland Region, the industry employing the highest percentage of residents is the educational services, which includes health care and social assistance industries, at just over 1 in 5 of the employed civilian population. The next largest industry was the professional and scientific industry, including management, administrative, and waste management services, at over 1 in 7 residents. The least populous industry was agriculture, with only 1 in 40 of the eligible population employed (Figure 33).

Median Household Income and Person Per Household Income

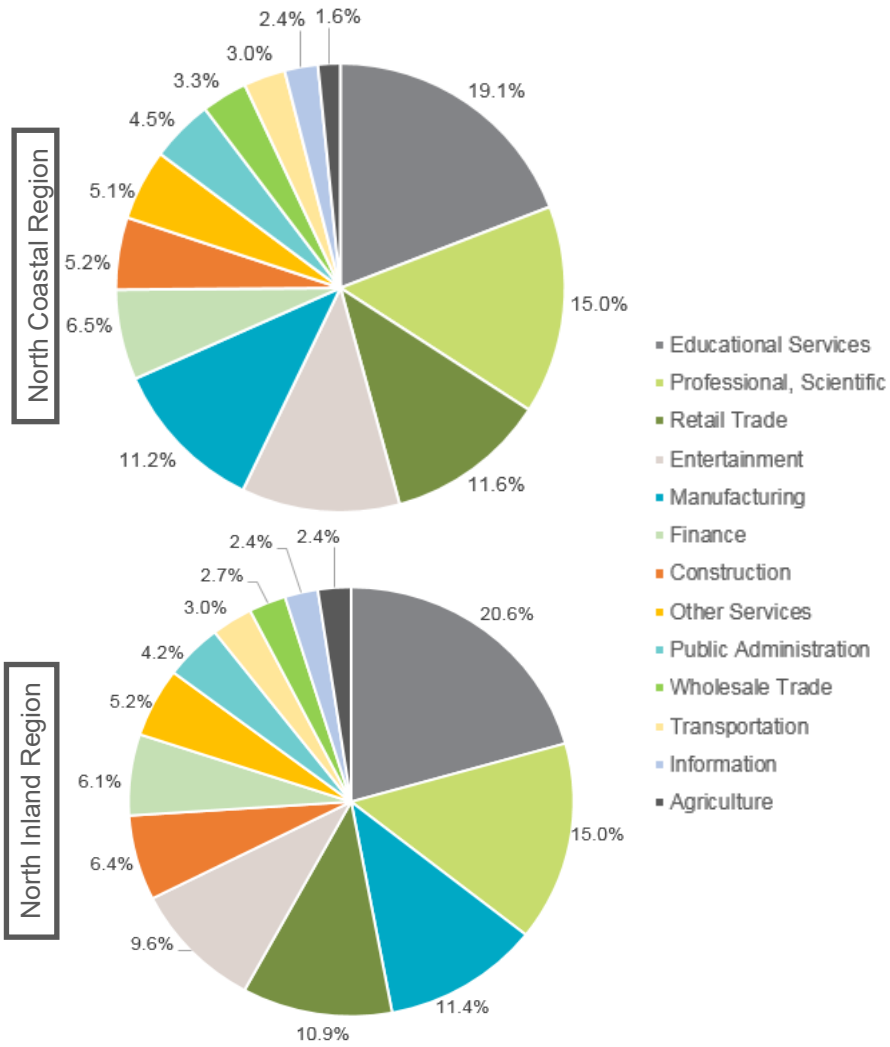
Income reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Household income includes income earned by the householder and all other people 15 years and older in the household, whether or not they are related to the householder. Median household income is determined by looking at the distribution of income across all households, including those with no income, and picking the point at which half the distribution falls below it, and half the distribution falls above it.

The median household income in North Coastal Region was almost $73,000 per year. This was higher than San Diego County as a whole, California, and the United States (Figure 34).

The median household income in North Inland Region was over $76,000 per year. This was higher than San Diego County as a whole, California, and the United States overall (Figure 35).

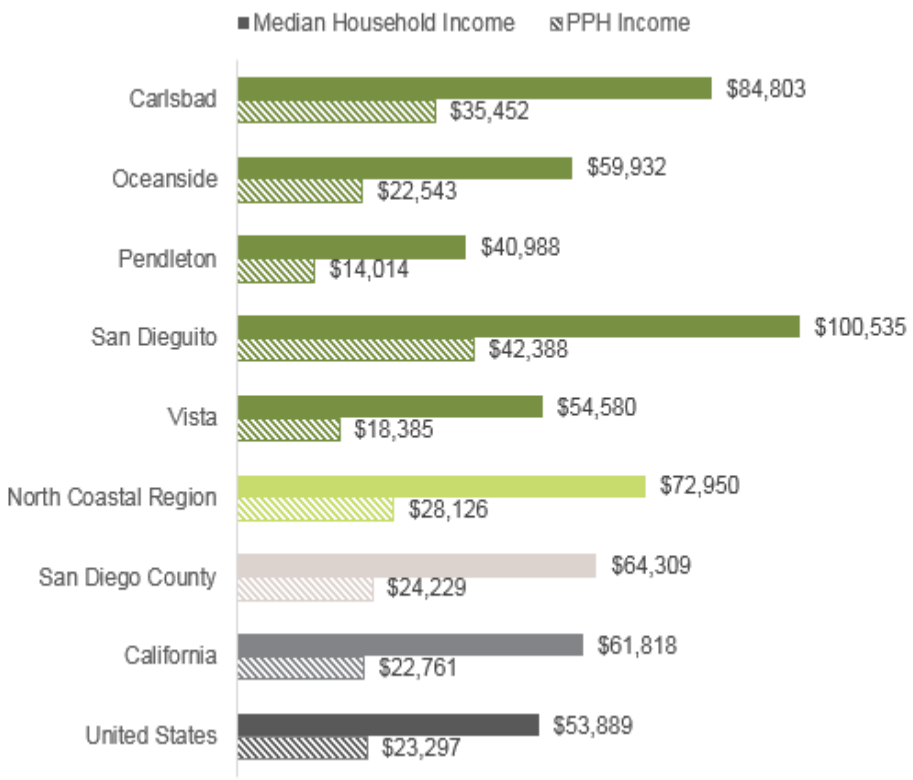
Per person household (PPH) income is determined by taking the median and dividing it by the average number of people per household, which was 2.59 people in North Coastal Region, and 2.78 in North Inland Region. The PPH Income in North Coastal Region was about $28,000 per year, and about $27,500 per year in North Inland

Figure 33. Occupation by Industry, North County Regions, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 34. Income, North Coastal Region by Subregional Area, 2015.

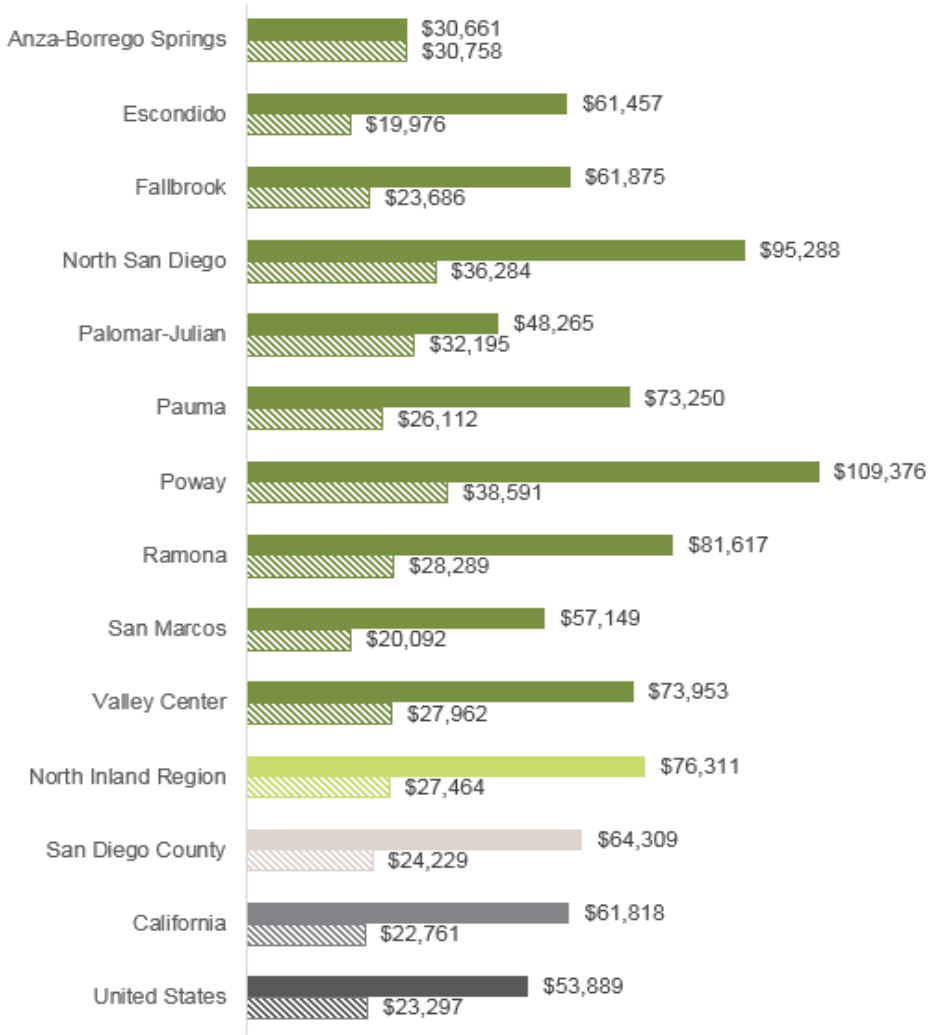


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP02, DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Region. This was higher than San Diego County, California, and the United States overall (Figure 34 and Figure 35).

Socioeconomic status is defined as a composite measure that typically incorporates economic, social, and work status. Economic and social status are measured by income, and work status is measured by occupation; each status is considered an indicator, and these indicators are related but do not overlap.

Figure 35. Income, North Inland Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP02, DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Cost of Living

According to the Consumer Price Index compiled by the U.S. Bureau of Labor Statistics, prices for goods, services and shelter rose 1.7% within the first six months of 2017. It was noted that the increase was primarily influenced by rising costs of shelter.[†] According to a study by Cushman and Wakefield, only 26% of households in San Diego can afford median-priced homes.[§]

The median rent in North Coastal Region was $1,646 per month. The most expensive SRA to rent in was San Dieguito; the least expensive was Vista. The median rent in North Coastal Region was higher than San Diego County, California, and the United States as a whole (Figure 36).

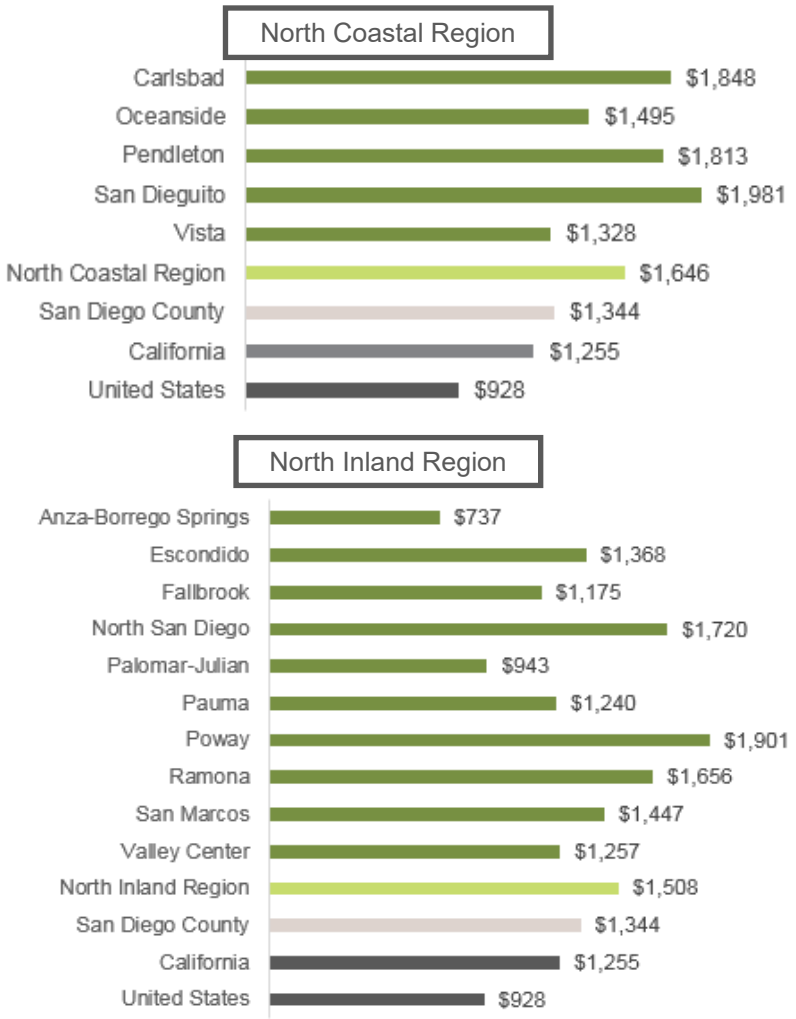
The median rent in North Inland Region was $1,508 per month. The most expensive SRA to rent in was Poway; the least expensive was Anza-Borrego Springs. The median rent in North Inland Region was higher than San Diego County, California, and the United States as a whole (Figure 36).

In the United States, the median house value was below $200,000. In North Coastal Region, the median house value was about $515,000. The SRA with the highest median house value was San Dieguito, at over $894,000. The SRA with the lowest median house value was Vista, at just under $364,000. The median house value in North Coastal Region was higher than San Diego County, California, and the United States as a whole (Figure 37).

In North Inland Region, the median house value was about $434,000. The SRA with the highest median house value was Poway, at over $590,000. The SRA with the lowest median house value was Anza-Borrego Springs, at $161,000. The median house value in North Inland Region was higher than San Diego County, California, and the United States as a whole (Figure 37).

In the North Coastal Region, about one-half of householders owned the home they lived in. About two-fifths of housing units were rented. About 1 in 13 housing units were unoccupied. The highest proportion of rented units were within the Pendleton Diego SRA. Carlsbad had the highest number of owner-occupied units (Figure 38).

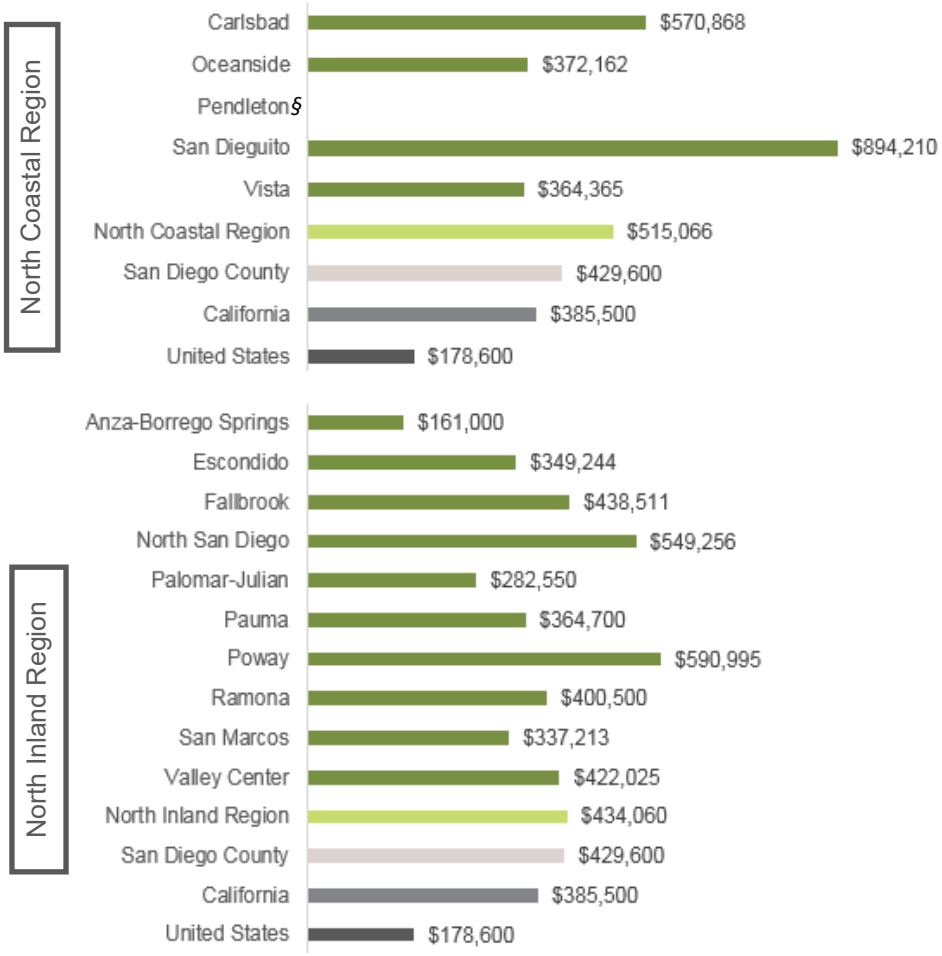
Figure 36. Median Gross Rent, North County Regions by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

[†] United States Department of Labor, Bureau of Labor Statistics. Consumer Price Index, San Diego—First Half 2017. https://www.bls.gov/regions/west/news-release/2017/consumerpriceindex_sandiego_20170714.htm#tableA. Accessed July 23, 2018.
[§]Cushman & Wakefield. San Diego MARKETBEAT Multi-Family Spring 2018. http://www.cushmanwakefield.com/en/research-and-insight/unitedstates/san-diego-multifamily-snapshot. Accessed June 25, 2018.

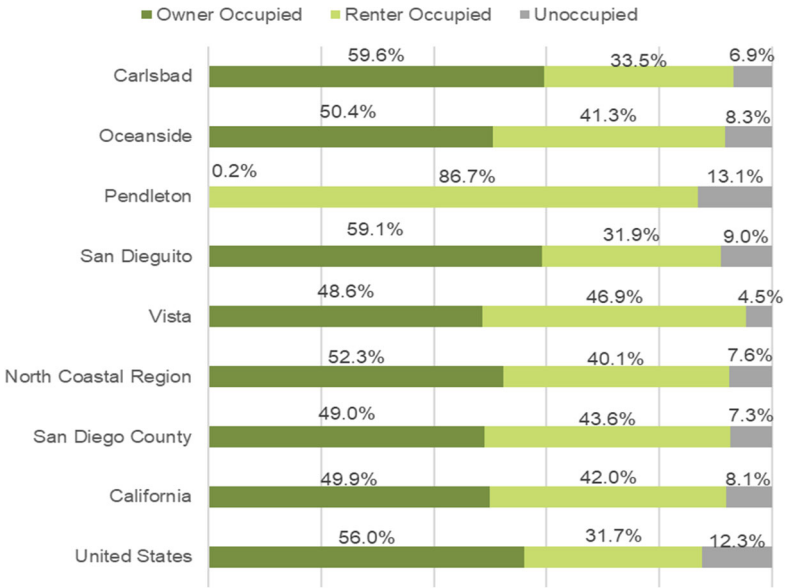
Figure 37. Median House Value, North County Regions by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
§ Unstable estimates
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In the North Inland Region, about three-fifths of householders owned the home they lived in. Approximately one-third of housing units were rented. About 1 in 15 housing units were unoccupied. The highest proportion of rented units were within the Escondido SRA. Poway and Valley Center had the highest number of owner-occupied units (Figure 39).

Figure 38. Housing Occupancy, North Coastal Region by Subregional Area, 2015.



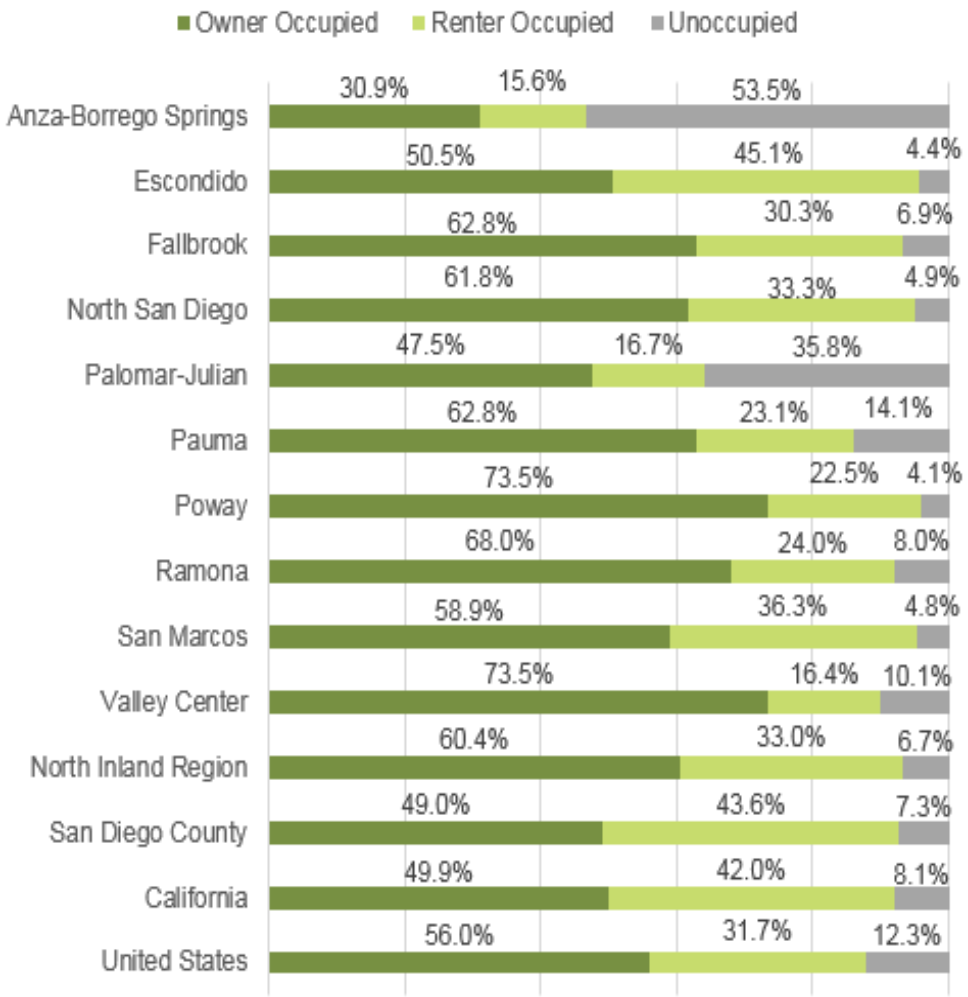
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

Poverty

Poverty is determined to be when a person or group of people lack human needs because they cannot afford them – including basic necessities such as clean water, adequate nutrition, health care, education, clothing, and shelter. Families or people with income below a certain limit are considered to be below the poverty level. Poverty level for a household is determined, in part, by the number of people in the household who must be supported by the combined household income.

STANDARD OF LIVING

Figure 39. Housing Occupancy, North Inland Region by Subregional Area, 2015.



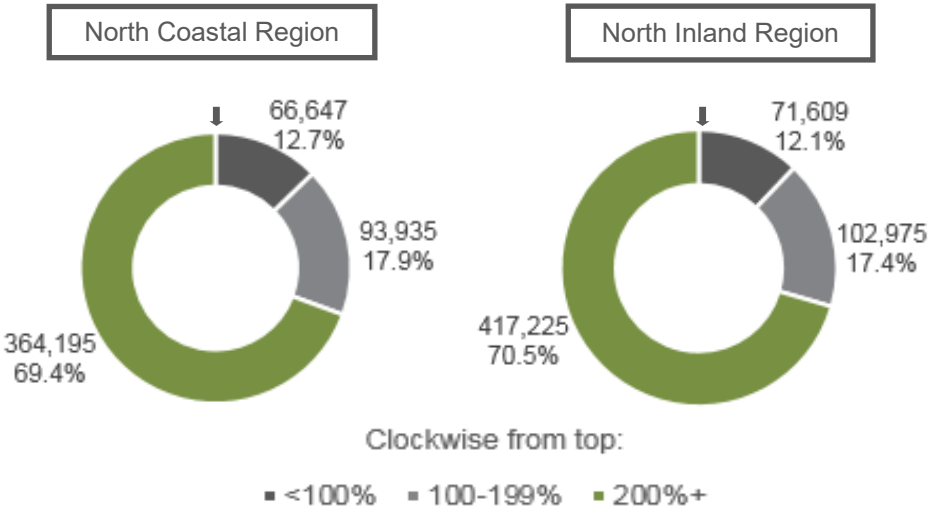
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

In North Coastal Region, about 1 in 8 people lives below the poverty line, and in North Inland Region, about 1 in 8 people live below the poverty line (Figure 40). It is generally accepted that in order to be able to afford basic necessities, an individual or household must be at or above 200% of the poverty level. With that standard, nearly 1 in 3 people lived without adequate financial resources in both North Coastal Region and North Inland Regions.

Public Program Participation

Many San Diegans rely on public assistance to make ends meet. In 2015, 4.0% of households within the North Coastal Region received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 4.0% received CalFresh benefits. The SRA with the greatest percentage of families with children under 18 receiving benefits was Oceanside. The SRA with the greatest proportion of households receiving CalFresh benefits was Oceanside (Figure 41).

Figure 40. Population by Poverty Level, North County Regions, 2015.

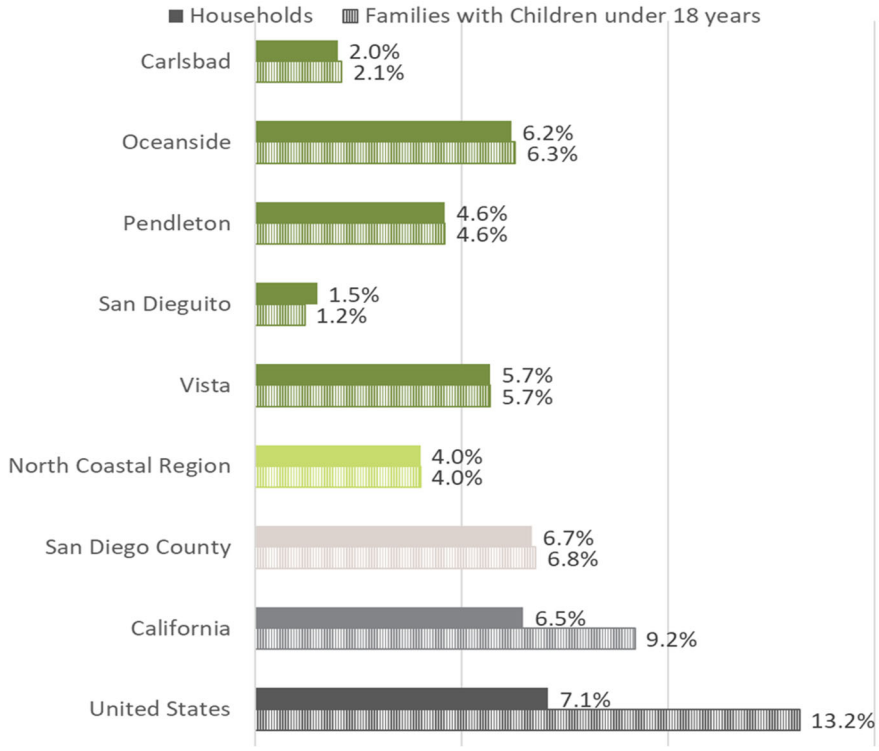


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table B17024.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

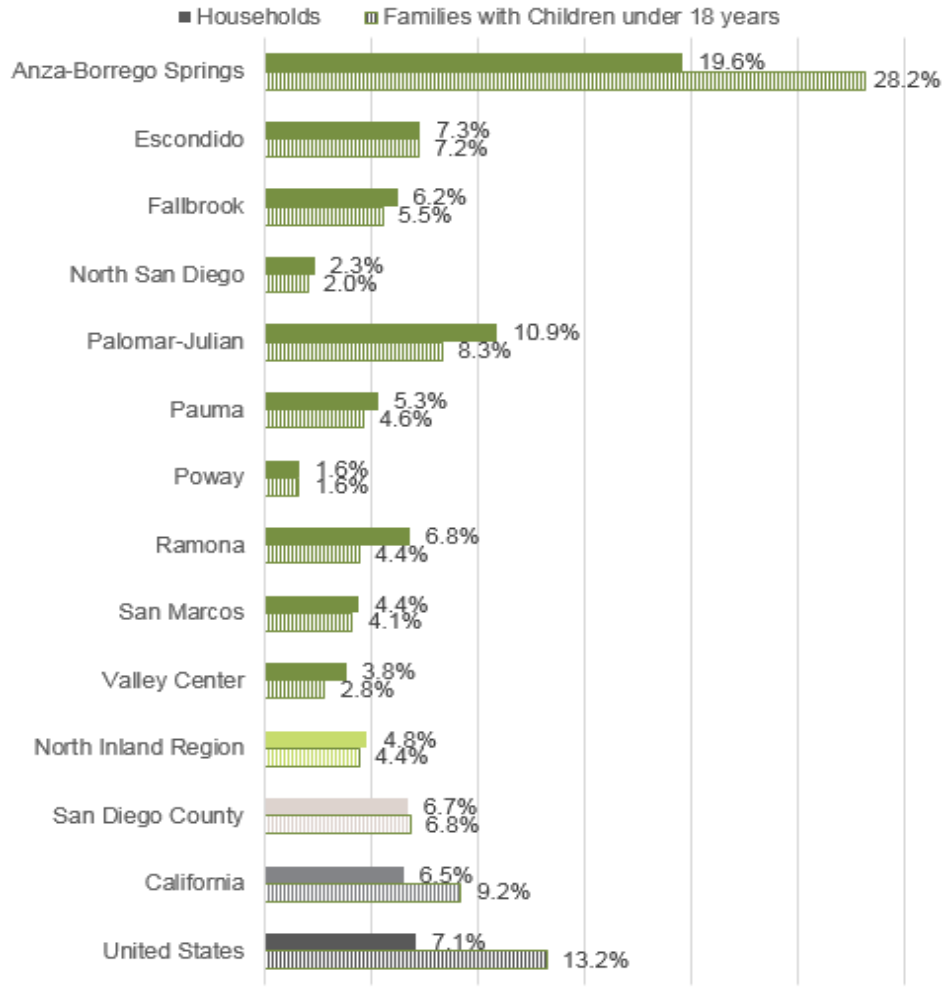
In 2015, 4.8% of households within the North Inland Region received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 4.4% received CalFresh benefits. The SRA with the greatest percentage of families with children under 18 receiving benefits was Anza-Borrego Springs. The SRA with the greatest proportion of households receiving CalFresh benefits was also Anza-Borrego Springs (Figure 42).

Figure 41. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, North Coastal Region, 2015



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B22022.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 42. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, North Inland Region, 2015



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B22022.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Of the nearly 525,000 people living in North Coastal Region, just over one-quarter relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or VA health care coverage; Figure 43).

Of the nearly 592,000 people living in North Inland Region, nearly one-third relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or VA health care coverage; Figure 43).

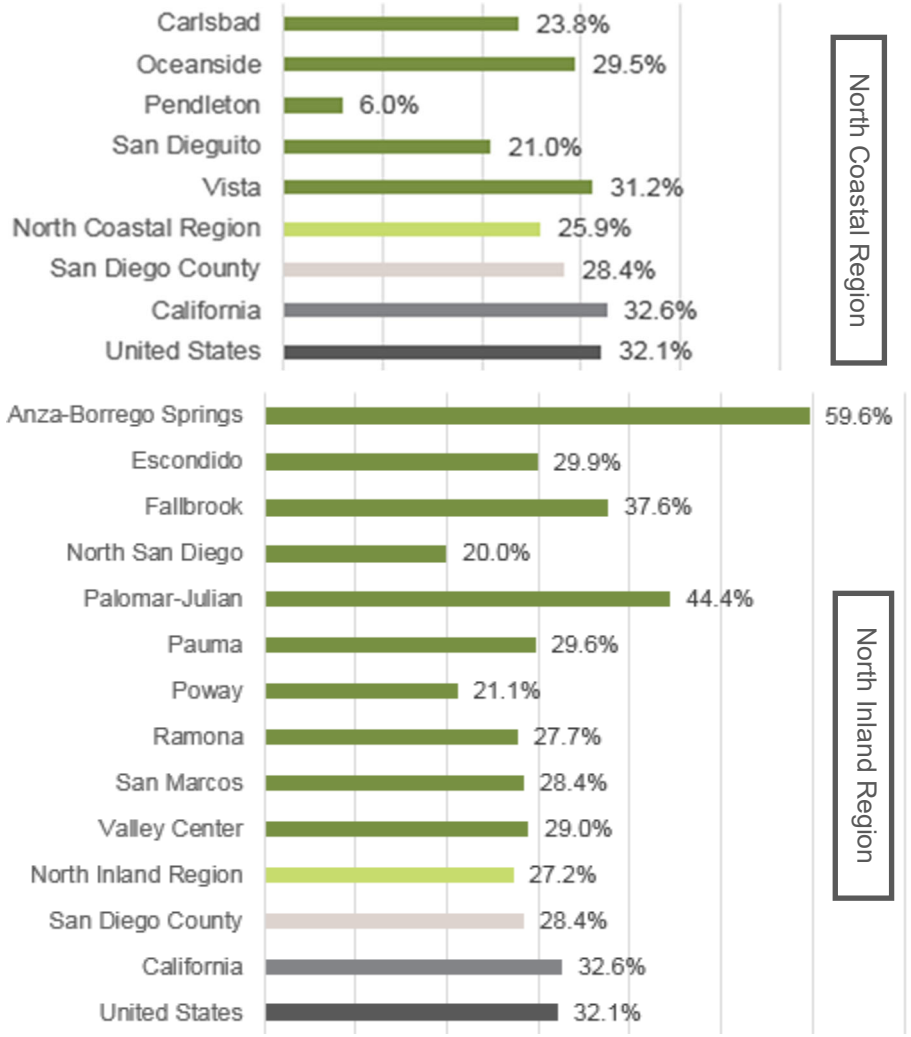
External Standard of Living Assessment

In this section, the results of an additional standard of living assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2018 WEALLCOUNT: San Diego's Annual Point-in-Time Count

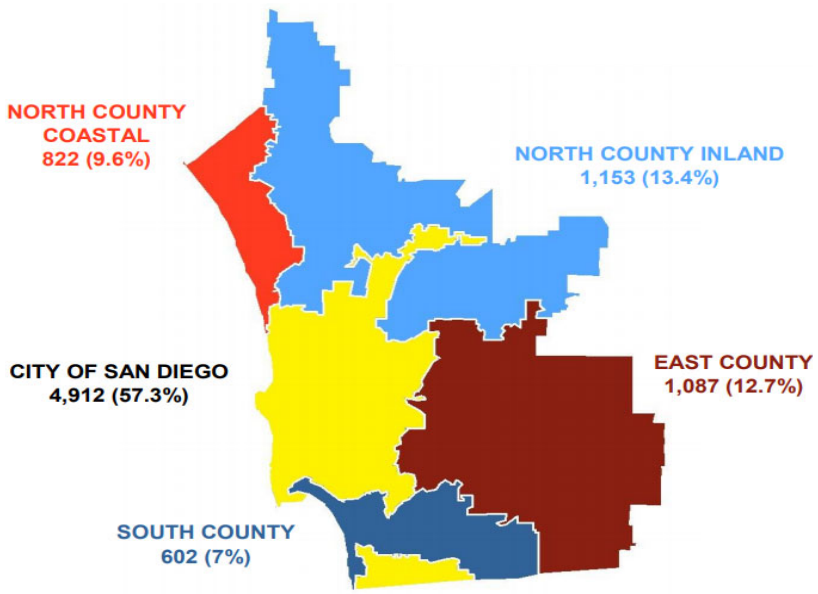
On January 26, 2018, 8,576 individuals were counted as homeless in San Diego County during San Diego County's annual WEALLCOUNT Homeless Point-In-Time count. Of those, 4,990 (58.2%) were unsheltered, and 3,586 (41.8%) were considered to be sheltered (spent the night in homeless shelter or program). About 9.6% of those counted were within the North County Coastal area, whose boundaries approximate the North Coastal Region. About 13.4% of those counted were within the North County Inland area, whose boundaries approximate the North Inland Region (without the majority of the eastern part of the Region represented; see Figure 44 for a map of included areas). Of those counted in North Coastal Region, approximately two-thirds were unsheltered. Of those counted in North Inland Region, over one-half were unsheltered (Figure 45).

Figure 43. Public Health Insurance Coverage, North County Regions, 2015.



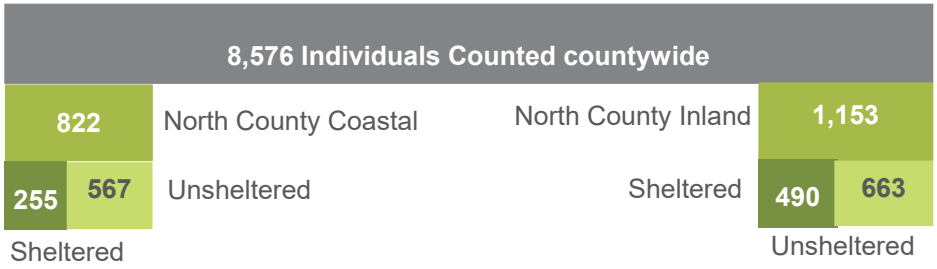
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2704.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 44. 2018 Point-in-Time Count: Regional Breakdown.



Source: San Diego County Regional Task Force On The Homeless. 2018 WE ALL Count Annual Report. https://www.rtfhsd.org/wp-content/uploads/2017/06/2018-WPoint-in-Time-Count-Annual-Report.pdf. The breakdown by region for the homeless count is not the same as HHSA regions in that the boundaries for the City of San Diego approximate Central and North Central Regions combined.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services,

Figure 45. Point-In-Time Count Results, North County Regions, 2018.



Area of Influence: Community

The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment.

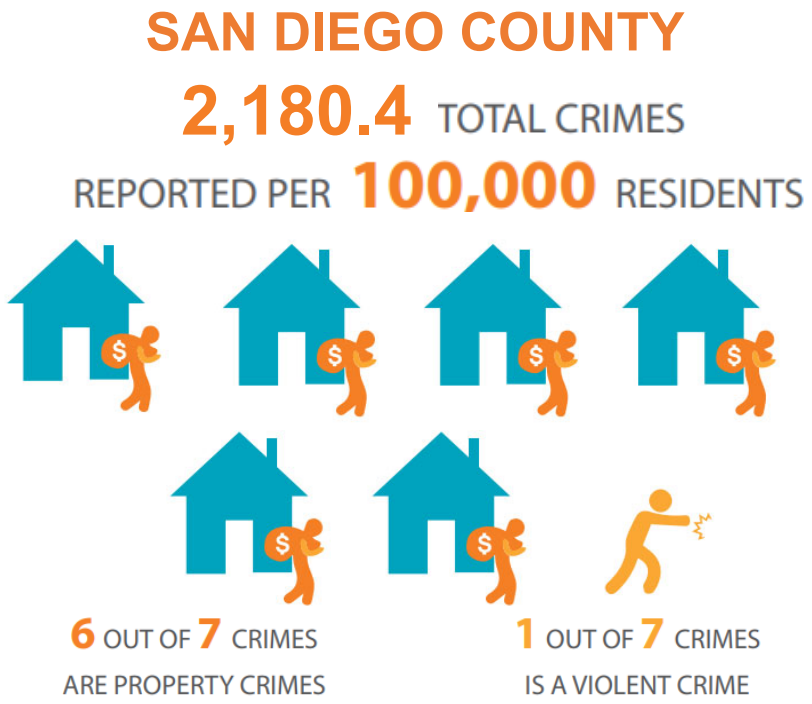
Conflict resolution programs are keeping youth out of the detention system, environmentally-conscious buildings and events are creating community pride, and community gardens are beautifying the environment and improving local access to healthy foods. Partners are training residents to be advocates for change in their own neighborhoods, and the community as a whole benefits as a result.

Live Well San Diego indicators that measure progress towards this area of influence include Security (Crime Rate), Physical Environment (Air Quality), and Built Environment (Distance to Park). Living in a crime-free or low-crime area reduces stress and increases an individual's ability to go outside and interact with their environment, leading to better health outcomes. Air quality influences lung health. Many residents of San Diego County live in highly urban areas where there is not much open space – having a park nearby provides an opportunity to be physically active and leads to reduced disease associated with sedentary lifestyle.

Live Well San Diego Indicator #6: Security (Crime Rate)

Security (Crime Rate) is measured as the number of crimes per 100,000 people. Crime, including violent and property crimes, can have a significant impact on well-being of the population, and contributes to premature death and disability, poor mental health, and lost productivity.

Data for this indicator is not available at the Regional level; therefore, the data presented in the infographic to the left represents San Diego County overall.

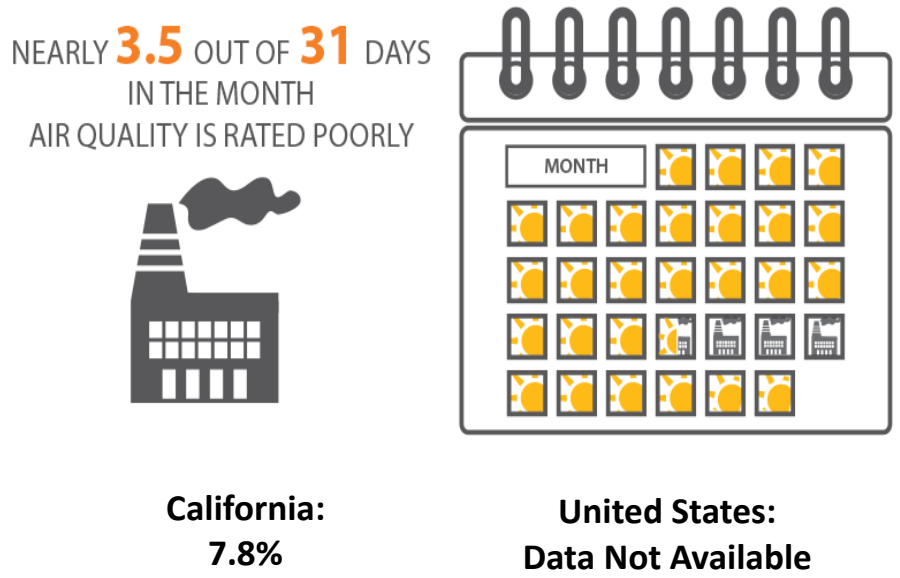


Source: 2016 Overall Crime rate per 100,000 population. Consists of Violent Crime: Murder and Non-negligent Manslaughter, Forcible Rape, Robbery, and Aggravated Assault AND Property Crime: Burglary, Larceny-Theft, and Motor Vehicle theft (Arson included). Source: US Department of Justice- Federal Bureau of Investigation's Uniform Crime Reporting Statistics. 2016. Original Date: 8/22/2012. Accessed on: 9/2017.

Live Well San Diego Indicator #7: Physical Environment (Air Quality)

Physical Environment (Air Quality) is measured as the ratio of days that air quality is rated unhealthy. Air pollution affects more people than any other pollutant. Lower levels of air pollution in a Region correlate with better respiratory and cardiovascular health of the population.

In San Diego County, the air quality was rated poorly on 11.5% of days.



Source: 2016 San Diego, State and Nation from EPA AirData System. http://www.epa.gov/airdata/ad_rep_con.html. May include exceptional events. Accessed 8/2017.

1 IN 2 PEOPLE LIVE WITHIN A QUARTER MILE OF A PARK

NORTH COASTAL REGION: 50.7%

2 IN 5 PEOPLE LIVE WITHIN A QUARTER MILE OF A PARK

NORTH INLAND REGION: 41.8%

San Diego County:	California:	United States:
61.5%	**	**

Live Well San Diego Indicator #8: Built Environment (Distance to Park)

Built environment (distance to park) is measured as the percentage of the population living within a quarter mile of a park. Access to parks and recreation services has been shown to have positive health impacts, including the physical, social, and mental aspects of health.

In North Coastal Region, about one in two residents lived within one-quarter mile of a park, which was a lower proportion than residents of San Diego County overall. The SRA with the highest proportion of residents was Oceanside, where almost three in five residents were living within one-quarter mile of a park. The SRA with the lowest proportion was Pendleton, where only one in four residents lived within one-quarter mile of a park (Figure 47).

In North Inland Region, about two in five residents lived within one-quarter mile of a park, which was a lower proportion than residents of San Diego County overall. The SRA with the highest proportion of residents was Escondido, where about one in two residents were living within one-quarter mile of a park. The SRA with the lowest proportion was Anza-Borrego Springs, where only 1 in 22 residents lived within one-quarter mile of a park (Figure 47).

Supporting Indicators

Air Quality

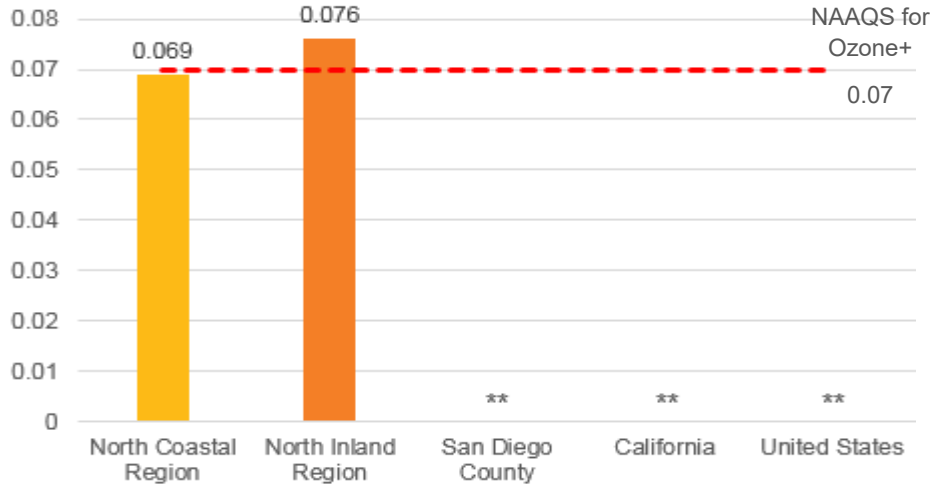
Ozone- One type of pollutant that contributes to air quality is ozone. Higher temperatures increase ground-level ozone, one type of secondary air pollutant as a result of chemical reactions taking place at power plants, and within motor vehicles, ultimately creating smog and pollution. Ozone affects those with cardiovascular and respiratory difficulties, such as asthma, and contributes to related mortality, emergency room visits, and hospitalizations. Ozone concentrations are higher where there are heavy vehicle traffic, coal-fired power plants, and industrial processes occurring.

Ozone Concentration is measured against the Design Value. The Design Value, or DV, is a statistic describing the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS). If the DV is less than the standard, then the area is in attainment of the standard (or that area, on average, meets the standard).

In the North Coastal Region, the DV for 2014-2016 was below the national standard, meaning the Region's Ozone concentration was lower than the standard and thereby in attainment of the standard (Figure 46).

In the North Inland Region, the DV for 2014-2016 was above the national standard, meaning the Region's Ozone concentration was higher than the standard and thereby not in attainment of the standard (Figure 46).

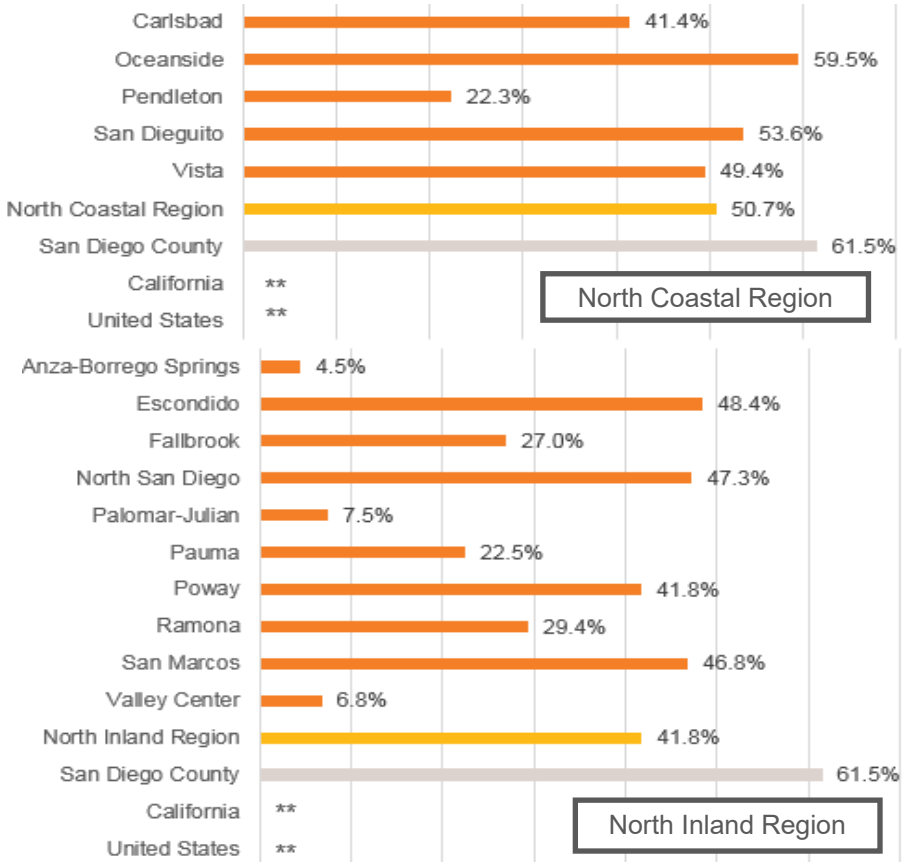
Figure 46. Ozone Concentration, North County Regions, 2014-2016.



*** Data Not Available*
Note: 2014-2016 3-year average of the 4th high 8-hour ozone concentration. When the Design Value (DV) is less than or equal to the standard, then we are in attainment of the standard. The DV shows that Alpine and Escondido, representing North Inland Region, are the only areas of the County that does not meet the National Ambient Air Quality Standards (NAAQS) for ozone. Due to the closing of the Escondido monitoring station in 2015, the value for 2015 and 2016 is the same as 2014 when calculating the 2014-2016 design value. Original Date: 4/17/2013. Accessed on: 8/2017.

+ United States Environmental Protection Agency. NAAQS table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 47. Percentage of Population Living within One-Quarter Mile of a Park or Community Space, North County Regions by Subregional Area, 2015.

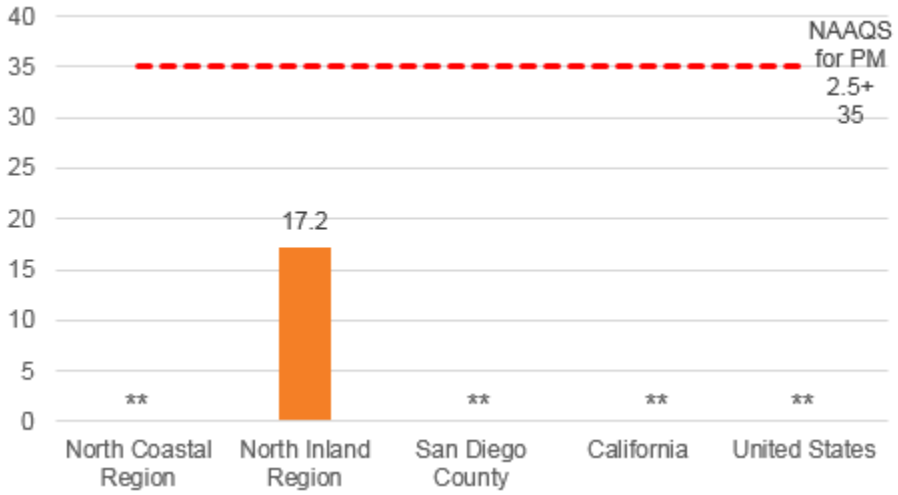


*** Data Not Available*
Source: Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). 2015 County Business Patterns data set. censtats.census.gov/. Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

PM 2.5 Concentration- PM 2.5, or particulate matter 2.5 microns or less in diameter, includes pollutants such as combustion particles, organic compounds, metals, and any other fine particulate matter, and is capable of reaching deep into the lungs and causing cancers and other diseases. PM 2.5 levels are higher in areas where heavy equipment is used, burning activities occur, and industrial facilities are located.

The North Inland Region had an average PM 2.5 concentration well below the National Ambient Air Quality Standard for the United States (Figure 48). This means that there is less PM 2.5 in the air than is allowed by the Environmental Protection Agency (EPA).

Figure 48. PM 2.5 Concentration, North County Regions, 2014-2016.



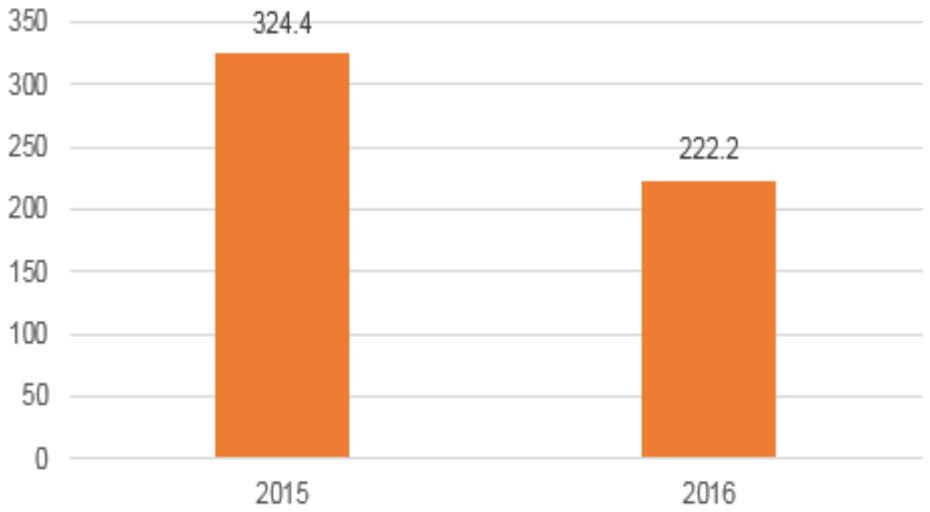
*** Data Not Available*
Source: 2014-2016 San Diego Air Pollution District Data. Particulate Matter 2.5—here we use a 3-year average of the 98th percentile of collected samples for a 24 hour standard. Not all regions are represented. Original date: 4/17/2013. Accessed on: 8/2016.
+United States Environmental Protection Agency (EPA). NAAQS Table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Water Quality

Environmental health affects the health of the population. Climate change is part of environmental health, and is defined as major changes in the earth's temperature, rainfall, snow and wind patterns. Climate change affects many areas of life, including health, water resources, food production, agriculture, forestry, wildlife, and energy supply.

Water quality is measured by tracking water quality violations. The actual indicator is rate of violations per year for federally regulated drinking water contaminants per 100,000 people. Data is not available at the Regional level for water quality, therefore, the San Diego County level data is presented in Figure 49.

Figure 49. Water Quality, San Diego County, 2015-2016.



†Rate of total water violations per 100,000 population for federally regulated drinking water contaminants and other drinking water violations. Data are not comparable to data collected prior to 2013 as EPA has done quality assurance on their system and increased reporting in many states.
Source; 2015 EPA water violations from SDWISFED Drinking Water Data. Original Date: 1/26/2012. Accessed on: 8/2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Geography

Geography has come to the forefront of the discussion on health equity. The idea that "place matters" has become more commonplace in recent years. Together, there are 18 incorporated cities and towns, as well as several unincorporated communities. Several community types exist throughout the County – some more urban, some more rural. Data is collected and reported out by the 41 Subregional Areas (SRAs) in San Diego County. San Diego County has an area of over 4,200 square miles and over 70 miles of coastline. Substantial differences in health indicators and health-related behaviors exist in the different areas of the County. More information on how geography affects health can be found in the *Identifying Health Disparities to Achieve Health Equity in San Diego County: Geography* at _HE_Geography_FINAL.pdf (sandiegocounty.gov).

Public Transportation and Commute to Work

Active transportation, or walking and using public transportation to get around, is related to the built environment and the individual's perception of safety, as well as the availability of public transit. This indicator measures the percent of population using public transportation to get to work.

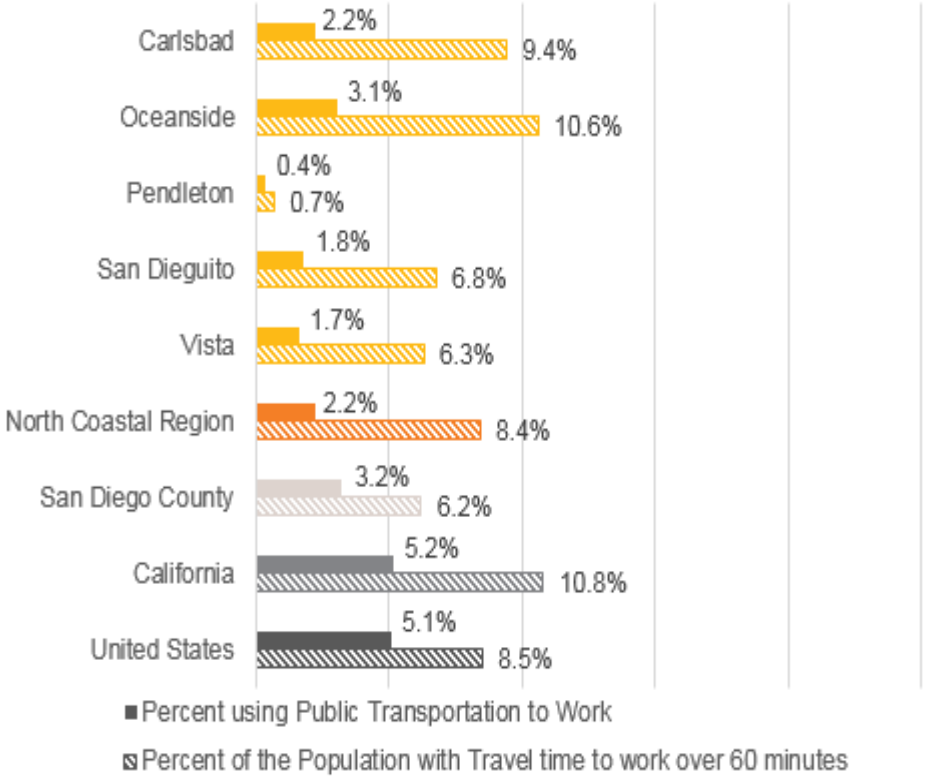
A lower percentage of those living in the North Coastal Region used public transit to get to work than those in San Diego County, California, and the United States as a whole. The SRA with the highest proportion of residents using public transit to get to work was Oceanside. The SRA with the lowest proportion was Pendleton (Figure 50).

A lower percentage of those living in the North Inland Region used public transit to get to work than those in San Diego County, the State of California, and the United States as a whole. The SRA with the highest proportion of residents using public transit to get to work was San Marcos. The SRAs with the lowest proportion were Ramona, Valley Center, and Anza-Borrego Springs.

Commute to work can be measured as the average travel time to work. It is also interesting to see how much of the population spend more than an hour commuting to work. In the North Coastal Region, 8.4% of residents commuted 60 minutes or more to get to their workplace. This was higher than San Diego County, lower than California, and about equal to the United States as a whole. The SRA with the greatest proportion of residents commuting 60 minutes or more was Oceanside at 10.6%. The SRA with the lowest proportion was Pendleton, at 0.7% (Figure 50).

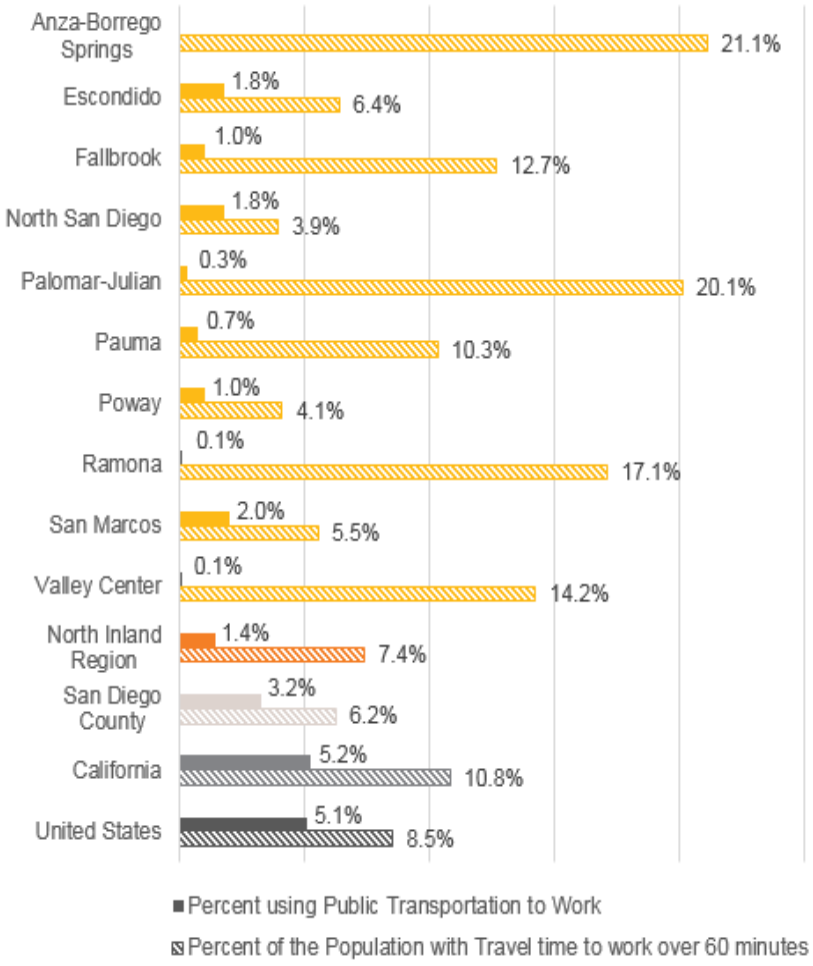
In the North Inland Region, 7.4% of residents commuted 60 minutes or more to get to their workplace. This was higher than San Diego County, and lower than California and the United States as a whole. The SRA with the greatest proportion of residents commuting 60 minutes or more was Anza-Borrego Springs at 21.1%. The SRA with the lowest proportion was North San Diego at 3.9% (Figure 51).

Figure 50. Commute to Work, North Coastal Region by Subregional Area, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03, B08012. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 51. Commute to Work, North Inland Region by Subregional Area, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03, B08012. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Community Assessment

In this section, the results of an additional external community assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2017 Youth Purchase Tobacco Survey

Vista Community Clinic (VCC), in partnership with CASA (Community Action Service & Advocacy), performed youth purchase tobacco surveys (YPTS) in three municipalities across San Diego County in 2017. The methods in each location were similar. Community Action Service and Advocacy (CASA), subcontracted to VCC, produced and distributed retailer Education Packets to managers or owners at every location licensed by the California Board of Equalization to sell tobacco products in the areas surveyed. On the day of the survey, teams of youth and adults supervisors traveled to businesses in each municipality, and the unaccompanied youth attempted to make a tobacco purchase. Data collected included whether the youth attempting the purchase was asked to show their identification, and whether the purchase was successful. The results of the survey conducted in Escondido are presented in Table 9.

For several sales in which the youth was able to make a tobacco purchase, the clerk did not ask for identification. In some instances, the clerk did ask for identification, or even swiped the underage identification for electronic confirmation, yet still completed the sale. Federal Law requires identification for tobacco purchases for any customer that appears to be under the age of 27. These sales to underage youth were sometimes occurring even when the clerks know they are selling to underage customers. Although Escondido did very well on this survey – only 1% of the 84 retailed made underage tobacco sales – the findings in other locations suggest much more needs to be done to prevent underage tobacco sales.

Table 9. Youth Purchase Tobacco Survey Results, North County Regions, 2017.

Geography	Mean Age of Youth Volunteers	Number of Retailers Surveyed	Successful Purchase Attempts
Escondido (Youth age range not reported)	15.9	84	1%

Source: Vista Community Clinic, Local Tobacco Control Interventions: Tobacco Retail Licensing, Youth Tobacco Purchase Surveys, Lemon Grove, National City, and Escondido, CA, 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

SOCIAL

Area of Influence: Social

The Social Area of Influence concerns residents helping one another. San Diegans help one another and contribute to their communities by volunteering to serve others who may be less fortunate, by contributing to charitable organizations, and by being politically active and voting in Local, State and Federal elections. There are also vulnerable populations within the County who benefit from the help that others provide.

Vulnerable populations in San Diego include those who live below 200% poverty level who may also be experiencing food insecurity. Food insecurity refers to individuals and families who are unable to afford enough food on a regular basis. In turn, they may not have access to healthier foods essential for good nutrition, and this impacts the health and well-being of the population.

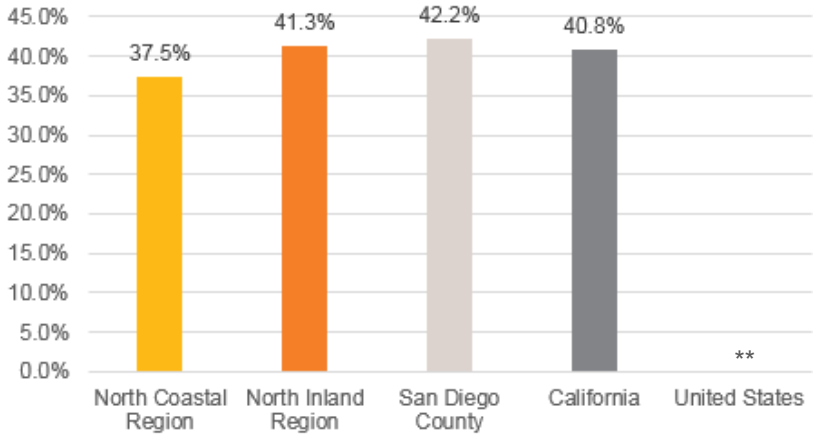
Communities thrive when people get to know their neighbors and are invested in the well-being of the people they interact with every day. *Live Well San Diego* partners encourage community connections and engage citizens. New residents are finding hope through refugee and survivor programs, foster youth and families are discovering resiliency through training and education, seniors are receiving comfort and nourishment through meal delivery services, and volunteers are gaining greater purpose by giving back to their neighbors.

Live Well San Diego Indicator #9: Vulnerable Populations: (Food Insecurity)

Food insecurity is measured as the percentage of the low income (income at or below 200% of the federal poverty level) population who have reported inability to purchase enough food on a regular basis, based on survey data. Food insecurity affects not only current health status, but also physical, mental, and social development.

In North Coastal Region, a lower proportion of residents were food insecure compared to San Diego County and California. In North Inland Region, a lower proportion of residents were food insecure compared to San Diego County, and a higher proportion compared to California (Figure 52).

Figure 52. Food Insecurity, North County Regions, 2014-2015.



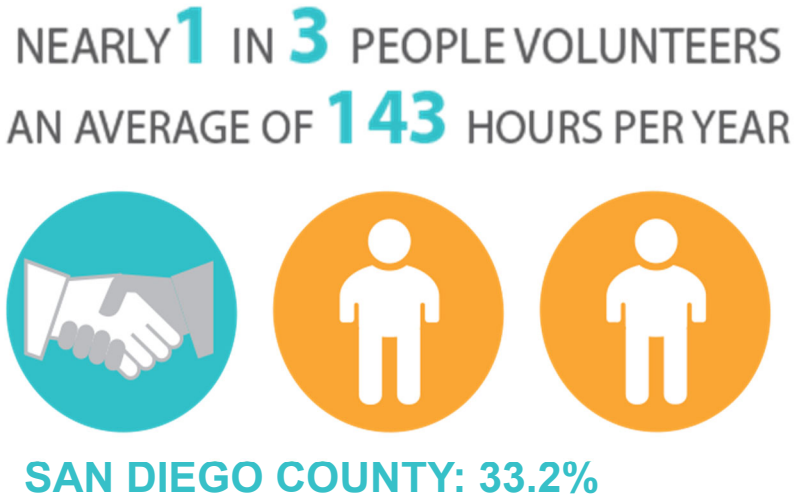
*** Data Not Available*
Source: 2014-2015 UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 9/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

SOCIAL

Live Well San Diego Indicator #10: Community Involvement (Volunteerism)

Volunteerism is measured as the percentage of the population who volunteer. Volunteering creates a meaningful, positive impact on the community, and benefits the volunteers themselves.

Data is not available by Region, so the figure for San Diego County overall is provided. A higher percentage of individuals in San Diego County volunteered compared to the State and the Nation.



SAN DIEGO COUNTY: 33.2%

California: 23.0%

United States: 24.9%

Source: Percent of residents who volunteer. Data from 2015 from Corporation for National and Community Service. Original Date: 1/24/2013. Accessed on: 6/2017.

Supporting Indicators

Linguistic Isolation

Linguistic isolation refers to those residents who are isolated because they are unable to communicate effectively in English. Those who cannot effectively communicate in English may have trouble talking to people who provide social services and medical care. They may also not hear or understand important information when there is an emergency – such as an accidental chemical release, or spill. As a result, those who do not communicate well in English may be less likely to get the health care or safety information that they need.

A linguistically isolated household is defined as a household in which no person 14 years old and over speaks English only, and no person 14 years old and over who speaks a language other than English speaks English "very well."

In North Coastal Region overall, about 1 in 13 households were linguistically isolated (see Figure 53). The SRA with the highest percentage of linguistically isolated households was Vista. The SRA with the lowest percentage of linguistically isolated households was Pendleton.

In North Inland Region overall, about 1 in 11 households were linguistically isolated (Figure 53). The SRAs with the highest percentage of linguistically isolated households were Escondido and San Marcos. The SRA with the lowest percentage of linguistically isolated households was Palomar-Julian.

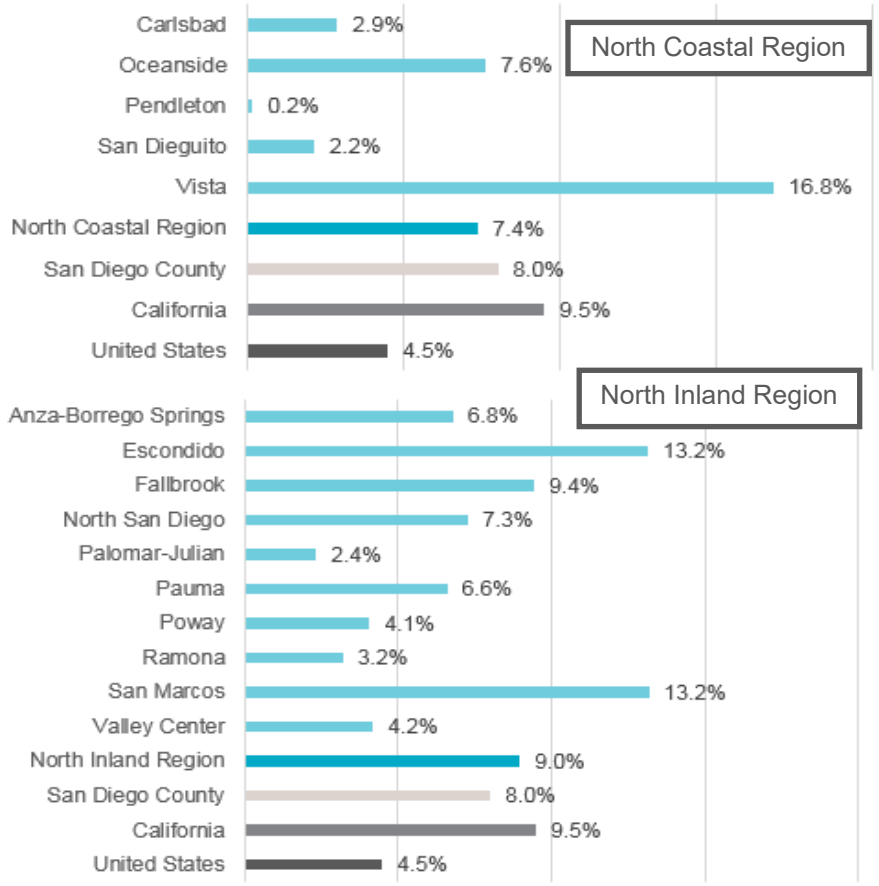
Health Insurance Status

An individual's ability to live well is influenced by their ability to access the health care system, for both urgent medical issues and preventive care. This indicator measures the lack of health insurance for the non-elderly adult population, or those aged 18 to 64. Children and the elderly often are more likely to be eligible for public health insurance programs, such as Medi-Cal and Medicare, than those adults who fall between the ages of 18 and 64.

More than 1 in 6 adults ages 18-64 were lacking health insurance in the North Coastal Region, which was lower than the 1 in 5 in the County overall. The SRA within the North Coastal Region with the highest percent of uninsured adults was Vista. The SRA with the lowest percent of uninsured adults was Carlsbad (Figure 54).

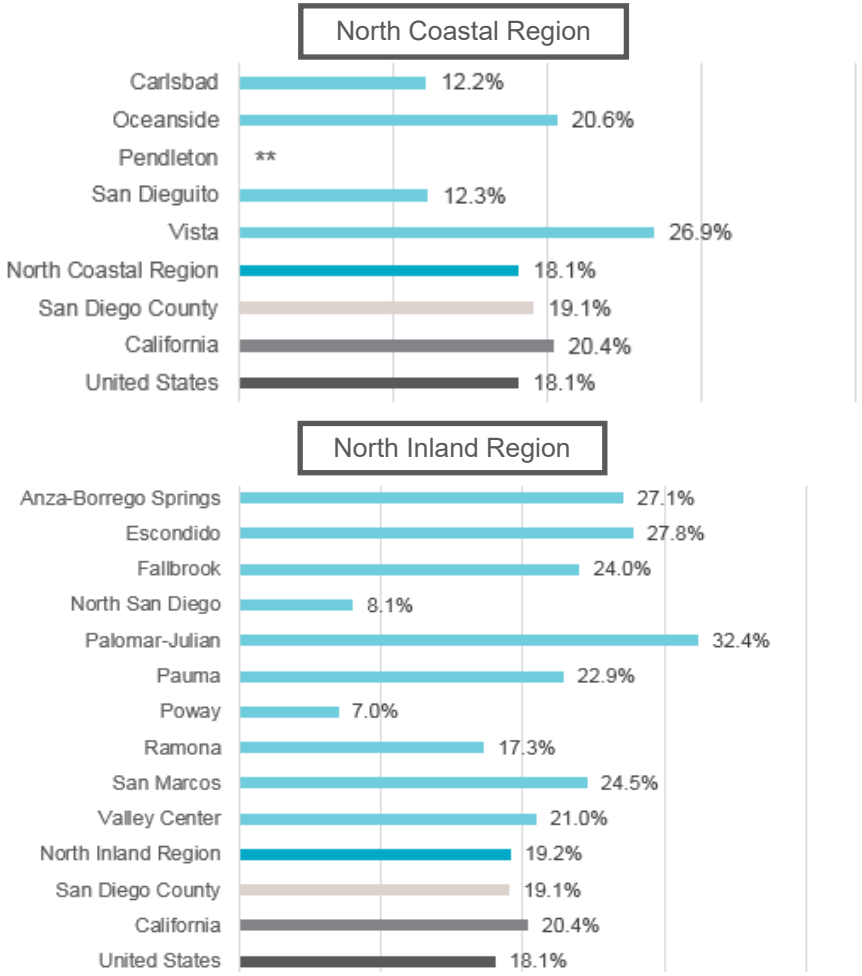
About 1 in 5 adults ages 18-64 were lacking health insurance in the North Inland Region, which was about equal to the 1 in 5 in the County overall. The SRA within the North Inland Region with the highest percent of uninsured adults was Palomar-Julian. The SRA with the lowest percent of uninsured adults was Poway (Figure 54).

Figure 53. Linguistic Isolation, North County Regions by Subregional



Percent of population considered linguistically isolated. A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who may speak only English.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S1602. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 54. Lack of Health Insurance (Ages 18-64), North County Regions by Subregional Area, 2015.



Note: Percent of population not currently covered by health insurance, ages 18-64.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2701. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

South Region
Community Health Assessment

TABLE OF CONTENTS

South Region Community Leadership Team 4

Introduction 8

Community Health Status Assessment

Demographics.....9

Morbidity and Mortality.....11

Community Health Status Assessment by Area of Influence 19

Health.....20

Knowledge.....25

Standard of Living.....27

Community.....34

Social.....39

COMMUNITY LEADERSHIP TEAM MEMBERS

Co-Chairs:

- Barbara Jiménez, Director of Regional Operations, HHSA-Central & South Regions
- Kathryn Lembo, South Bay Community Services, President/CEO

Some members are also *Live Well San Diego* Recognized Partners which is indicated with an asterisk (*).

COMMUNITY LEADERSHIP TEAM MEMBERS BY SECTOR

Business & Media:

- Agent Prolific
- Edward Jones Investments
- GHI Mortgage
- JLC Consulting
- La Maestra Community Health Centers *
- MediExcel*
- Maxim Healthcare Services
- National City Chamber of Commerce*
- Northgate Gonzalez Markets*
- Paradise Valley Hospital*
- Thomas Stafford Investments
- Westpac Wealth Partners
- Zavero Consulting Inc.

Schools:

- National School District*
- Chula Vista Elementary School District (CVESD)*
- Coronado Unified School District*
- National University
- Parent Institute for Quality Education
- San Ysidro School District*
- South Bay Union School District*
- Southwestern College
- Sweetwater Union High School District*
- Trade Schools: Pima, UEI

Cities and Governments:

- California State Assembly
- City of Chula Vista *
- City of Coronado*
- City of Imperial Beach*
- City of National City*
- City of San Diego*
- COSD Board of Supervisors
- COSD Community Services Group (CSG) – Libraries
- COSD, HHSA (multiple departments)
- COSD Public Safety Group (PSG) - Sheriff's Department and Probation Department
- Drug Enforcement Administration
- San Diego Association of Government (SANDAG)*
- US-Mexico Border Health Commission

Community and Faith-Based Organizations/Other Valued Partners

- 2-1-1 San Diego*
- Access Inc. Youth and Immigration Services*
- Accion
- Alliance Healthcare Foundation*
- American Heart Association*
- American Lung Association*
- API Initiative
- Arts for Learning San Diego*
- Boys and Girls Club*
- California Department of Rehabilitation
- Casa Familiar*
- Center for Sustainable Energy
- Child Development Associates Inc.
- Chula Vista Community Collaborative (CVCC)*
- Chula Vista Elite Athlete Training Center*
- Circulate San Diego*

COMMUNITY LEADERSHIP TEAM MEMBERS

- CityReach Church San Diego
- Communities of Excellence 2026*
- Community Action Service Advocacy (CASA)*
- Community-Based Organization Boards
- Community Health Improvement Partners (CHIP)*
- Community Housing Works*
- Community Rowing of San Diego*
- Community Through Hope
- Community/Private Entity Decision Makers
- Dairy Council of CA
- DREAMbuilders
- Egge
- Elite Athlete Services
- Environmental Health Coalition
- Family Health Centers of San Diego*
- Financial Coach 4U*
- Fit As Well
- Fleet Science Center
- Goddess in Motion Insitute*
- Holistic Chamber of Commerce
- Hope Through Housing*
- Imperial Beach Collaborative
- Imperial Beach Community Clinic Health Center*
- Imperial Beach Neighborhood Center*
- Institute for Public Strategies*
- Junior Achievement of San Diego County*
- Kaiser Permanente*
- Legal Aid Society of San Diego*
- LifeVantage
- Logan Heights Community Development Corporation*
- MAAC Project*
- Mabuhay Foundation*
- MANA de San Diego*
- McAlister Institute*
- Mental Health America of San Diego*
- Mexican American Business and Professional Association (MABPA)*
- Molina Healthcare
- National City Collaborative
- National Conflict Resolution Center*
- Nitai Partners, Inc.
- Olivewood Gardens and Learning Center*
- Operation Samahan Health Centers*
- Palomar Health*
- Partners in Life
- Point Loma Credit Union
- Professional Land Corporation
- Public Consulting Group (PCG)
- Pure Game
- Rady's Childrens Hospital*
- Reach Out to Families
- Reality Changers
- Retina World Congress
- San Diego Blood Bank*
- San Diego County Credit Union*
- San Diego County US Census Bureau
- San Diego Foundation
- San Diego Health Connect*
- San Diego Housing Commission
- San Diego Hunger Coalition*
- San Diego Workforce Partnership*
- San Ysidro Health Center*
- SCORE San Diego

COMMUNITY LEADERSHIP TEAM MEMBERS

- Scripps Family Medicine Residency Program
- Scripps Mercy Hospital, Chula Vista
- Sharp Chula Vista Medical Center
- South Bay Community Services (SBCS)*
- South County Economic Development Council*
- South Teen Recovery Center
- Southern Caregiver Resource Center*
- South County Economic Development Council
- Stretchtopia*
- SunCoast Co-op Market (IB Health Grocery Initiative)
- Super Saludable
- Sweetwater Authority
- The Awareness Center
- The Super Dentists*
- Uncle Keith's Gourmet Foods
- United Way San Diego*
- University of California San Diego (UCSD)
- Urban League of San Diego County*
- Victory Gardens San Diego
- WILDCOAST*
- YALLA San Diego
- YMCA (San Diego County, Bayside, South Bay Family) *
- YMCA Childcare Resource Service

SOUTH REGION (2015)

Demographics

Nearly **2** in **3** residents (60.4%) were Hispanic.

Another **1** in **8** residents (13.0%) were Asian/Pacific Islander.

Health

20%

of all new HIV diagnoses within the County from 2010-2014 were in the **South Region.**

Knowledge

7 in **9** residents (77.1%) **graduated from high school**, compared to 85.5% in the County overall.

Standard of Living

$60,483

South Region had a **lower median household income** than the County overall.

$382,962

South Region had the **lowest median house value** of all the HHSA Regions.

Over **2** in **5** households in South Region were **renter-occupied**.

10.6%

of households within the South Region rely on **CalFresh benefits**, compared to 6.7% within the County overall.

Nearly **1** in **3** residents (32.0%) relied on **public health Insurance coverage**, compared to 28.4% within the County overall.

Community

Over **3** in **4** residents of South Region (78.1%) lived within a **quarter mile of a park**, the highest of all the HHSA Regions.

Social

Over **1** in **3** low-income residents (37.7%) experienced **food insecurity** in South Region, compared to 42.2% within the County overall.

Nearly **1** in **4** adult residents (18-64 years) were **uninsured** in South Region (23%), compared to 19.1% within the County overall.

INTRODUCTION

Introduction

Formation of Leadership Team

The *Live Well San Diego* South Region Community Leadership Team was formed in June 2010 to help guide planning for health and safety priorities in the Region and to foster information sharing and connectivity among group members. This collaboration includes community leaders, stakeholders and residents who are actively working together in the HHSA South Region to fulfill the vision of *Live Well San Diego* to create a Region that is Building Better Health, Living Safely and Thriving.

Formation of Regions

In 1998, due to the size and diversity of the County, a new Regional service delivery system was created, enabling Regional general managers (now called Regional Directors) to better acquaint themselves with their individual communities, and develop partnerships to meet the unique needs of each one of the six HHSA Regions. Staff provides services in an integrated fashion, close to families and communities, in collaboration with other public and private sector providers.

Community Leadership Team Structure and Planning Process

The South Region Leadership Team is comprised of several members representing 25 community-based organizations. The entire team meets bi-monthly, and supports four workgroups and subcommittees that meet as needed:

- Advisory Group
- Chronic Disease Workgroup
- Economic Vitality Workgroup
- Schools Subcommittee

As part of their planning process for the second MAPP cycle,[†] the South Region Leadership Team attended a data presentation by the Community Health Statistics Unit.

The South Region Leadership Team is also the leadership body overseeing the implementation of health improvement frameworks within the Region. Communities of Excellence 2026 is an opportunity to study and change the way the community operates, using the Baldrige performance excellence framework. The framework promotes collaboration across sectors, and aims to align the efforts of the businesses, organizations, schools, and governmental organization community-wide to promote, implement, and sustain community-wide change.[§]

The South Region Leadership Team began the Communities of Excellence 2026 journey in September of 2016, when the program was introduced to the team. Grounding data was presented in January of 2017, followed by Environmental Scans conducted by members of the leadership team. An Ad-Hoc group, which is now called the Advisory Group, met five times between April and August of 2017. The South Region Leadership Team submitted its Communities of Excellence 2026 Community Profile in September of 2017.

[†] For information on the planning process during the first MAPP cycle, please refer to the 2014 *Live Well San Diego* Community Health Improvement Plan.

[§] Communities of Excellence 2026. The Communities of Excellence Framework. http://communitiesofexcellence2026.org/what-we-do/framework.html. Accessed September 7, 2018.

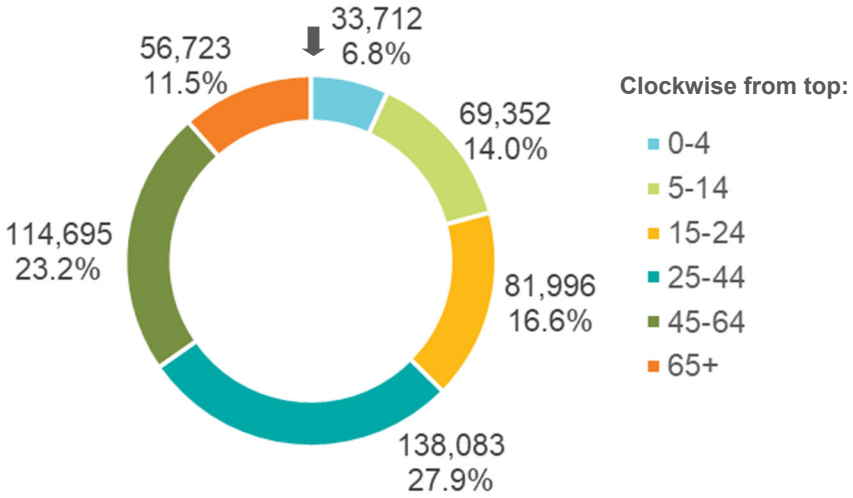
Community Health Status Assessments

Demographics

The South Region of San Diego County is a highly diverse border Region with a large proportion of economically disadvantaged residents. Geographically, the Region covers 155 square miles of urban, suburban, and rural areas. The Region includes the cities of National City, Chula Vista, Imperial Beach, Coronado, and three communities of the City of San Diego: Otay Mesa, Nestor and San Ysidro. San Ysidro is home to the busiest land border crossing in the world.

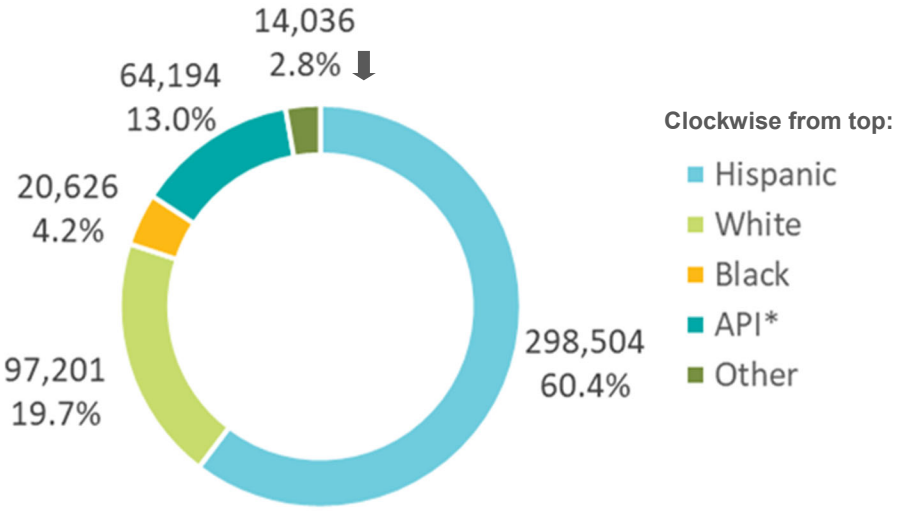
According to the U.S. Census Bureau's American Community Survey, the majority of residents were between the ages of 25-44 (1 in 4), followed by those aged 45-64 (1 in 5; Figure 1). The population was 49.7% male and 50.3% female.

Figure 1. Population by Age Group, South Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B01001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 2. Population by Race/Ethnicity, South Region, 2015.

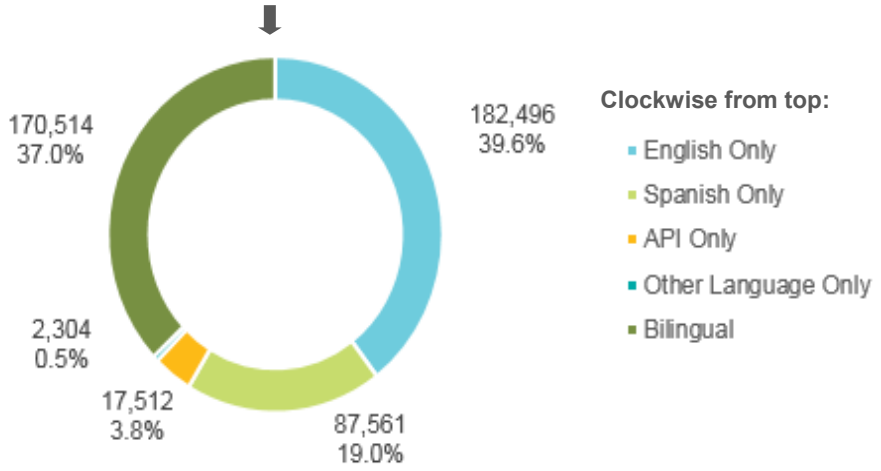


**API refers to Asian/Pacific Islander.*
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B03002.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

About three in five of South Region residents were Hispanic. Another one in five were white. Less than one in twenty were Black, more than one in eight were Asian or Pacific Islander, and less than one in thirty were another race or ethnicity (Figure 2).

DEMOGRAPHICS

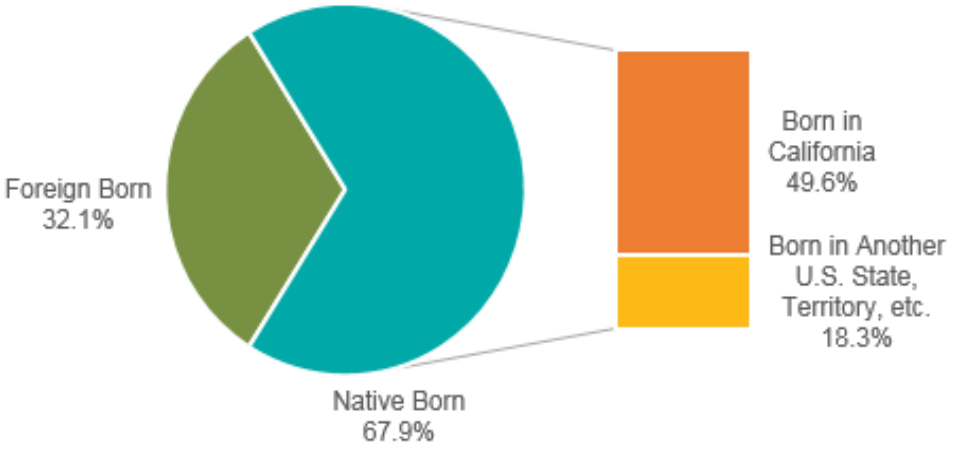
Figure 3. Population by Language Spoken at Home, South Region, 2015.



API refers to Asian or Pacific Island languages.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table DP02.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Note: This word cloud is a representation of the diversity of languages spoken in San Diego County. Not all languages spoken are represented.

Figure 4. Population by Nativity and Place of Birth, South Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table B06001.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Just under two-fifths of the population aged 5 years and older were English-only speakers. Almost one-fifth were Spanish-only speakers, and nearly all of the remaining two-fifths were bilingual (Figure 3.)

Almost 1 in 3 people living in South Region were foreign born. Of those who were born in the United States, 3 in 4 were born in California (Figure 4).

MORBIDITY AND MORTALITY

Approximately 1 in 10 South Region adult residents was a veteran. Of those residents who are veterans, 1 in 9 were female (Figure 5).

Figure 6 describes older adults in the population. Almost 1 out of 9 South Region residents were seniors (over the age of 65). Of those over the age of 65, more than 1 in 3 had some kind of a disability (hearing, vision, cognitive, self-care). Approximately 1 in 10 residents over the age of 60 in the South Region were solely responsible for raising a grandchild (no parent is present in the household).

Morbidity and Mortality

According to the Centers for Disease Control and Prevention, morbidity is defined as any departure, subjective or objective, from a state of physiological or psychological well-being, encompassing disease, injury, and disability. Mortality refers to death.

In this section, conditions contributing to the greatest amount of morbidity and mortality are discussed. First, the 3-4-50 concept is introduced and explained, with data relevant to each indicator presented. Next, prevention quality indicators, measures formulated and defined by the U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality, are presented. These indicators describe the rate of hospitalizations for conditions or complications that could have been prevented with adequate primary or outpatient care. Lastly, the leading causes of death by Region and County overall are presented, in contrast to those for the State of California and United States as a whole.

The purpose of this section is to describe what conditions are contributing the most to the morbidity and mortality of people living in San Diego County.

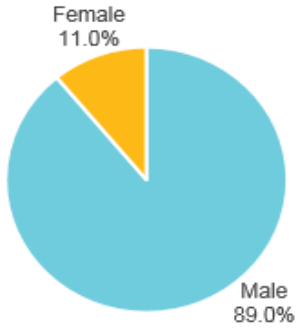
3-4-50

Introduction

Chronic diseases are now among the leading causes of death and disability worldwide. This reflects an improvement in the prevention and treatment of infectious diseases as well as significant changes in dietary habits, physical activity levels, and tobacco use in the population.[1] Three behaviors (poor diet, physical inactivity, and tobacco use) contribute to four chronic diseases (cancer, heart disease and stroke, type 2 diabetes, and lung diseases such as asthma) that result in over 50 percent of all deaths worldwide. This is the foundation of the 3-4-50 concept.[2] The influence of these three unhealthy behaviors may be seen in San Diego County as these four chronic diseases are among the most common causes of death and disability in our Region.

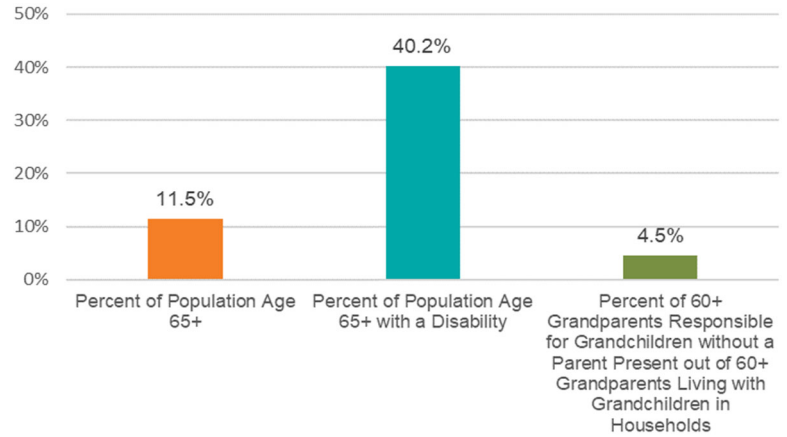
Figure 5. Veterans in the Population, South Region, 2015.

9.4%
of South Region Residents 18+ were Veterans.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S2101.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 6. Characteristics of Older Adult Population, South Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Tables B01001, B10051.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

MORBIDITY AND MORTALITY

The information discussed on the following pages is specific to South Region and its SRAs. For a more detailed explanation, please see the 3-4-50 section in the countywide document (Page 31), or the 3-4-50 reports located on the following website: 3-4-50 (sandiegocounty.gov)

Three Behaviors

Diet, which is ultimately a personal choice, is one of the factors that can contribute to obesity. The physical environment, including lack of sidewalks and adequate lighting, poses challenges to walking. Smoking is the leading factor contributing to lung cancer and chronic obstructive pulmonary disease (COPD) deaths in the United States. Exposure to second hand smoke increases risk of heart disease and lung cancer in adults, and asthma attacks and respiratory infections in children.

In 2015 (Figure 7):

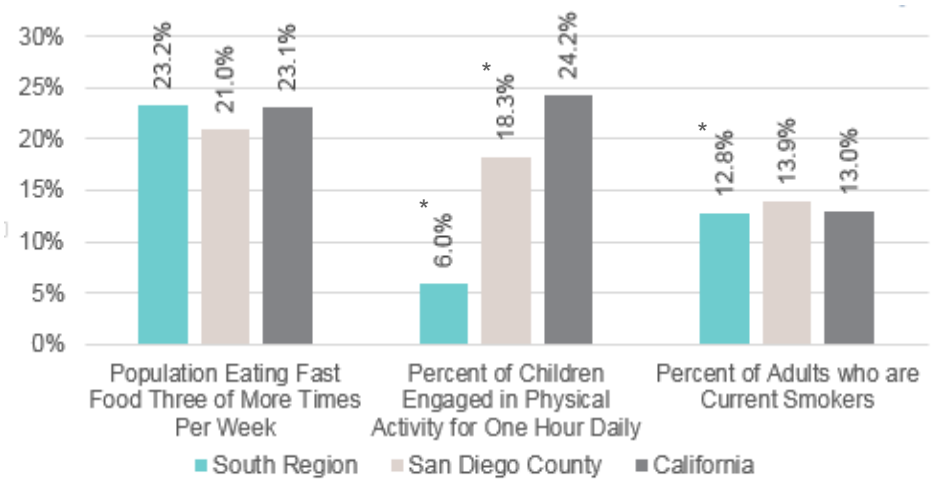
- Nearly 1 in 4 residents aged 2 and over ate fast food three or more time per week in South Region. This was slightly higher than the County and the State overall.
- Nearly 1 in 4 children aged 2-11 in the California engaged in physical activity for one hour daily.
- Nearly 1 in 7 adults in San Diego County were current smokers. This was about equal to the State overall.

Four Diseases

Cancer is a term used to describe a group of diseases in which abnormal cells divide without control and invade other tissues.[3] Heart disease refers to any acute or chronic condition that involves the heart or its blood vessels: the muscle itself, valves, blood flow, and beating rhythm.[4] Stroke is a distinct type of cardiovascular disease, also called cerebrovascular disease. Specifically, stroke is a disease that affects the arteries leading to and within the brain.[5] Diabetes mellitus is a serious disease in which the levels of blood glucose, or blood sugar, are above normal.[6] Asthma is a chronic inflammatory disease of the respiratory system which causes the airways of the lungs to constrict and become inflamed in response to certain triggers. Chronic Obstructive Pulmonary Disease (COPD) is a disease that makes it hard to breathe.[7]

Figure 8 provides an estimate of the percent of adult residents who may have been suffering from heart disease and diabetes. Estimates of asthma prevalence are for residents aged 1 and over. Estimates of cancer prevalence are not available through the same data source, and are therefore not comparable and not included in this analysis.

Figure 7. Measures of Three Behaviors (Poor Diet, Physical Inactivity, and Smoking) Contributing to 3-4-50 Deaths, South Region, 2015.

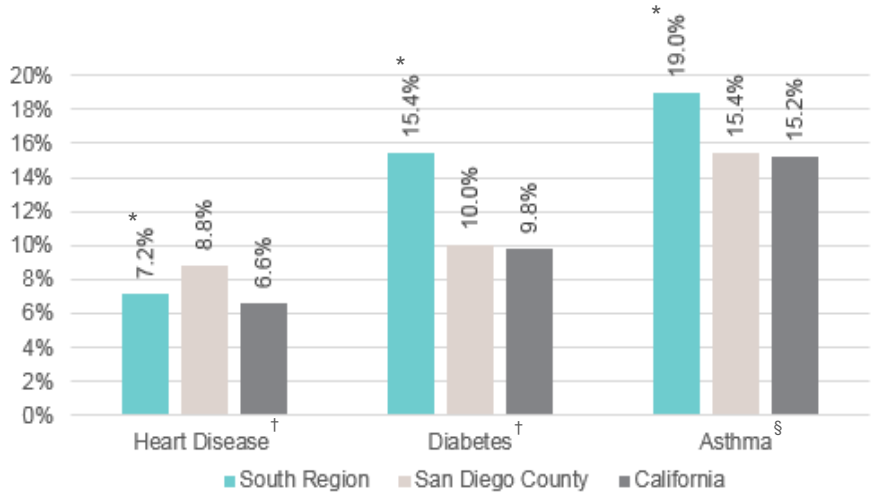


**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

In 2015:

- 1 in 12 adult residents of San Diego County had ever been told they had heart disease, which is higher than the State overall.
- 1 in 10 adult residents of San Diego County had ever been told they had diabetes. This was slightly higher than the State overall.
- About 1 in 7 residents of San Diego County over the age of one had ever been diagnosed with Asthma. This was nearly equal to the State overall.

Figure 8. Ever Diagnosed with a Disease Contributing to 3-4-50 Deaths, South Region, 2015.



**Indicates a statistically unstable estimate. Proceed with caution. Estimate is included for trending purposes.*
† Adults aged 18 and over.
§ Residents aged 1 year and over.
Source: UCLA Center for Health Policy Research. 2015 California Health Interview Survey, AskCHIS. Retrieved June 14, 2018.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Over 50% of Deaths

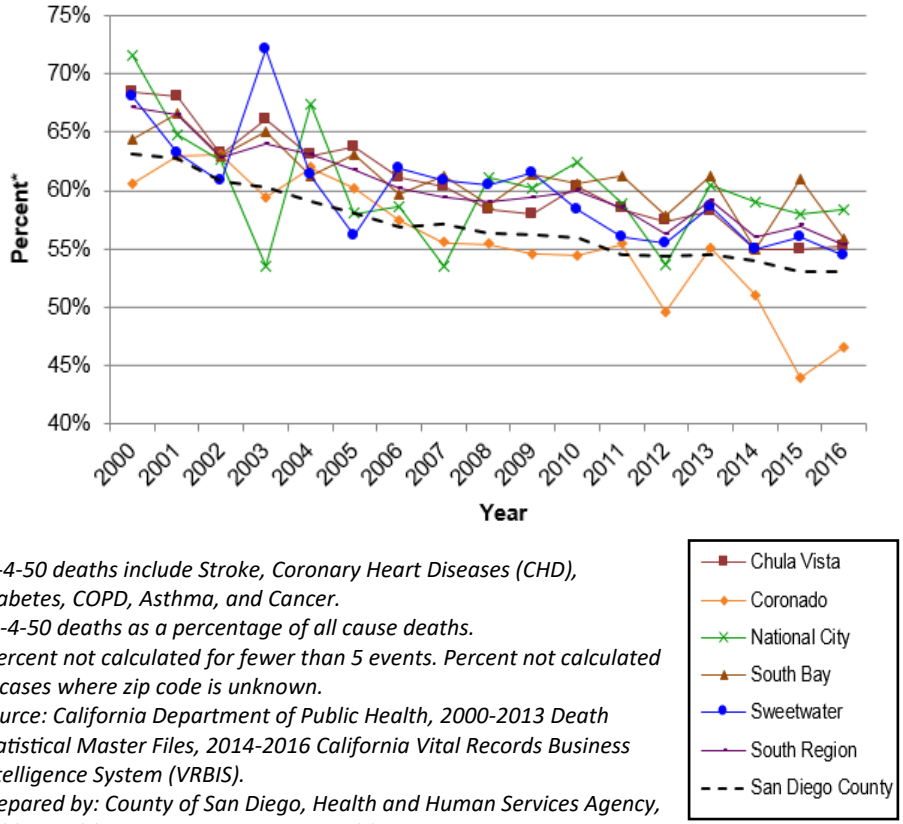
Three behaviors - poor diet, physical inactivity and tobacco use - contribute to four major chronic diseases - cancer, heart disease, type 2 diabetes, and pulmonary disease - which are responsible for more than 50% of deaths worldwide. In San Diego County in 2016, 53% of deaths are due to these chronic diseases. In South Region in 2016, 55% of deaths were due to 3-4-50 diseases (Table 1).

Compared to the County overall, South Region had a higher percentage of deaths due to 3-4-50 diseases. The SRA with the highest 3-4-50 percentage in 2016 was National City, at 58%. The SRA with the lowest percentage was Coronado, at 47%. The percentages for South Region and its SRAs decreased from 2000 to 2016 (Figure 9).

Summary

Overall, the percentage of deaths due to 3-4-50 diseases has been decreasing within the South Region, and within the County overall as well. While relatively low percentages of San Diegans residing in South Region were participating in the risk behaviors that lead to deaths from one of the 3-4-50 diseases, more work is needed to continue to lower the percentage of deaths due to chronic disease. Addressing 3-4-50 behaviors and diseases ultimately helps South Region residents, and all San Diegans, to live well.

Figure 9. 3-4-50 Death† Percentages* Among San Diego County Residents—South Region, 2000-2016.



†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
§Percent not calculated for fewer than 5 events. Percent not calculated in cases where zip code is unknown.
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

References

1. World Health Organization (WHO). "The Global Strategy on Diet, Physical Activity and Health." http://www.who.int/dietphysicalactivity/media/en/gsfs_general.pdf (Accessed September 29, 2010).
2. 3Four50, www.3four50.com (Accessed July 2, 2010).
3. National Cancer Institute, "What is Cancer?" (February 9th, 2015), http://www.cancer.gov/about-cancer/what-is-cancer (Accessed October, 2015).
4. Mayo Clinic, "Heart Disease: Definition." http://www.mayoclinic.com/health/heart-disease/DS01120, (Accessed 10/2015).
5. American Heart Association. "About Stroke." http://www.strokeassociation.org/STROKEORG/AboutStroke/About-Stroke_UCM_308529_SubHomePage.jsp (Accessed 10/2015).
6. American Diabetes Association. "Statistics About Diabetes." http://www.diabetes.org/diabetes-basics/statistics/ (Accessed 10/2015).
7. Centers for Disease Control and Prevention, "Chronic Obstructive Pulmonary Disease (COPD)." http://www.cdc.gov/copd/index.html. (Accessed 10/2015).

Table 1. 3-4-50 Death† Percentages* Among San Diego County Residents—South Region, 2000-2016.

Geography	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Chula Vista	68%	68%	63%	66%	63%	64%	61%	60%	58%	58%	60%	58%	57%	58%	55%	55%	55%
Coronado	61%	63%	63%	59%	62%	60%	57%	56%	55%	55%	54%	55%	50%	55%	51%	44%	47%
National City	72%	65%	63%	54%	67%	58%	59%	54%	61%	60%	62%	59%	54%	60%	59%	58%	58%
South Bay	64%	67%	63%	65%	61%	63%	60%	61%	59%	61%	61%	61%	58%	61%	55%	61%	56%
Sweetwater	68%	63%	61%	72%	61%	56%	62%	61%	61%	61%	58%	56%	55%	59%	55%	56%	54%
South Region	67%	66%	63%	64%	63%	62%	60%	59%	59%	59%	60%	59%	56%	59%	56%	57%	55%
San Diego County	63%	63%	61%	60%	59%	58%	57%	57%	56%	56%	56%	54%	54%	55%	54%	53%	53%

†3-4-50 deaths include Stroke, Coronary Heart Diseases (CHD), Diabetes, COPD, Asthma, and Cancer.
**3-4-50 deaths as a percentage of all cause deaths.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS).
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Table 2. Leading Causes of Death[1,2] Among San Diego County Residents, South Region, 2015.

Rank	South Region	San Diego County	California	United States
1	Diseases of the Heart	Malignant Neoplasms	Diseases of the Heart	Diseases of the Heart
2	Malignant Neoplasms	Diseases of the Heart	Malignant Neoplasms	Malignant Neoplasms
3	Alzheimer's Disease	Alzheimer's Disease	Alzheimer's Disease	Chronic Lower Respiratory Diseases
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Accidents/Unintentional Injuries
5	Diabetes Mellitus	Accidents/Unintentional Injuries	Chronic Lower Respiratory Diseases	Cerebrovascular Diseases
6	Chronic Lower Respiratory Diseases	Chronic Lower Respiratory Diseases	Accidents/Unintentional Injuries	Alzheimer's Disease
7	Accidents/Unintentional Injuries	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
8	Chronic Liver Disease and Cirrhosis	Intentional Self-Harm (Suicide)	Influenza and Pneumonia	Influenza and Pneumonia
9	Influenza and Pneumonia	Chronic Liver Disease and Cirrhosis	Chronic Liver Disease and Cirrhosis	Nephritis, Nephrotic Syndrome and Nephrosis
10	Essential Hypertension And Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Essential Hypertension and Hypertensive Renal Disease	Intentional Self-Harm (Suicide)

Leading Causes of Death

Introduction

The leading causes of death are mortality statistics useful for showing the relative burden of cause-specific mortality. The top 10 most common rankable causes of death are determined in San Diego County each year, based on rankable categories and reported underlying cause of death. Rankings show the most frequently occurring causes of death out of those rankable. It is important to note that rankings do not in any way depict risk of dying from one condition or another. Mortality rates for a specific cause of death may increase or decrease, but the ranking may not change over time.

Note: Diseases ranked 1 and 2 make up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 are within 5% of one another for San Diego County and each of the six HHSA Regions.
[1] Rank is based on total number of deaths in each of the National Center for Health Statistics (NCHS) "rankable" categories. The top 15 leading causes of death presented here are based on the San Diego County residents for 2015.
[2] Cause of death is based on the underlying cause of death reported on death certificates as classified by ICD-10 codes.
Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System.
Prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, June, 2018.

Rankable causes of death are categories determined based on recommendations from the 1951 Public Health Conference on Records and Statistics. The original list had 64 selected causes of death; the list used for the 2015 rankings only had 51 categories. For more information on the categories and the conditions they encompass, please visit https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_05.pdf.

Analysis

Table 2 on the previous page shows the Leading Causes of Death in South Region, San Diego County, California, and the United States as a whole. In South Region in 2015, Diseases of the Heart were the leading causes of death (in comparison to #2 for the County overall), followed by Malignant Neoplasms. Compared to the County overall, diabetes ranked higher in South Region (#5 in South Region; #7 in San Diego County), and accidents ranked lower (#7 in South Region; #5 in San Diego County).

Summary

Overall, the most common causes of death in 2015 were Malignant Neoplasms and Diseases of the Heart, ranking either first or second within each HHSA Region, the County overall, the State of California, and the nation. Diseases ranked 1 and 2 make up approximately 50% of deaths, and percentages of deaths due to diseases ranked 1 and 2 were within 5% of one another for San Diego County and each of the six HHSA Regions. Alzheimer's disease deaths were more common in California, the County, and the HHSA Regions than they were in the United States overall.

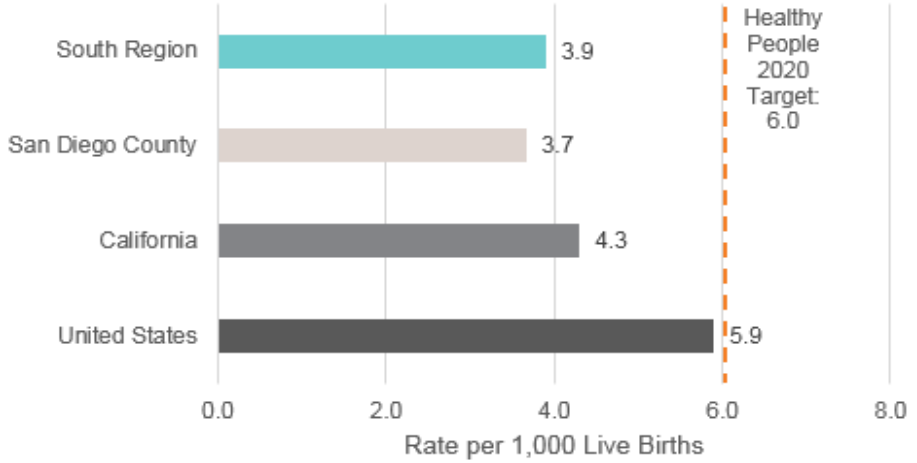
Infant Mortality

The Centers for Disease Control and Prevention (CDC) define infant mortality as the death of an infant before his or her first birthday, while defining the rate of infant mortality as the number of those infant deaths per 1,000 live births in the same year.[1] It is common practice to consider the infant mortality rate (IMR) as a representative indicator of population health.[2] It is theorized that using IMR as an indicator might mirror other factors of population health such as social well-being, rates of illness and disease, economic development, general living conditions and others.[3] It has also been used as a proxy measure for access and quality of pre-term and post-term medical care, for both the mother and infant.[4] In 2016, the top three causes of infant mortality in the United States were congenital malformations, low birth weight and Sudden Infant Death Syndrome.[2]

The infant mortality rate in South Region in 2015 was 3.9 deaths per 1,000 live births, well below the Healthy People 2020 Target. This was slightly higher than the County overall (3.7 deaths per 1,000 live births). The infant mortality rate in South Region in 2015 was lower than the State of California (4.3 deaths per 1,000 live births), and the United States as a whole (5.9 deaths per 1,000 live births) (Figure 10).

In general, between 2000-2015, the infant mortality rate decreased in the South Region (Figure 11).

Figure 10. Overall Infant Mortality Rate, South Region, 2015.



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

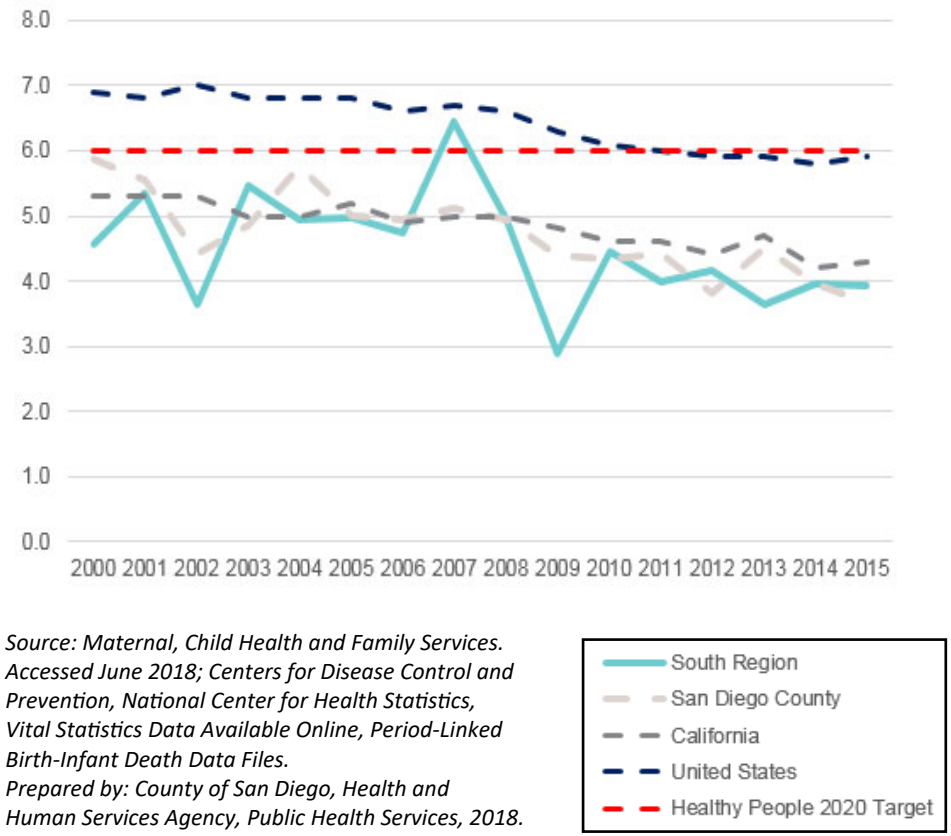
1. Centers for Disease Control and Prevention (CDC). Infant Mortality. Reproductive Health. https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm. Published 2017.

2. Kochanek KD, Murphy SL, Xu J, Arias E. Mortality in the United States, 2016. NCHS Data Brief. doi:10.1056/NEJM184002260220306.

3. Reidpath DD. Infant mortality rate as an indicator of population health. *J Epidemiol Community Heal*. 2003;57(5):344-346. doi:10.1136/jech.57.5.344.

4. Fry-Johnson YW, Levine R, Rowley D, Agboto V, Rust G. United States black:white infant mortality disparities are not inevitable: Identification of community resilience independent of socioeconomic status. *Ethn Dis*. 2010;20(1 SUPPL.1):1-10.

Figure 11. Overall Infant Mortality Rate, South Region Comparison, 2000-2015.



Source: Maternal, Child Health and Family Services. Accessed June 2018; Centers for Disease Control and Prevention, National Center for Health Statistics, Vital Statistics Data Available Online, Period-Linked Birth-Infant Death Data Files.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2018.

Suicide

In 2016, South Region had a lower suicide rate than San Diego County overall, California, the United States as a whole, and was below the Healthy People target (10.2 per 100,000 population). In the National City SRA, the suicide rate was highest compared to the other SRAs in the Region, San Diego, and the Healthy People 2020 target. The rate in South Bay was lower compared to the other SRAs in South Region (Table 3). Between 2011-2016, rates in National City, South Bay, Sweetwater, and South Region overall have decreased, while the rate in Chula Vista increased slightly (Figure 12). South Region, Chula Vista SRA, South Bay SRA, and Sweetwater SRA all had rates in 2016 lower than the Healthy People 2020 Target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce suicide death by the year 2020).

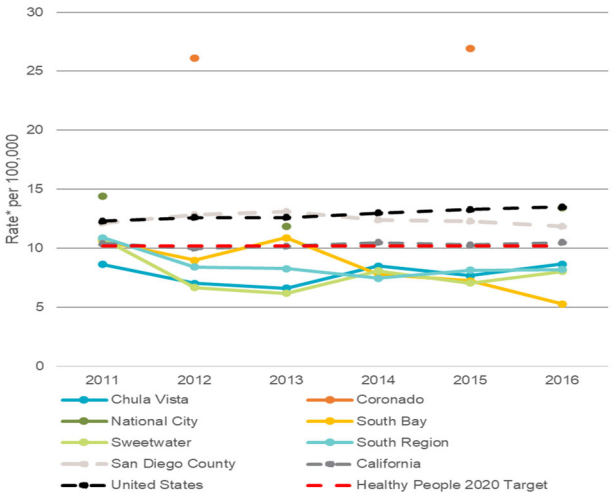
Table 3. Suicide*, South Region, 2016.

Geography	2016 Suicide Death Rate*
Chula Vista	8.7
Coronado	§
National City	13.4
South Bay	5.3
Sweetwater	8.0
South Region	8.2
San Diego County	11.9
California	10.5
United States	13.5
Healthy People 2020 Target	10.2

**All rates are age-adjusted.; rate per 100,000.*
§Percent not calculated for fewer than 5 events.
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

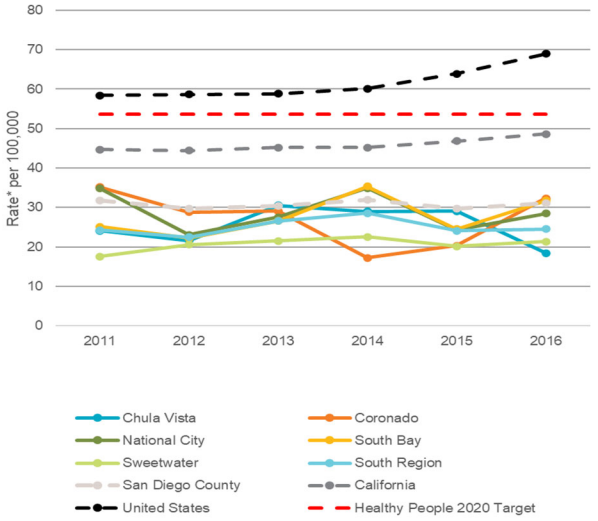
MORBIDITY AND MORTALITY

Figure 12. Suicide*, South Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS). SANDAG, Current Population Estimates, Received 03/2017. CA, US, & HP2020 Target: Healthy People 2020 Mental Health and Mental Disorders 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 13. Unintentional Injury Death Rate*, South Region, 2011-2016.



**All rates are age-adjusted; rate per 100,000.*
Source: California Department of Public Health, 2000-2013 Death Statistical Master Files, 2014-2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017. CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Unintentional Injury

Unintentional injuries include any accident that results in cutting or piercing of the skin, drowning or submersion, falls, or motor vehicle accidents. Nationally, more than 3 million people are hospitalized, 27 million people are treated in emergency departments and released, and over 192,000 die as a result of violence and unintentional injuries each year. The cost of both fatal and nonfatal injury in the U.S. in 2013 was $671 billion, in both medical and work loss costs, according to the CDC.[1]

In 2016, South Region as a whole, Chula Vista, National City, and Sweetwater all had rates of unintentional injury death below San Diego County and below California and the United States overall (Table 4). The Coronado and South Bay SRAs had rates higher than the County, but lower than the State and the United States as a whole.

The rate of unintentional injury death in San Diego County, South Region, and all the SRAs within South Region was below the Healthy People 2020 target (a goal set by the Federal Office of Disease Prevention and Health Promotion to reduce unintentional injury death by the year 2020). The SRA with the highest unintentional injury death rate was Coronado; the lowest was Chula Vista. Between 2011-2016, the unintentional injury death rate increased in the South Bay and Sweetwater SRAs. The Chula Vista, Coronado, and National City SRAs experienced a decrease between 2011-2016 in the unintentional injury death rate (Figure 13).

1.Centers for Disease Control and Prevention, National Center for Injury Prevention and Control https://www.cdc.gov/injury/wisqars/cost/index.html

Table 4. Unintentional Injury Death Rate*, South Region, 2016.

Geography	2016 Unintentional Injury Death Rate*
Chula Vista	18.4
Coronado	32.3
National City	28.4
South Bay	31.8
Sweetwater	21.3
South Region	24.5
San Diego County	31.1
California	48.6
United States	69.0
Healthy People 2020 Target	53.7

**All rates are age-adjusted; rate per 100,000.*
Regional, Subregional, & County Source: 2016 California Vital Records Business Intelligence System (VRBIS), SANDAG, Current Population Estimates, Received 03/2017.
CA, US, & HP2020 Target: Healthy People 2020 Injury and Violence Prevention 1; National Vital Statistics System-Mortality (NVSS-M), CDC/NCHS; Bridged-race Population Estimates, CDC/NCHS and Census, 2011-2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

AREAS OF INFLUENCE

Live Well San Diego Areas of Influence and Indicators

Areas of Influence

The following pages show data by Area of Influence, or factors that influence quality of life. The *Live Well San Diego* Areas of Influence and Indicator Framework provides the necessary instrument to measure progress in helping all County residents to be healthy, safe, and thriving. This Framework takes into consideration that there are many different factors influencing how well a person is living (Table 5).

Most people would agree that to "live well" means much more than simply the absence of disease. The Areas of Influence represent the five factors that were found to have the most significant impact on well-being.

Top Ten Indicators

The Top Ten Indicators are how progress is measured in each of the Areas of Influence. The areas of influence, and corresponding indicators support collective impact by being simple, actionable, and applicable at the Subregional level. Subregional Areas (SRAs) are aggregations of census tracts that are smaller than the HHSA Regions. Indicators are tracked by Region and community because geographic area, or where someone lives, tells a lot about an individual's ability to "live well."

Table 5. Indicators by Area of Influence.

Areas of	Definition	Top 10 Indicators
HEALTH	Enjoying good health and expecting to live a full life	• Life Expectancy • Quality of Life
KNOWLEDGE	Learning throughout the lifespan	• Education
STANDARD OF LIVING	Having enough resources for a quality life	• Unemployment Rate • Income
COMMUNITY	Living in a clean and safe neighborhood	• Security • Physical Environment • Built Environment
SOCIAL	Helping each other to live well	• Vulnerable Population • Community Involvement

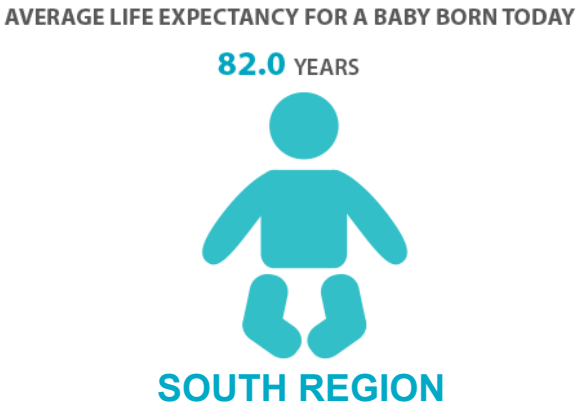
HEALTH

Area of Influence: Health

The health of an individual influences their ability to "live well." Improving health and supporting healthy choices is essential to Building Better Health in San Diego County. Two of the Top 10 indicators measuring progress for *Live Well San Diego* fall under the Health area of influence. The first, life expectancy, refers to the measure of length of life expected at birth, and describes the overall health status of a population. The second, quality of life, describes the percent of the population that is sufficiently healthy and able to live independently. Other measures that contribute to quality of life include disability status and health insurance coverage. An individual's disability status can create barriers to education, employment, and ability to live independently, thus influencing their quality of life. Access to care – both preventive medicine services and treatment for disease – is essential to a high quality of life. Both disability status and access to care influence a person's health and therefore influence their quality of life.

Live Well San Diego Indicator #1: Life Expectancy

Life expectancy at birth is measured as the average number of years a baby born today is expected to live if current mortality patterns continue throughout his or her lifetime.

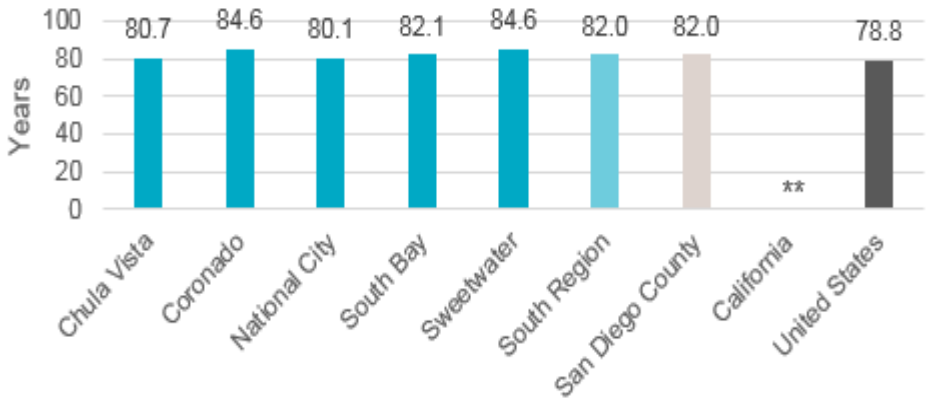


San Diego County: 82.0 Years

California: **

United States: 78.8 Years

Figure 14. Life Expectancy at Birth, South Region by Subregional Area, 2015.

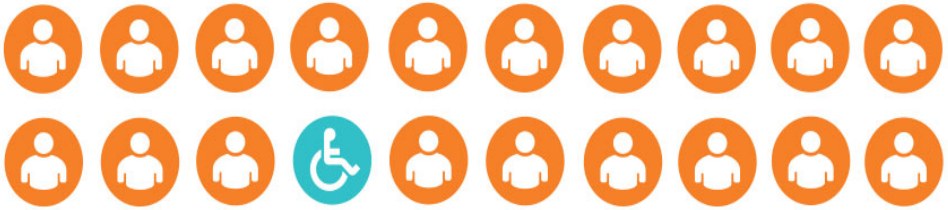


***Data not available.*
Source: Life Expectancy; U.S. and State data from the United States Centers for Disease Control and Prevention, FastStats. County and Regional data prepared by the County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, 2015. Accessed: 09/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Life Expectancy in South Region was 82.0 years, which was equal to San Diego County overall, and higher than the United States as a whole. The SRA with the highest life expectancy within South Region was Sweetwater, at 84.6 years. The SRA within South Region with the lowest life expectancy was National City, at 80.1 years (Figure 14).

Live Well San Diego Indicator #2: Quality of Life

Quality of life is measured as the percentage of the population sufficiently healthy to live independently. The ability to live independently has a positive impact on physical, mental, emotional, and social well-being.



19 IN **20** PEOPLE ARE HEALTHY ENOUGH TO LIVE INDEPENDENTLY*

**Defined as not having health issues (physical, mental, or emotional condition) that impact a person's ability to live independently.*

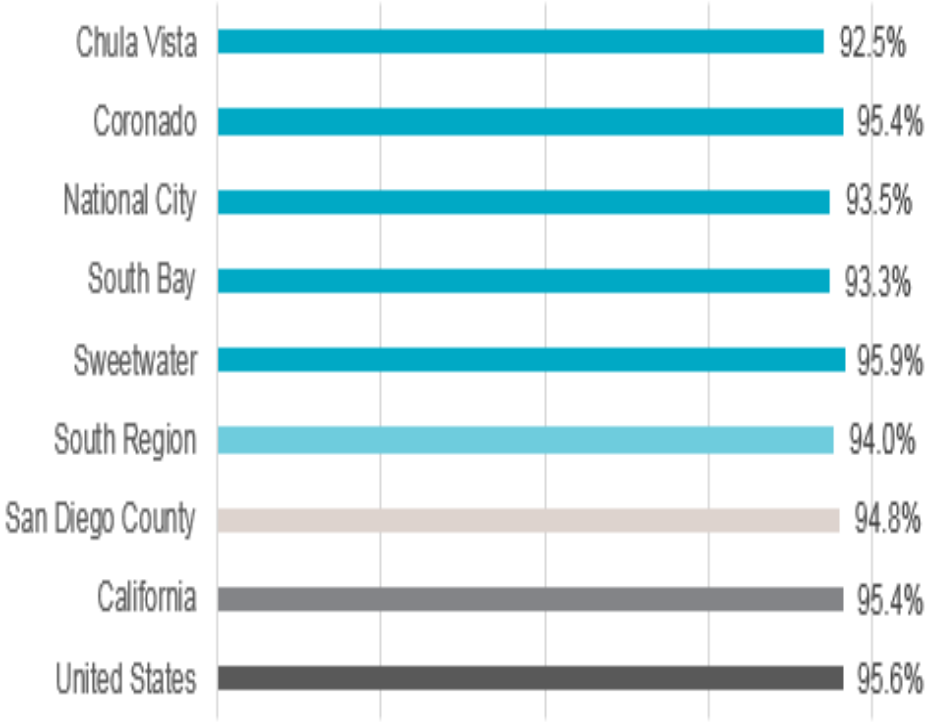
SOUTH REGION: 94.0%

San Diego County:	California:	United States:
94.8%	95.4%	95.6%

In South Region, 19 out of 20 people were healthy enough to live independently (meaning the individual does not have any physical, mental, or emotional condition that impacts their ability to live independently).

The percentage of people who are able to live independently was similar across South Region, its SRAs, San Diego County, California, and the United States as a whole (Figure 15).

Figure 15. Quality of Life (Ability to Live Independently), South Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1810. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

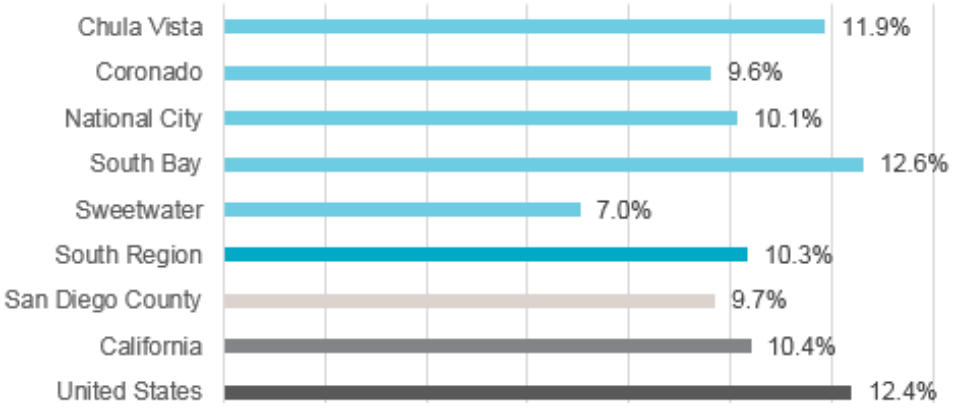
Disability Status

Disability is defined as a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business. Disability also contributes to an individual's ability to live independently. In 2015, 10.3% of residents in South Region reported having a disability (Figure 16).

In South Region, approximately 1 in 10 residents had a disability. The SRA with the highest proportion of residents with a disability was South Bay, at 1 in 8. South Region had a similar proportion of residents who were disabled compared to the County overall. South Region and its SRAs except for South Bay and Chula Vista all had percentages of disabled residents lower than California and the United States overall.

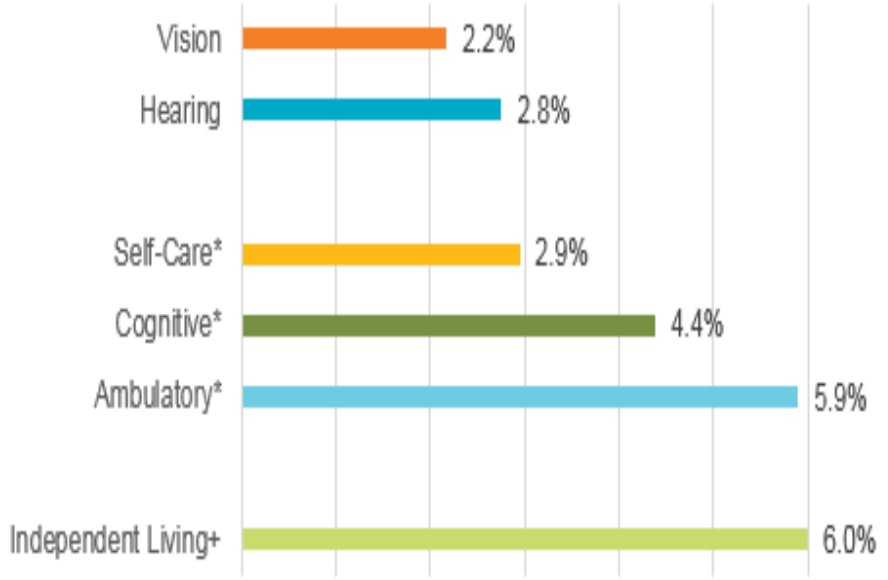
As shown in Figure 17, the most prevalent type of disability among adults aged 18 and over in South Region was independent living. The second most prevalent type of disability among adults in the Region was ambulatory, meaning the person had serious difficulty walking or climbing stairs.

Figure 16. Disability Status by Subregional Area, South Region, 2015



Source: U.S. Census Bureau, American Community Survey 2011-2015 5-Year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 17. Disability Status by Type, South Region, 2015.



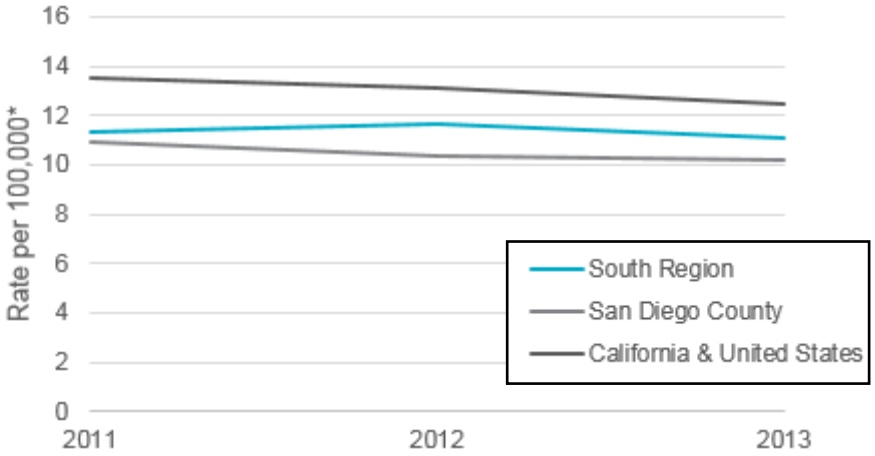
Note: Percentage represents fraction out of total residents reporting disabilities (46,759). Percentages do not add to 100% because an individual may report having more than one kind of disability or difficulty.
**Cognitive, Ambulatory, and Self-Care excludes population under 5 years.*
+Independent living disabilities only calculated for 18+ population.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1810.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Internal Health Assessment

In this section, the results of additional internal and external health assessments are described. The purpose of this section is to help paint a more complete picture of the health of San Diego County residents.

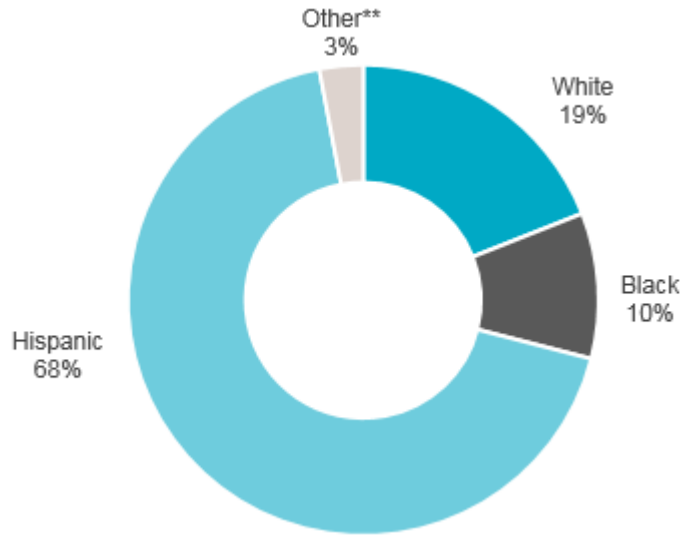
HIV/AIDS Assessment

Figure 18. HIV Incidence, South Region, 2011-2013.



Note: California and United States have nearly identical incidence rates and are represented by one line.
United States Source: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral hepatitis, STD, and TB Prevention; Division of HIV/AIDS Prevention. HIV Surveillance Report: Diagnoses of HIV Infection in the United States and Dependent Areas, 2016. https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-surveillance-report-2016-vol-28.pdf. Accessed December 2017.
California Source: California Department of Public Health, Center for Infectious Diseases, Office of AIDS, Sacramento, California. California HIV Surveillance Report—2015. https://www.cdph.ca.gov/Programs/CID/DOA/CDPH%20Document%20Library/California%20HIV%20Surveillance%20Report%20-%202015%20(Final%20Version%20Submitted%20for%20Approval).pdf. Accessed December 2017.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), retrieved December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 19. Persons Living with HIV/AIDS, by Race/Ethnicity, South Region, 2010-2014.



***Includes Asian/Pacific Islander, Native American, and Unknown.*
Note: Percentages may not total to 100% due to rounding.
Source: County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services, HIV/AIDS Epidemiology Unit (HAEU), HIV Epidemiology report 2015.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Human Immunodeficiency Virus, or HIV, is a virus that weakens a person's immune system by destroying important cells that fights disease and infection. Acquired Immunodeficiency Syndrome, or AIDS, refers to an advanced HIV infection, and is diagnosed when immune cell counts drop below a certain threshold, or a person with an HIV infection acquires another opportunistic infection due to their severely weakened immune system.

Since 2011, the incidence rates (new diagnoses) of HIV have declined in South Region. In 2013, the rate at which new cases of HIV were diagnosed was 11.1 cases per 100,000 people (Figure 18). The HIV incidence rate in South Region from 2011-2013 was consistently higher than the rate in San Diego County.

Between 2010-2014, there were 2,438 new HIV diagnoses in the County, 20% of which were in the South Region. Of those newly diagnosed cases during that time period, 10% were female.

Of persons living with HIV/AIDS in the South Region between 2010-2014, 19% were white, 10% were black, 68% were Hispanic, and an additional 3% were either Asian/ Pacific Islander, Native American, or their race/ethnicity was unknown (Figure 19).

External Health Assessment

Oral Health Assessment

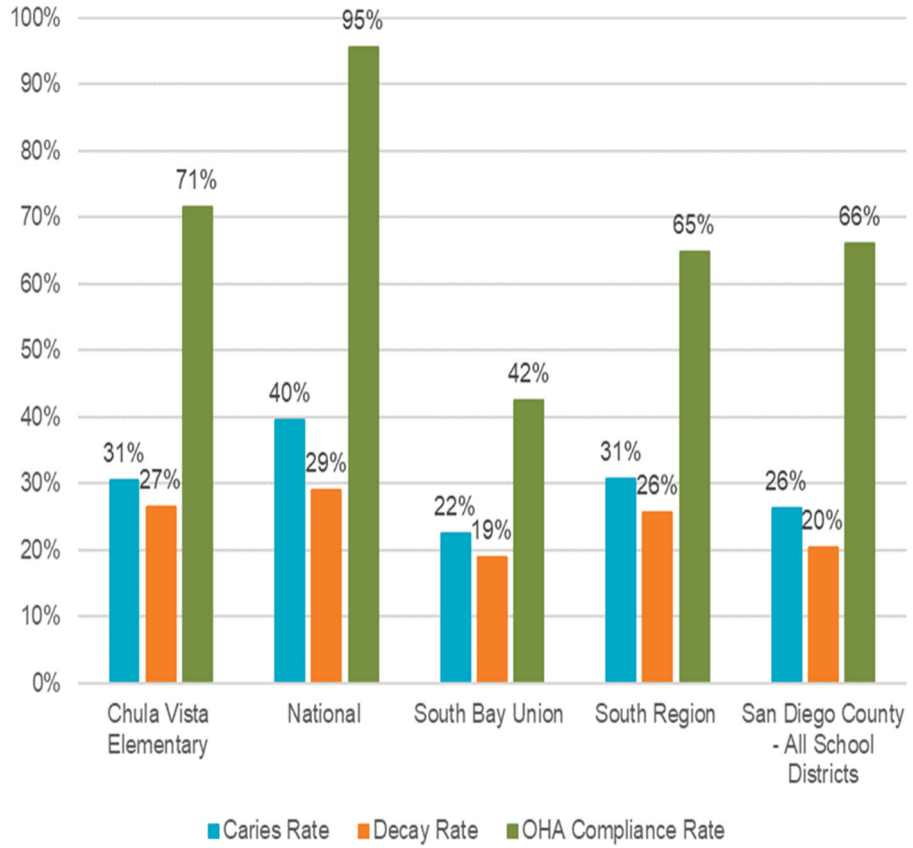
Assembly Bill 1433 requires schools to distribute the Oral Health Assessment (OHA) Form to parents who are registering their child in public school, in either kindergarten or first grade. The form collects general demographic information about the student from the parent, and information about dental caries and decay from a licensed dental professional. Schools must collect the Oral Health Assessment Forms by May 31 of the school year and are responsible to report totals to their district. All Regions are required to collect this data.

The summary report submitted by each district contains information about the number and percentage of children with an OHA on file, which is also called the compliance rate, for the current school year. Once reports are submitted to the local Child Health and Disability Prevention (CHDP) Program, data are analyzed. Although the following results provide insight on current oral health issues among school children, findings should be interpreted with caution because of potential data accuracy and reporting issues. All school districts are required to participate.

In South Region, participating schools were part of the Chula Vista, National, and South Bay Union School Districts. Overall, out of 5,692 eligible kindergartners and first graders in South Region during the 2017-2018 school year, 3,691 (66%) participated in the oral health assessment (Figure 20). Approximately 31% (1,135) were experiencing dental caries. Of those who participated, 26% (946) were experiencing dental decay.

Compared to the County overall, participating students in the South Region had higher rates of dental caries (31%; County 26%). Participating students in the South Region also had higher rates of decay (26%; County 20%) than the County overall. The compliance (participation) rate in South Region was the same as the County overall (65%; County 66%).

Figure 20. Oral Health Assessment (OHA) Results, South Region, 2017-2018.



Note: In geographies where OHA compliance rates are low, the caries and visible decay rates may not accurately reflect the actual rates among those kindergarteners and first graders.
Source: County of San Diego, Health & Human Services Agency, Maternal, Child and Family Health Services, Child Health and Disability Prevention Program, South Region Oral Health Assessment, School Year 2017-18.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, 2019.

KNOWLEDGE

Area of Influence: Knowledge

KNOWLEDGE

Knowledge and access to education play an important part in the ability of an individual to "live well." Learning throughout the lifetime, for all individuals, impacts their health status. Education is measured by looking at the percentage of the population aged 25+ that currently has a high school diploma or GED. Graduation from high school is required for individuals to either further their education by going on to college, or in most cases, to get a job. Both of these factors influence the health of an individual.

7 IN 9 STUDENTS GRADUATE FROM HIGH SCHOOL

SOUTH REGION: 77.1%

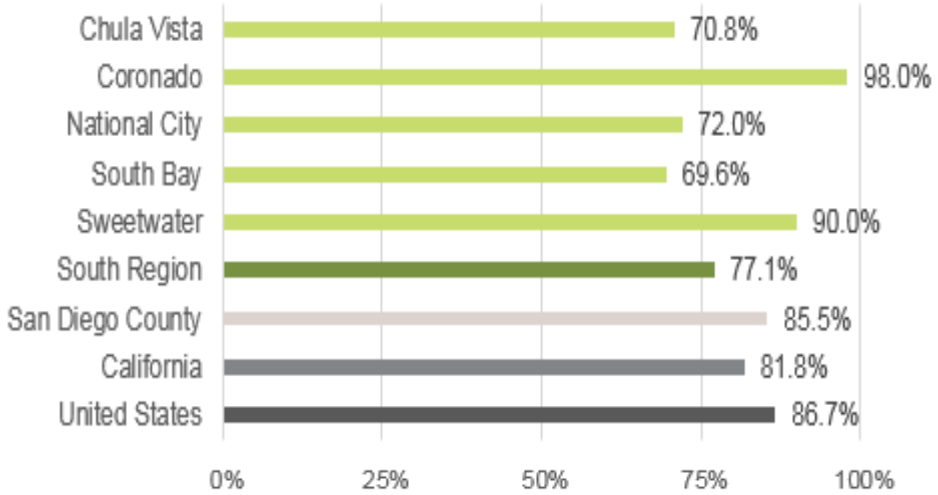
San Diego County:	California:	United States:
85.5%	81.8%	86.7%

Live Well San Diego Indicator #3: Education

Education is measured as the percentage of the population with a high school diploma or equivalent. Education has a beneficial influence on a variety of economic, social and psychological factors which impact the health and well-being of a population.

In South Region, 77.1% of adults aged 25 and over had a high school diploma or equivalent. This estimate is lower than the County as a whole, California, and the United States overall in 2015 (Figure 21). The SRA with the highest percentage of high school graduates was Coronado, where 98.0% of residents reported having a high school diploma or equivalent. The SRA with the lowest percentage was South Bay, where only 69.6% of residents had a high school diploma or equivalent.

Figure 21. Education, South Region by Subregional Area, 2015.



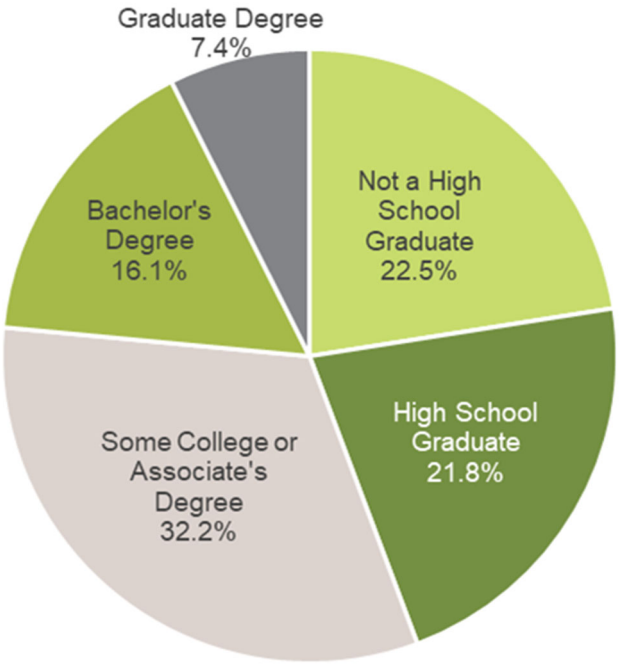
"Education" refers to percent of population 25 years and older with at least a high school diploma or equivalent.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1501. Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

Overall Educational Attainment

About half of South Region residents had at least some college education, with three -tenths having some college or an associates degree, one-sixth having a bachelors degree, and one-thirteenth having a graduate degree (Figure 22).

Figure 22. Overall Educational Attainment, South Region, 2015.

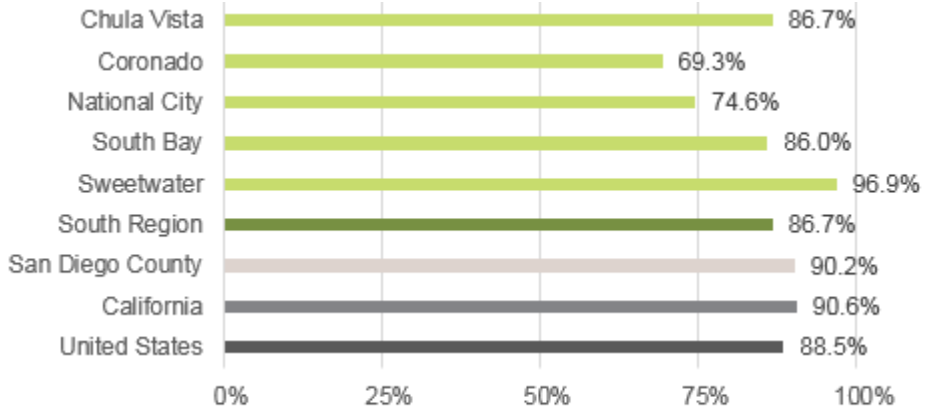


Note: "Educational Attainment" refers to the percent of population 25 years and older at the listed education level.
Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP02.
Prepared by: Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

School Enrollment

In 2015, 86.7% of school-aged residents (aged 3-24 years) were enrolled in school in the South Region. This figure was lower than enrollment in San Diego County (90.2%), California (90.6%), and the United States as a whole (88.5%; Figure 23). The SRA with the highest school enrollment was Sweetwater. The SRA with the lowest school enrollment was Coronado. It is important to note that school enrollment includes those who are college age.

Figure 23. School Enrollment, South Region by Subregional Area, 2015.



"School enrollment" refers to enrollment in regular school, either public or private, which includes nursery school, kindergarten, elementary school, and schooling which leads to a high school diploma or college degree.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1401; Accessed 04/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Area of Influence: Standard of Living

The Standard of Living Area of Influence concerns residents having enough resources to live a quality life. Important indicators include unemployment rate because having a steady job and making enough money to live a quality life are both crucial to an individual's standard of living. San Diego County is an expensive place to live, as the cost of housing here is higher than it is in most other urban areas across the United States. Housing affordability is measured by the percentage of individuals who spend less than 30% of their income on housing. Being able to afford adequate housing and still being able to afford other necessities (health care, food, transportation, etc.) reflects an individual's ability to "live well."

Live Well San Diego Indicator #4: Unemployment Rate

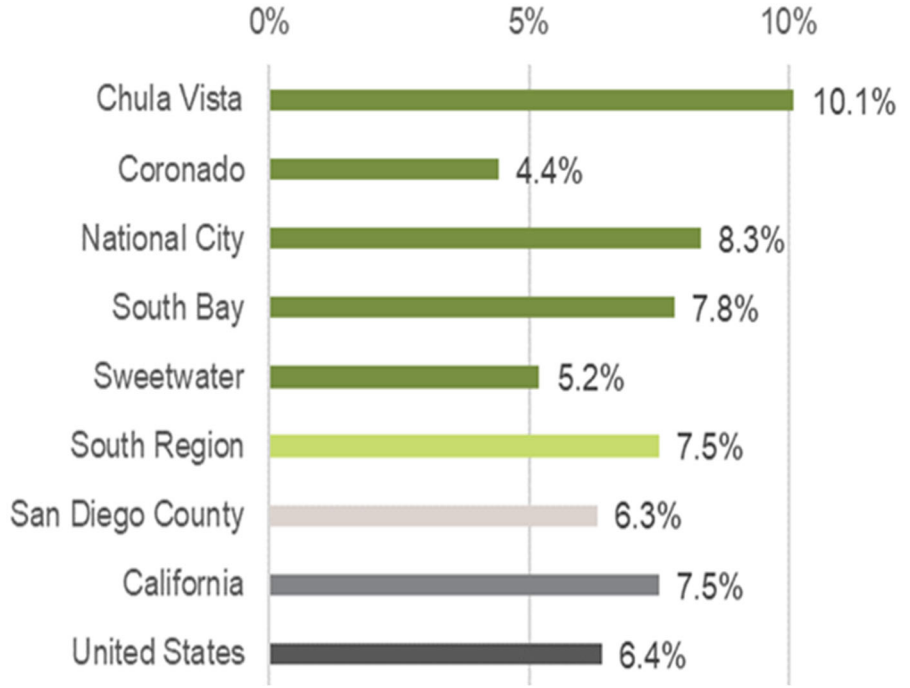
Unemployment rate is measured as the percentage of the total labor force that is unemployed. The rate of unemployment has a strong negative influence on the financial health and overall well-being of a population.

San Diego County: 6.3%

California: 7.5%

United States: 6.4%

Figure 24. Population Unemployed*, South Region by Subregional Area, 2015.



**"Unemployment" refers to the population unemployed, of those eligible and seeking work.*
Source: 2015 Unemployment Rate. ESRI Community Analyst.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2019.

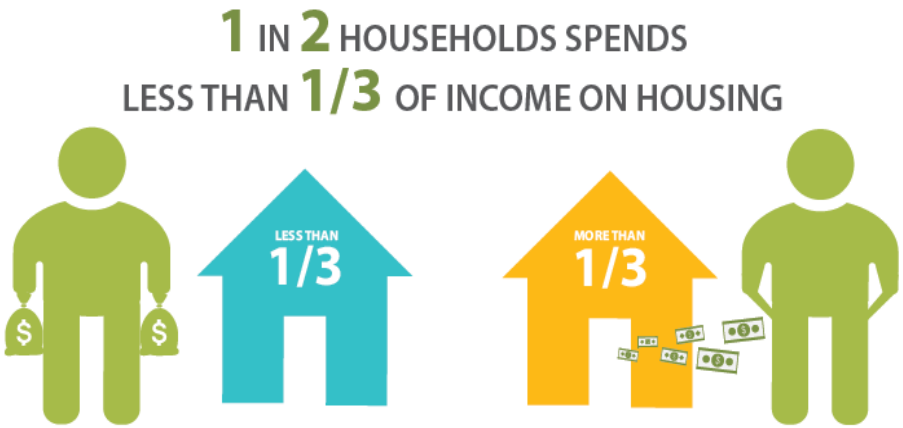
In 2015, 7.5% of South Region residents eligible and seeking work were unemployed. The unemployment rate for South Region was higher in 2015 than it was in either San Diego County (6.3%) or the United States as a whole (6.4%), and the same as California (7.5%; Figure 24).

The SRAs with the highest unemployment rates were Chula Vista (10.1%) and National City (8.3%). In Chula Vista 1 in 10 people eligible and seeking work were unemployed.

STANDARD OF LIVING

Live Well San Diego Indicator #5: Income

Income is measured as the percentage of the population spending less than 1/3 of income on housing. Households who spend more than 1/3 of household income for housing may have difficulty paying for necessities such as food, transportation, or medical care.



San Diego County: 51.8%

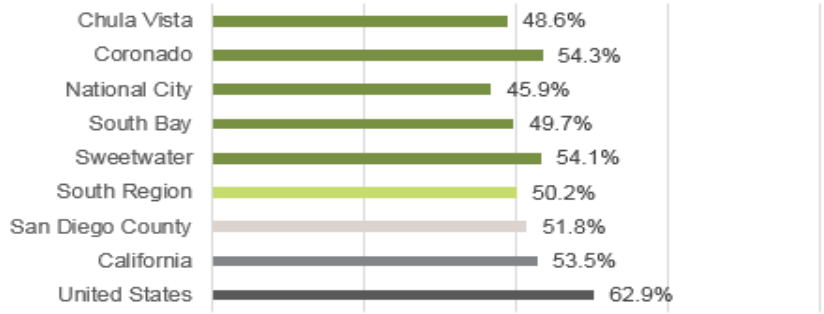
California: 53.5%

United States: 62.9%

In South Region, a large proportion of residents (50.2%) spent less than one-third of their income on housing, which was smaller than in San Diego County (51.8%), California (53.5%), and the United States overall (62.9%).

About half of households in the South Region spent less than one-third of their income on housing, a pattern that held true across all SRAs within the South Region. The SRA with the highest percentage of households spending less than one-third of their income on housing within the South Region was Coronado, followed closely by Sweetwater (Figure 25).

Figure 25. Households Spending Less Than One-Third of Income on Housing, South Region, 2015.



Does not include cash rent or those with zero or negative income.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table S2503.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

Occupation

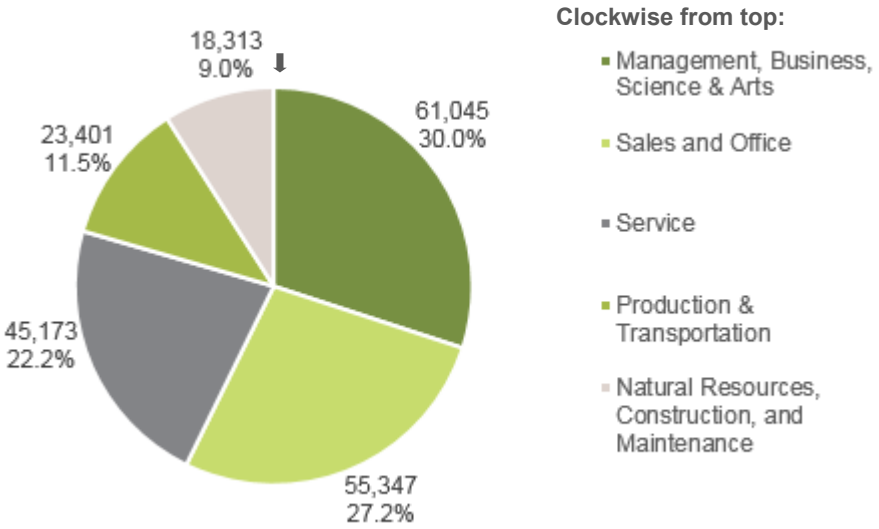
A person's educational attainment likely influences their career. Industry and occupation determine level of income, which in turn reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Certain industries and occupations come with inherent environmental or occupational risks, which may influence an individual's health.

Management, business, science, and arts includes any occupation in business, finances, computer engineering, architecture, life science-related jobs, as well as community and social services, legal, education, arts, and healthcare professionals and techs. *Service* refers to healthcare support, protective services such as firefighting and law enforcement, food preparation and service, custodial and maintenance, and personal care. *Sales and office* refers to anything related to sales or office and administrative support. *Natural resources, construction, and maintenance* refers to farming, fishing, forestry, construction, extraction, installation, maintenance and repair. *Production and transportation* includes anything related to production, transportation or material moving.

STANDARD OF LIVING

In South Region, almost one-third of people who are over the age of 16 and employed in a civilian capacity were involved in the management, business, sciences and arts sectors. The sector with the least involvement was the natural resources, construction, and maintenance occupations (Figure 26).

Figure 26. Labor Force by Occupation, South Region, 2015.

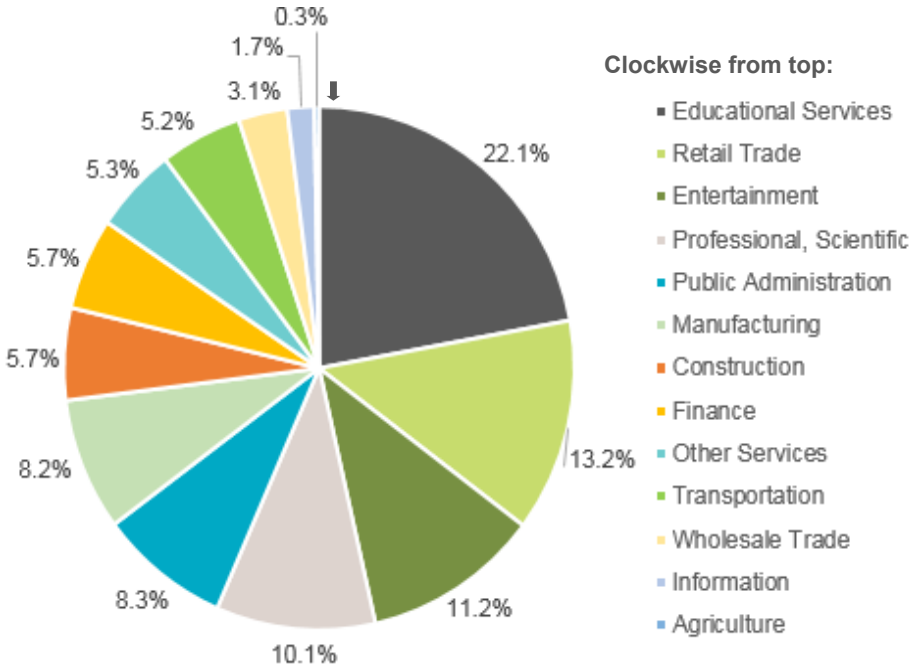


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Industry

When broken down further by industry, a more detailed picture of the sectors employing the most South Region residents emerges. The industry employing the highest percentage of residents is the educational services industry, which also includes health care and social assistance industries, at just under 1 in 4 of the employed civilian population. The next largest industry was the retail trade industry, at almost 1 in 7 residents. The least populous industry was agriculture, with only 1 in 300 of the eligible population employed (Figure 27).

Figure 27. Occupation by Industry, South Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Median Household Income and Person Per Household Income

Income reflects an individual's or family's spending power when it comes to housing, food, and medical care, which are all factors that influence the ability to live well. Household income includes income earned by the householder and all other people 15 years and older in the household, whether or not they are related to the householder. Median household income is determined by looking at the distribution of income across all households, including those with no income, and picking the point at which half the distribution falls below it, and half the distribution falls above it.

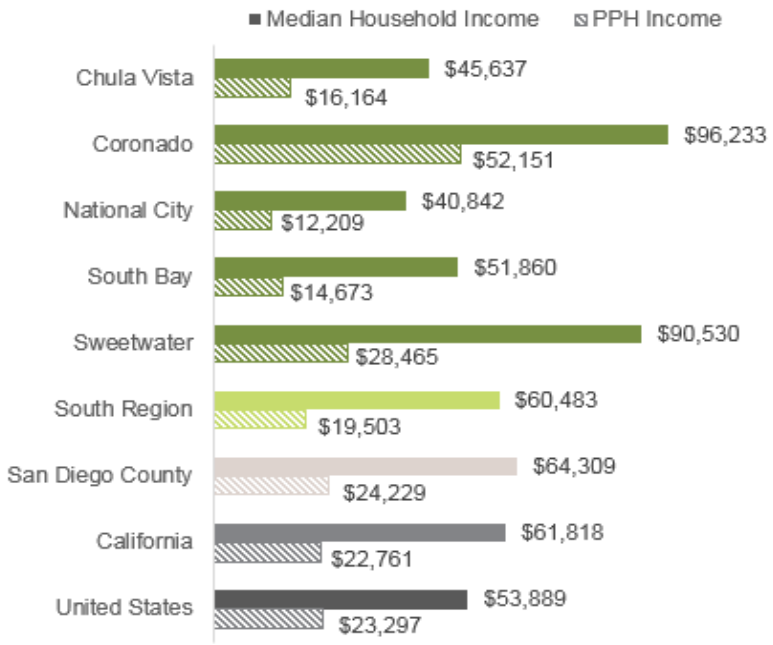
STANDARD OF LIVING

The median household income in South Region was just over $60,000 per year. This was lower than San Diego County as a whole and California, but higher than the United States overall (Figure 28).

Per person household (PPH) income is determined by taking the median and dividing it by the average number of people per household, which was 3.10 people in South Region. The PPH Income in South Region was about $19,500 per year. This was lower than San Diego County, California, and the United States overall (Figure 28).

Socioeconomic status is defined as a composite measure that typically incorporates economic, social, and work status. Economic and social status is measured by income, and work status is measured by occupation; each status is considered an indicator, and these indicators are related but do not overlap.

Figure 28. Income, South Region by Subregional Area, 2015.

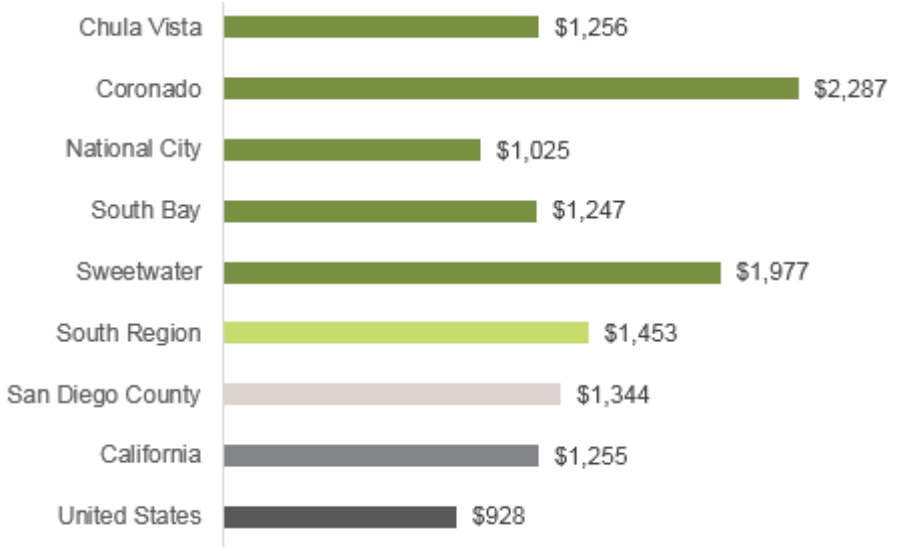


Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP03, DP04.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Cost of Living

According to the Consumer Price Index compiled by the U.S. Bureau of Labor Statistics, prices for goods, services and shelter rose 1.7% within the first six months of 2017. It was noted that the increase was primarily influenced by rising costs of shelter.[†] According to a study by Cushman and Wakefield, only 26% of households in San Diego can afford median-priced homes.[§]

Figure 29. Median Gross Rent, South Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

[†] *United States Department of Labor, Bureau of Labor Statistics. Consumer Price Index, San Diego—First Half 2017. https://www.bls.gov/Regions/west/news-release/2017/consumerpriceindex_sandiego_20170714.htm#tableA. Accessed July 23, 2018.*

[§] *Cushman & Wakefield. San Diego MARKETBEAT Multi-Family Spring 2018. http://www.cushmanwakefield.com/en/research-and-insight/unitedstates/san-diego-multifamily-snapshot. Accessed June 25, 2018.*

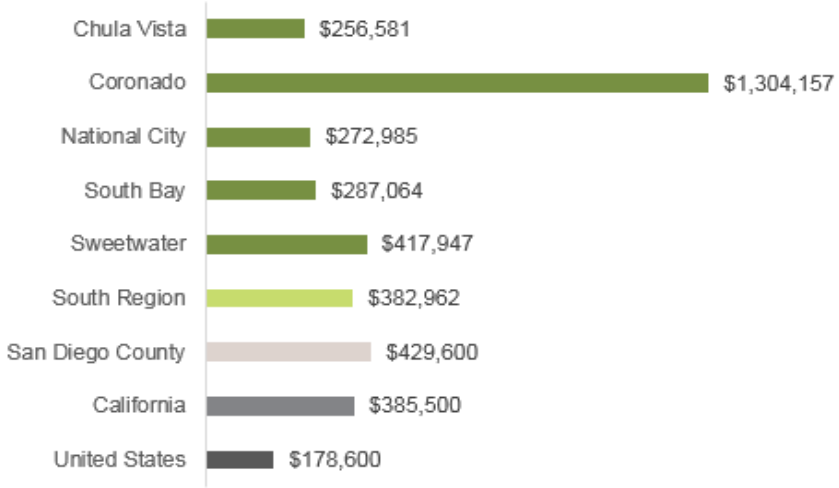
STANDARD OF LIVING

The median rent in South Region was $1,453 per month. The most expensive SRA to rent in was Coronado, followed by Sweetwater; the least expensive was National City. The median rent in South Region was higher than San Diego County and California, and significantly higher than the United States as a whole (Figure 29).

In the United States, the median house value was below $200,000. In South Region, the median house value was about $383,000. The SRA with the highest median house value was Coronado, at over $1.3 million. The SRA with the lowest median house value was Chula Vista, at about $256,500. The median house value in South Region was lower than San Diego County, about equal to California, and significantly higher than the United States as a whole (Figure 30).

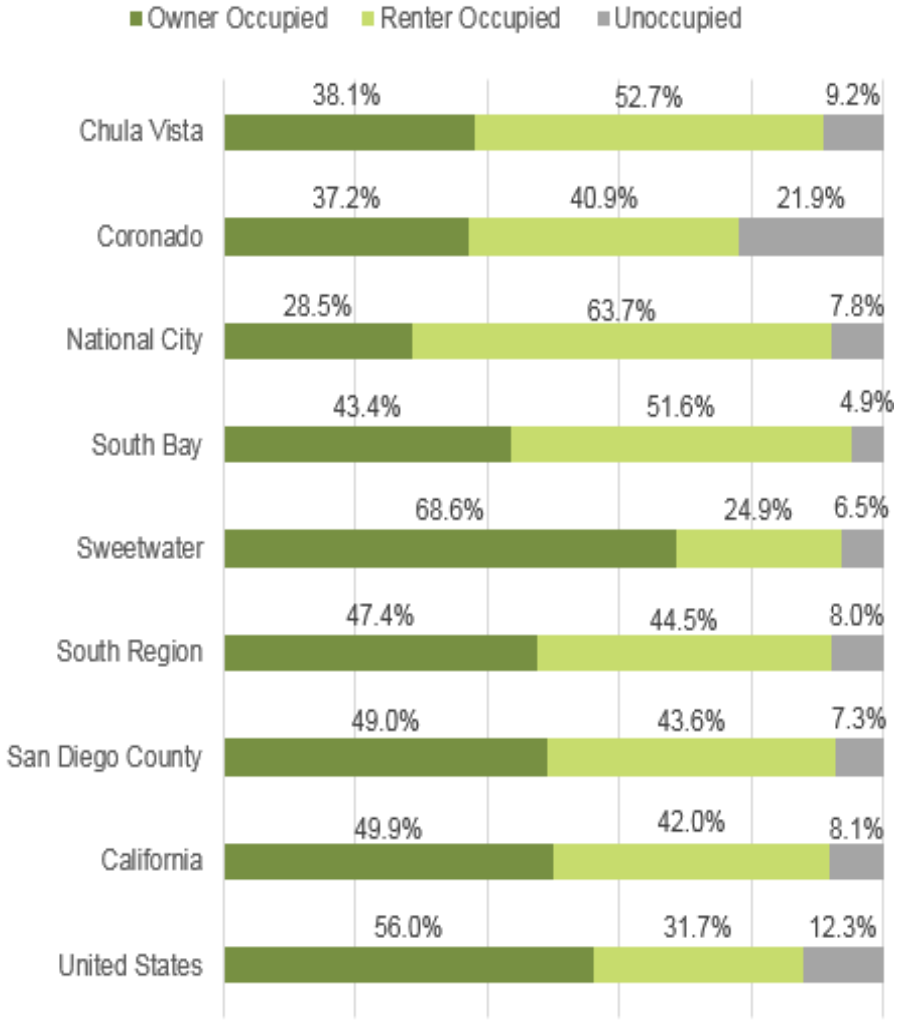
In the South Region, almost half of householders owned the home they live in. Over two-fifths of housing units were rented. About 1 in 12 housing units were unoccupied. The highest proportion of rented units within the South Region were in the National City SRA. The Sweetwater SRA had the highest proportion of owner-occupied units (Figure 31).

Figure 30. Median House Value, South Region by Subregional Area, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table DP04, B25064.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

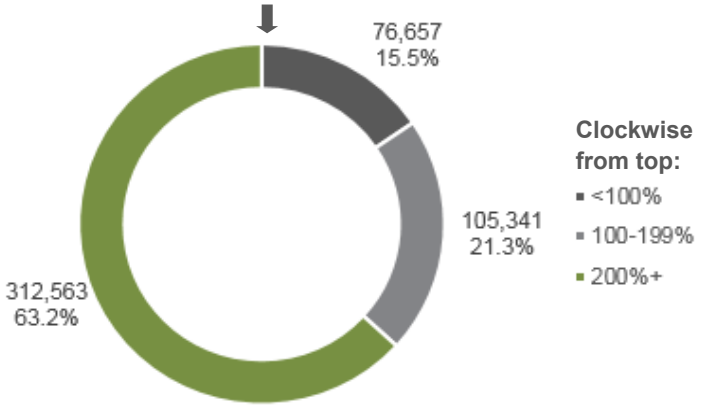
Figure 31. Housing Occupancy, South Region by Subregional Area, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP04.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

STANDARD OF LIVING

Figure 32. Population by Poverty Level, South Region, 2015.



Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year estimates, Table B17024.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Poverty is determined to be when a person or group of people lack human needs because they cannot afford them – including basic necessities such as clean water, adequate nutrition, health care, education, clothing, and shelter. Families or people with income below a certain limit are considered to be below the poverty level. Poverty level for a household is determined, in part, by the number of people in the household who must be supported by the combined household income.

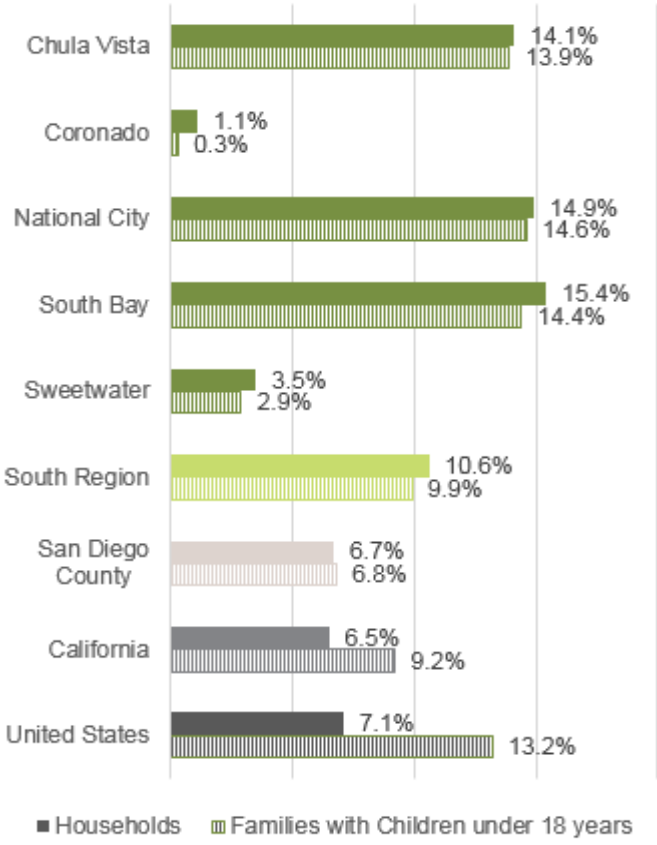
In South Region, over 1 in 7 people lived below the poverty line (Figure 32). It is generally accepted that in order to be able to afford basic necessities, an individual or household must be at or above 200% of the poverty level. With that standard, over 1 in 3 people were living without adequate financial resources.

Public Program Participation

Many San Diegans rely on public assistance to make ends meet. In 2015, 10.6% of households within the South Region received assistance from CalFresh to assist with buying food. Of families with children under the age of 18, 9.9% received CalFresh benefits. The SRA with the greatest percentage of families with children under 18 receiving benefits were National City and South Bay. The SRAs with the greatest proportion of total households receiving CalFresh benefits were South Bay, National City, and Chula Vista (Figure 33).

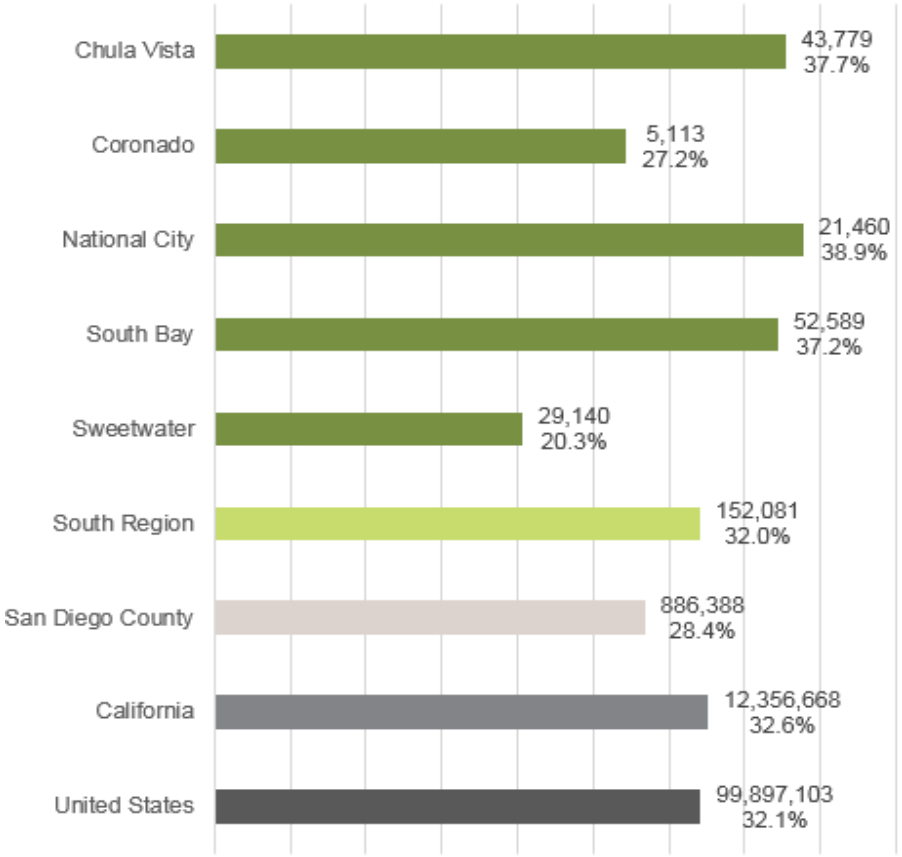
Of the nearly 500,000 people living in South Region, almost one-third relied on some sort of public health insurance coverage (Medicare, Medi-Cal, or VA health care coverage; Figure 34).

Figure 33. Receipt of Food Stamps/SNAP (CalFresh) in the Past 12 Months, South Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table B22022.
Prepared by: County of San Diego, Health and Human Service Agency, Public Health Services, Community Health Statistics Unit, 2018.

Figure 34. Public Health Insurance Coverage, South Region, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table S2704.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

External Standard of Living Assessment

In this section, the results of an additional external standard of living assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2018 WEALLCOUNT: San Diego's Annual Point-in-Time Count

On January 26, 2018, 8,576 individuals were counted as homeless in San Diego County during San Diego County's annual WEALLCOUNT Homeless Point-In-Time count. Of those, 4,990 (58.2%) were unsheltered, and 3,586 (41.8%) were considered to be sheltered (spent the night in homeless shelter or program). About 7% of those counted were within the South County, whose boundaries approximate the South Region (Figure 35).

Nearly three-quarters of the 602 counted within the South County were unsheltered (Figure 36).

Figure 35. 2018 Point-in-Time Count: Regional Distribution.

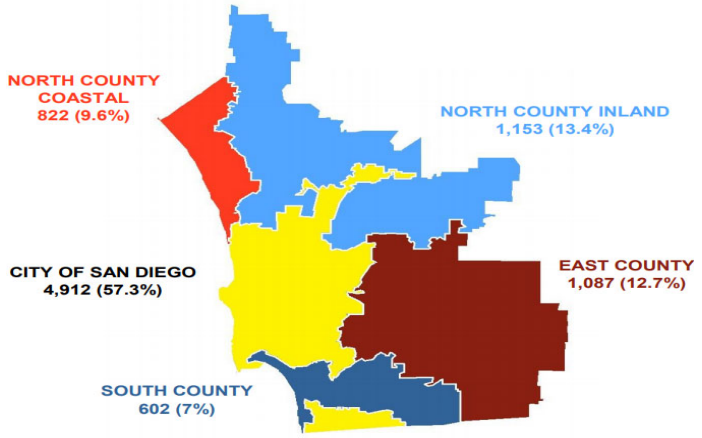
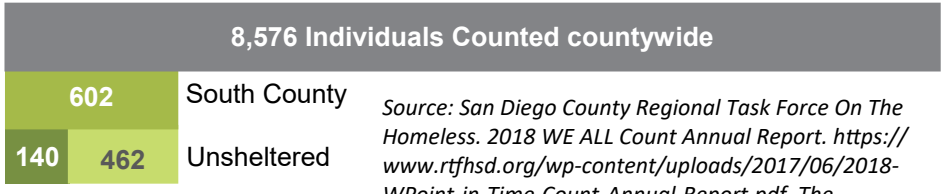


Figure 36. Point-In-Time Count Results, South Region, 2018.



Source: San Diego County Regional Task Force On The Homeless. 2018 WE ALL Count Annual Report. https://www.rtfhsd.org/wp-content/uploads/2017/06/2018-WPoint-in-Time-Count-Annual-Report.pdf. The breakdown by region for the homeless count is not the same as HHSA regions in that the boundaries for the City of San Diego approximate Central and North Central Regions combined.

COMMUNITY

Area of Influence: Community

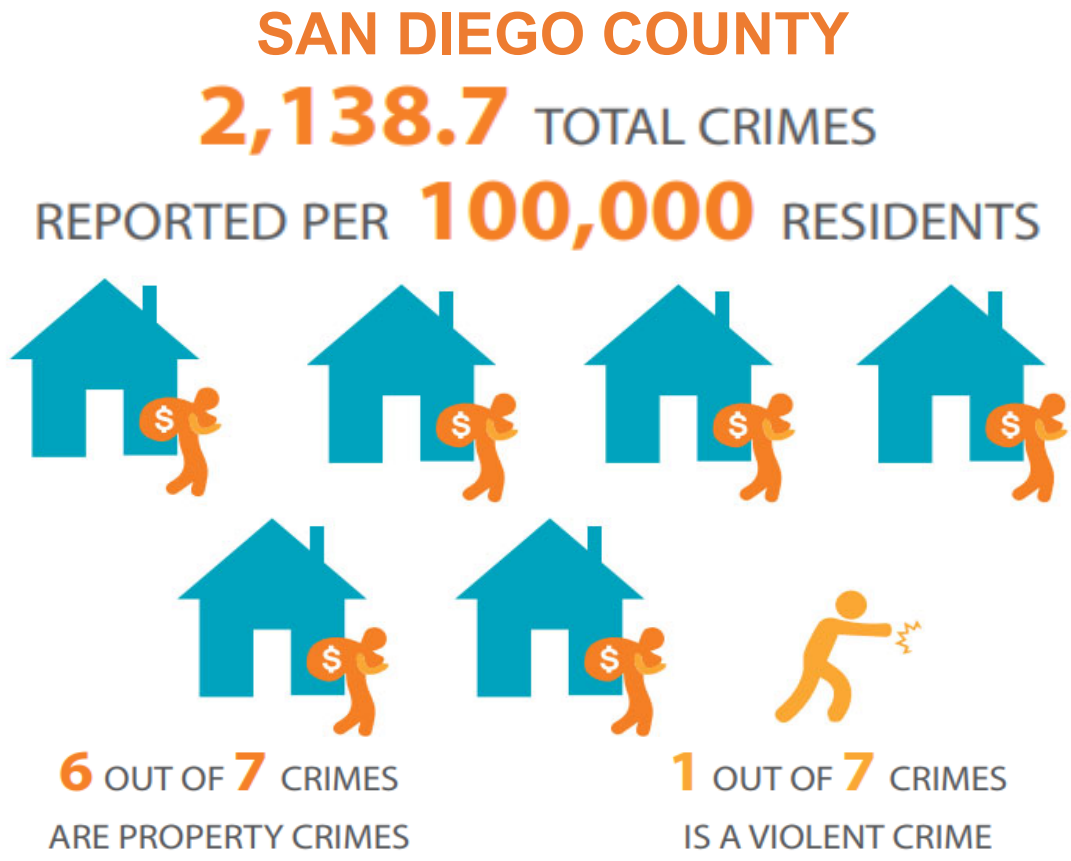
The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment.

The Community Area of Influence refers to residents living in a clean and safe neighborhood. Organizations throughout San Diego County are working together to support safe communities, projects that encourage thriving lives, and a healthy environment. Conflict resolution programs are keeping youth out of the detention system, environmentally-conscious buildings and events are creating community pride, and community gardens are beautifying the environment and improving local access to healthy foods. Partners are training residents to be advocates for change in their own neighborhoods, and the community as a whole benefits as a result.

Live Well San Diego indicators that measure progress towards this area of influence include Security (Crime Rate), Physical Environment (Air Quality), and Built Environment (Distance to Park). Living in a crime-free or low-crime area reduces stress and increases an individual's ability to go outside and interact with their environment, leading to better health outcomes. Many residents of San Diego County live in highly urban areas where there is not much open space – having a park nearby provides an opportunity to be physically active and leads to reduced disease associated with sedentary lifestyle.

Live Well San Diego Indicator #6: Security (Crime Rate)

Security (Crime Rate) is measured as the number of crimes per 100,000 people. Crime, including violent and property crimes, can have a significant impact on well-being of the population, and contributes to premature death and disability, poor mental health, and lost productivity.



Source: 2016 Overall Crime rate per 100,000 population. Consists of Violent Crime: Murder and Non-negligent Manslaughter, Forcible Rape, Robbery, and Aggravated Assault AND Property Crime: Burglary, Larceny-Theft, and Motor Vehicle theft (Arson included).
US Department of Justice- Federal Bureau of Investigation's Uniform Crime Reporting Statistics. 2016. Original Date: 8/22/2012. Accessed on: 9/2017.

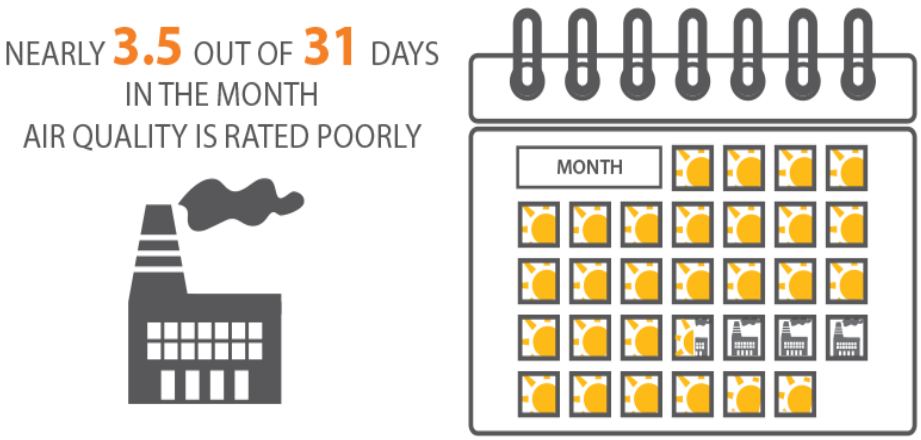
COMMUNITY

Live Well San Diego Indicator #7: Physical Environment (Air Quality)

Physical Environment: Air Quality is measured as the ratio of days that air quality is rated unhealthy. Air pollution affects more people than any other pollutant. Lower levels of air pollution in a Region correlate with better respiratory and cardiovascular health of the population.

In San Diego County, the air quality was rated poorly on 11.5% of days.

SAN DIEGO COUNTY



California:
7.8%

United States:
Data Not Available

Source: 2016. San Diego, State and Nation from EPA AirData System. http://www.epa.gov/airdata/ad_rep_con.html. May include exceptional events. Accessed 8/2017.

Live Well San Diego Indicator #8: Built Environment (Distance to Park)

Built environment/distance to park is measured as the percentage of the population living within a quarter mile of a park. Access to parks and recreation services has been shown to have positive health impacts, including the physical, social, and mental aspects of health (Figure 37).

3 IN 4 PEOPLE LIVE WITHIN A QUARTER MILE OF A PARK

SOUTH REGION: 78.1%

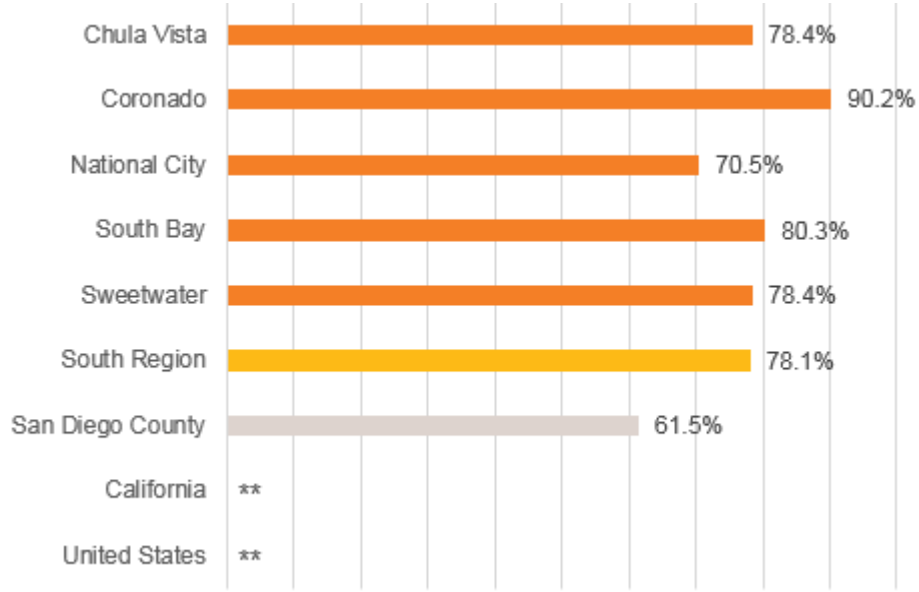
San Diego County
61.5%

California:
******

United States:
******

Source: 2016. County of San Diego, Land Use and Environmental Group, Planning and Development Services Analysis.

Figure 37. Percentage of Population Living within One-Quarter Mile of a Park or Community Space, South Region by Subregional Area, 2015.



*** Data Not Available*
Source: Rate of recreational facilities per 100,000 people. Recreational facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities (NIACS Code 713940 and 713990). 2015 County Business Patterns data set. censtats.census.gov/. Original Date: 2/22/2013. Accessed on: 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Supporting Indicators

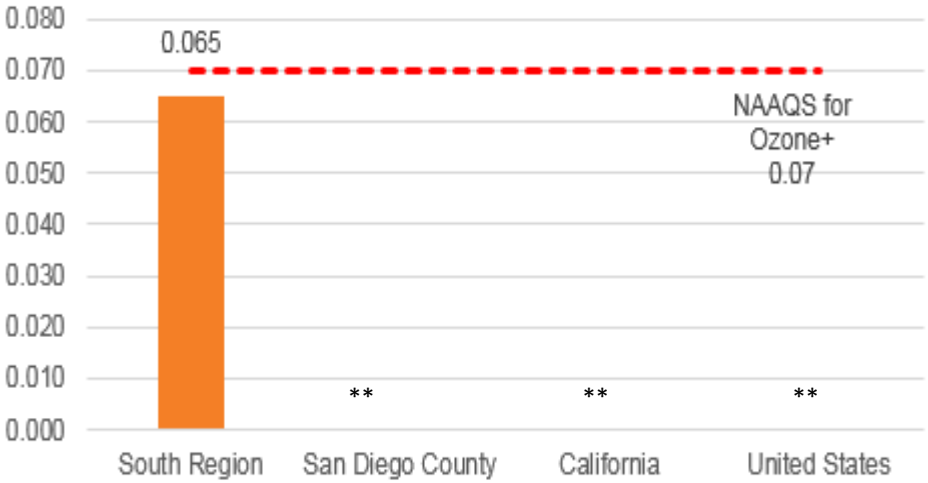
Air Quality

Ozone- One type of pollutant that contributes to air quality is ozone. Higher temperatures increase ground-level ozone, one type of secondary air pollutant, as a result of chemical reactions taking place at power plants, within motor vehicles, and ultimately creating smog and pollution. Ozone affects those with cardiovascular and respiratory difficulties, such as asthma, and contributes to related mortality, emergency room visits, and hospitalizations. Ozone concentrations are higher where there is heavy vehicle traffic, coal-fired power plants, and industrial processes occurring.

Ozone Concentration is measured against the Design Value. The Design Value, or DV, is a statistic describing the air quality status of a given location relative to the level of the National Ambient Air Quality Standards (NAAQS). If the DV is less than the standard, then the area is in attainment of the standard (or that area, on average, meets the standard).

In the South Region, the DV for 2014-2016 was below the national standard, meaning the Region's Ozone concentration was lower than the standard and thereby in attainment of the standard (Figure 38).

Figure 38. Ozone Concentration, South Region, 2014-2016.

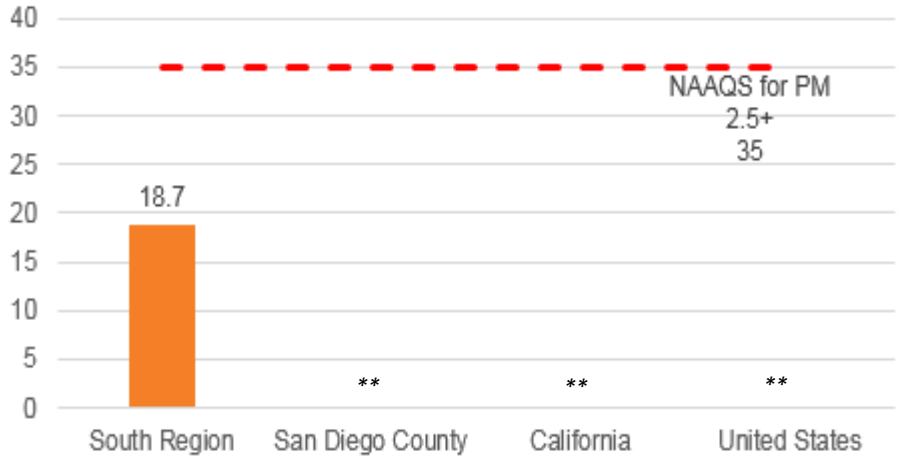


*** Data Not Available*
Note: 2014-2016 3-year average of the 4th high 8-hour ozone concentration. When the DV is less than or equal to the standard, then we are in attainment of the standard. The Otay Mesa site is now located at Donovan State Prison, therefore raising the values in South Region. Original Date: 4/17/2013. Accessed on: 8/2017.
+ United States Environmental Protection Agency. NAAQS table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed December 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

PM 2.5 Concentration- PM 2.5, or particulate matter 2.5 microns or less in diameter, includes pollutants such as combustion particles, organic compounds, metals, and any other fine particulate matter, and is capable of reaching deep into the lungs and causing cancers and other diseases. PM 2.5 levels are higher in areas where heavy equipment is used, burning activities occur, and industrial facilities are located.

The South Region had an average PM 2.5 concentration well below the National Ambient Air Quality Standard for the United States. This means that there was less PM 2.5 in the air than is allowed by the Environmental Protection Agency (EPA), and thereby in compliance with standards (Figure 39).

Figure 39. PM 2.5 Concentration, South Region, 2014-2016.



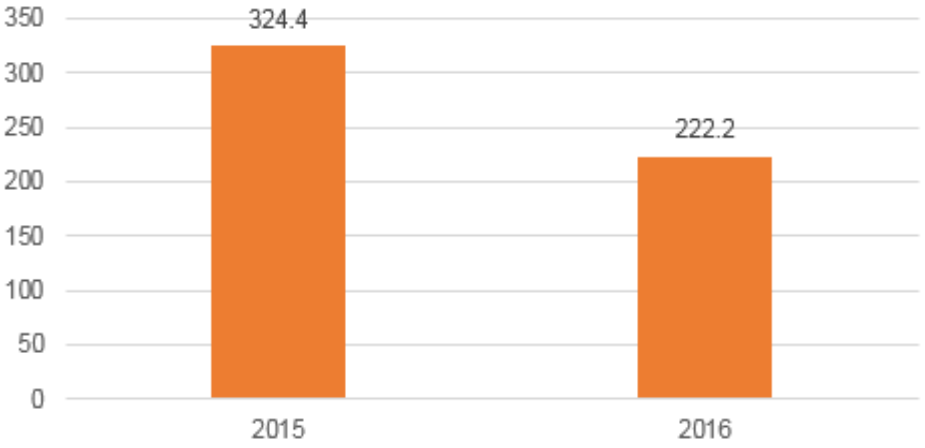
*** Data Not Available*
Source: 2014-2016 San Diego Air Pollution District Data. Particulate Matter 2.5—here we use a 3 year average of the 98th percentile of collected samples for a 24 hour standard. Not all Regions are represented. Original date: 4/17/2013. Accessed on: 8/2016.
+United States Environmental Protection Agency (EPA). NAAQS Table. https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed 12/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Water Quality

Environmental health affects the health of the population. Climate change is part of environmental health, and is defined as major changes in the earth's temperature, rainfall, snow and wind patterns. Climate change affects many areas of life, including health, water resources, food production, agriculture, forestry, wildlife, and energy supply.

Water quality is measured by tracking water quality violations. The actual indicator is rate of violations per year for federally regulated drinking water contaminants per 100,000 people.

Figure 40. Water Quality, San Diego County, 2015-2016.



[†]Rate of total water violations per 100,000 population for federally regulated drinking water contaminants and other drinking water violations. Data are not comparable to data collected prior to 2013 as EPA has done quality assurance on their system and increased reporting in many states.
Source; 2014-2016 EPA water violations from SDWISFED Drinking Water Data. Original Date: 1/26/2012. Accessed on: 8/2016.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Geography

Geography has come to the forefront of the discussion on health equity. The idea that "place matters" has become more commonplace in recent years. Together, there are 18 incorporated cities and towns, as well as several unincorporated communities. Several community types exist throughout the County – some more urban, some more rural. Data is collected and reported out by the 41 Subregional Areas (SRAs) in San Diego County. San Diego County has an area of over 4,200 square miles and over 70 miles of coastline. Substantial differences in health indicators and health-related behaviors exist in the different areas of the County. More information on how geography affects health can be found in the *Identifying Health Disparities to Achieve Health Equity in San Diego County: Geography* at HE_Geography_FINAL.pdf (sandiegocounty.gov).

Public Transportation and Commute to Work

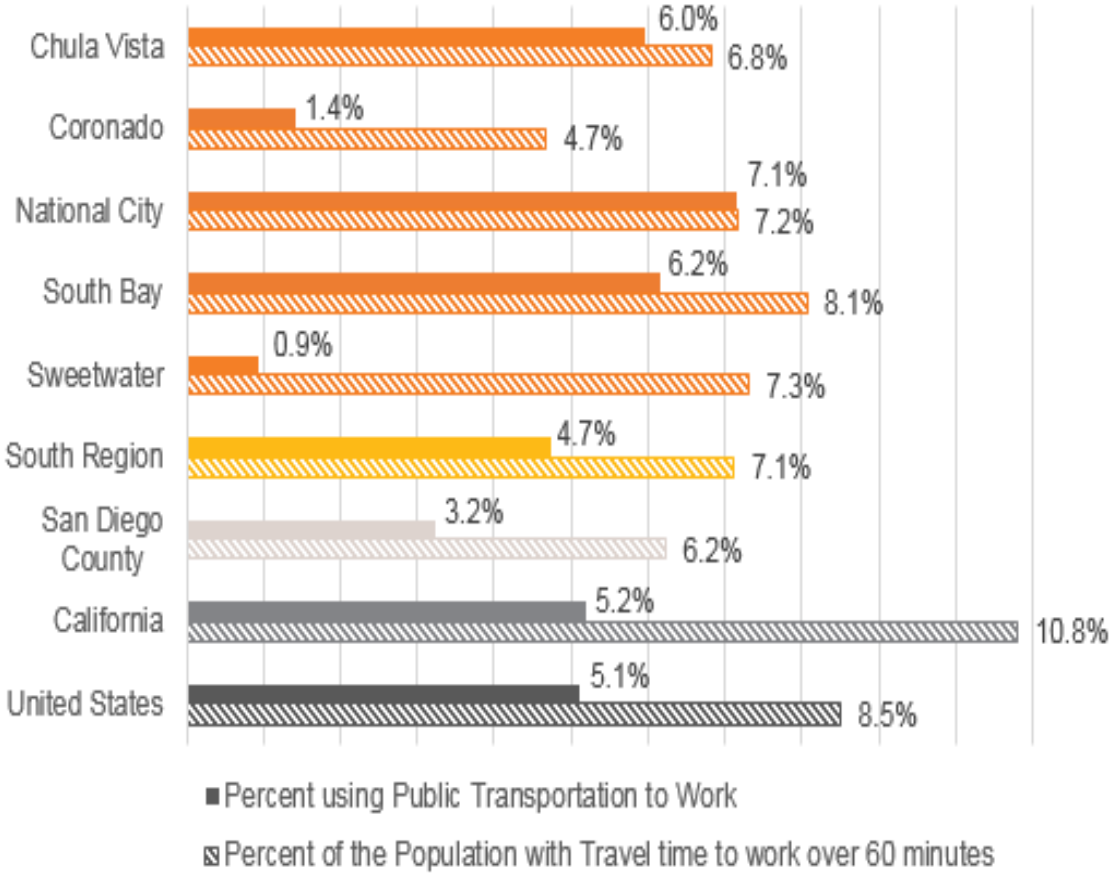
Active transportation, or walking and using public transportation to get around, is related to the built environment and the individual's perception of safety, as well as the availability of public transit. This indicator measures the percent of population using public transportation to get to work.

A higher percentage of those living in the South Region use public transit to get to work than those in San Diego County, but less frequently than California, and the United States as a whole. The SRA with the highest proportion of residents using public transit to get to work was National City. The SRA with the lowest proportion was Sweetwater (Figure 41).

Commute to work can be measured as the average travel time to work. It is also interesting to see how much of the population spend more than an hour commuting to work.

In the South Region, 7.1% of residents commuted 60 minutes or more to get to their workplace. This was higher than San Diego County, and lower than California and the United States as a whole. The SRA with the greatest proportion of residents commuting 60 minutes or more was South Bay at 8.1%. The SRA with the lowest proportion was Coronado, at 4.7% (Figure 41).

Figure 41. Commute to Work, South Region by Subregional Area, 2015.



Source: U.S. Census Bureau; 2011-2015 American Community Survey 5-Year Estimates, Table DP03, B08012. Accessed 8/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

SOCIAL

External Community Assessment

In this section, the results of an additional external community assessment is described. The purpose of this section is to help paint a more complete picture of the health, safety, and ability to thrive of San Diego residents.

2017 Youth Purchase Tobacco Survey

Vista Community Clinic (VCC), in partnership with CASA (Community Action Service & Advocacy), performed youth purchase tobacco surveys (YPTS) in three municipalities across San Diego County in 2017. The methods in each location were similar. Community Action Service and Advocacy (CASA), subcontracted to VCC, produced and distributed retailer Education Packets to managers or owners at every location licensed by the California Board of Equalization to sell tobacco products in the areas surveyed. On the day of the survey, teams of youth and adults supervisors traveled to businesses in each municipality, and the unaccompanied youth attempted to make a tobacco purchase. Data collected included whether the youth attempting the purchase was asked to show their identification, and whether the purchase was successful. The results of the survey conducted in National City are presented in Table 6.

For several sales in which the youth was able to make a tobacco purchase, the clerk did not ask for identification. In some instances, the clerk did ask for identification, or even swiped the underage identification for electronic confirmation, yet still completed the sale. Federal Law requires identification for tobacco purchases for any customer that appears to be under the age of 27. These sales to underage youth are sometimes occurring even when the clerks know they are selling to underage customers. In National City, 25% of purchase attempts by underage youth were successful, suggesting more needs to be done in order to prevent underage tobacco sales.

Table 6. Youth Purchase Tobacco Survey Results, South Region, 2017.

Geography	Mean Age of Youth Volunteers	Number of Retailers Surveyed	Successful Purchase Attempts
National City (Youth aged 18-20)	**	52	25%

***Data not available.*
Source: Vista Community Clinic, Local Tobacco Control Interventions: Tobacco Retail Licensing, Youth Tobacco Purchase Surveys, Lemon Grove, National City, and Escondido, CA, 2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Area of Influence: Social

The Social Area of Influence concerns residents helping one another. San Diegans help one another and contribute to their communities by volunteering to serve others who may be less fortunate, by contributing to charitable organizations, and by being politically active and voting in Local, State and Federal elections. There are also vulnerable populations within the County who benefit from the help that others provide.

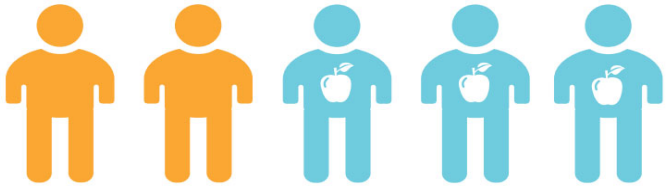
Vulnerable populations in San Diego include those who live below 200% poverty level who may also be experiencing food insecurity. Food insecurity refers to individuals and families who are unable to afford enough food on a regular basis. In turn, they may not have access to healthier foods essential for good nutrition, and this impacts the health and well-being of the population.

Communities thrive when people get to know their neighbors and are invested in the well-being of the people they interact with every day. *Live Well San Diego* partners encourage community connections and engaged citizens. New residents are finding hope through refugee and survivor programs, foster youth and families are discovering resiliency through training and education, seniors are receiving comfort and nourishment through meal delivery services, and volunteers are gaining greater purpose by giving back to their neighbors.

Live Well San Diego Indicator #9: Community Involvement (Food Insecurity)

Food insecurity is measured as the percentage of the low income (income at or below 200% federal poverty level) population who have reported inability to purchase enough food on a regular basis, based on survey data. Food insecurity affects not only current health status but also physical, mental, and social development.

In South Region, a lower percentage of residents were food insecure than San Diego County, and the State of California (Figure 42)



SOUTH REGION: 37.7%

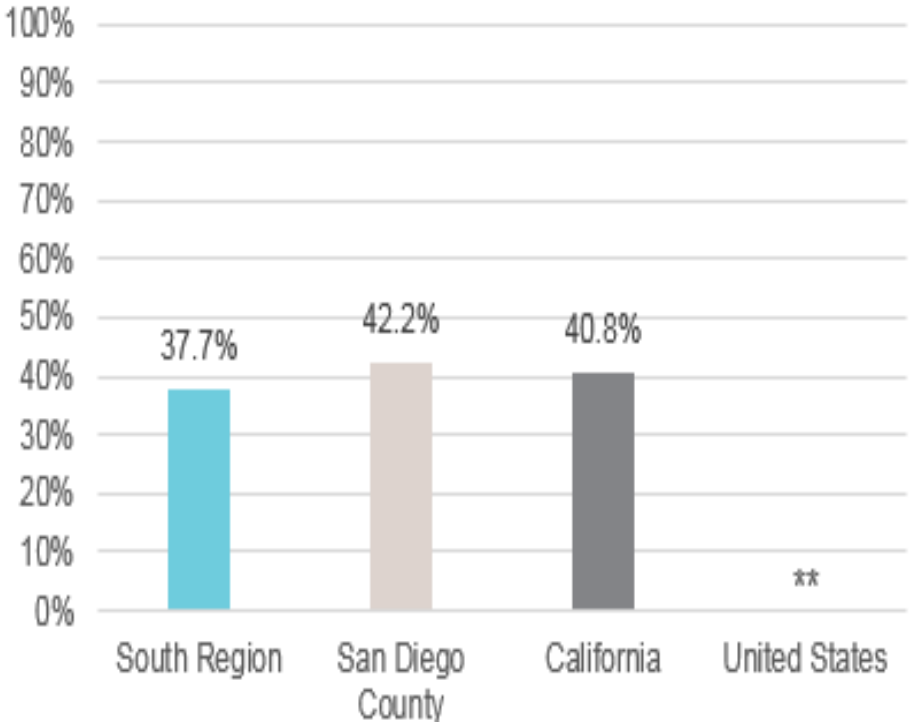
2 IN 5 PEOPLE WITH LOW-INCOME* EXPERIENCE FOOD INSECURITY

*Low-income is 200% or below the Federal Poverty Level (FPL)

SAN DIEGO COUNTY:	CALIFORNIA:	UNITED STATES:
42.2%	40.8%	**

*** Data Not Available*

Figure 42. Food Insecurity, South Region, 2014-2015.

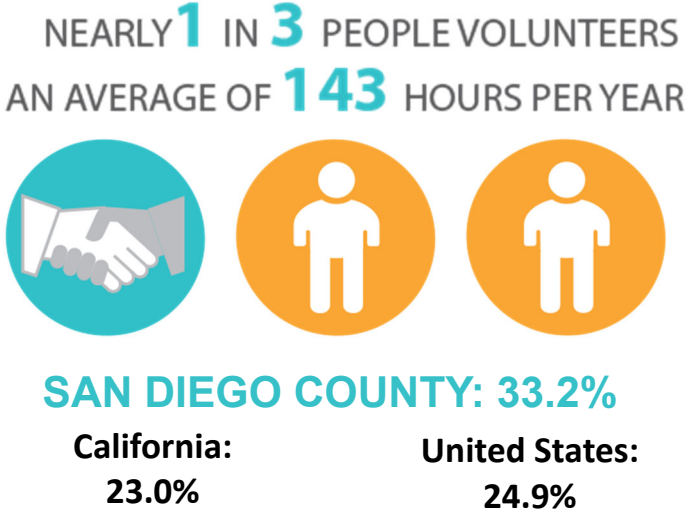


***Data Not Available*
Source: 2014-2015 UCLA Center for Health Policy California Health Interview Survey (CHIS). Accessed 9/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Live Well San Diego Indicator #10: Community Involvement (Volunteerism)

Volunteerism is measured as the percentage of the population who volunteer. Volunteering creates a meaningful, positive impact on the community, and benefits the volunteers themselves.

Data is not available by Region, so the figure for San Diego County overall is provided. A higher percentage of individuals in San Diego County volunteer compared to the State and the Nation.



Percent of residents who volunteer.
Source: 2015 from Corporation for National and Community Service. Original Date: 1/24/2013. Accessed on: 6/2017.

Supporting Indicators

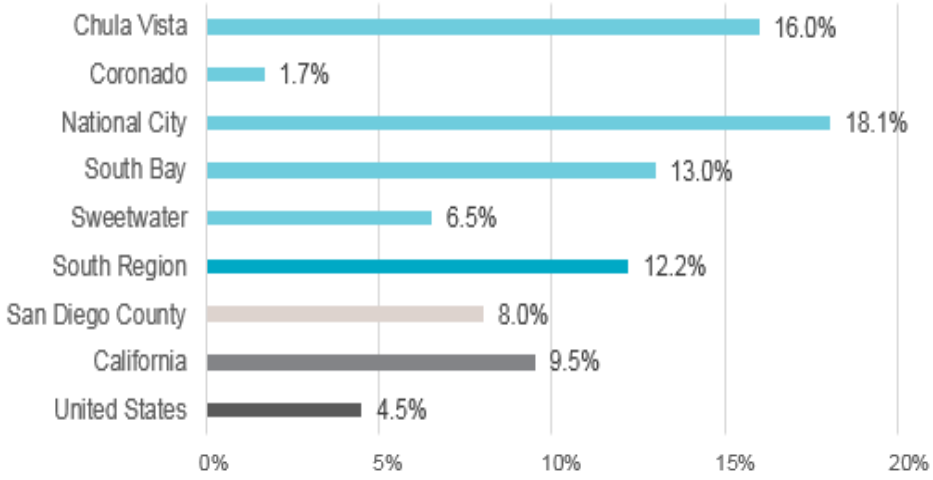
Linguistic Isolation

Linguistic isolation refers to those residents who are isolated because they are unable to communicate effectively in English. Those who cannot effectively communicate in English may have trouble talking to people who provide social services and medical care. They may also not hear or understand important information when there is an emergency – such as an accidental chemical release, or spill. As a result, those who do not communicate well in English may be less likely to get the health care or safety information that they need.

A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well."

In South Region overall, about 1 in 8 households were linguistically isolated (Figure 43). The SRAs with the highest percentage of linguistically isolated households were National City and Chula Vista. The SRA with the lowest percentage of linguistically isolated households was Coronado.

Figure 43. Linguistic Isolation, South Region by Subregional Area, 2015.



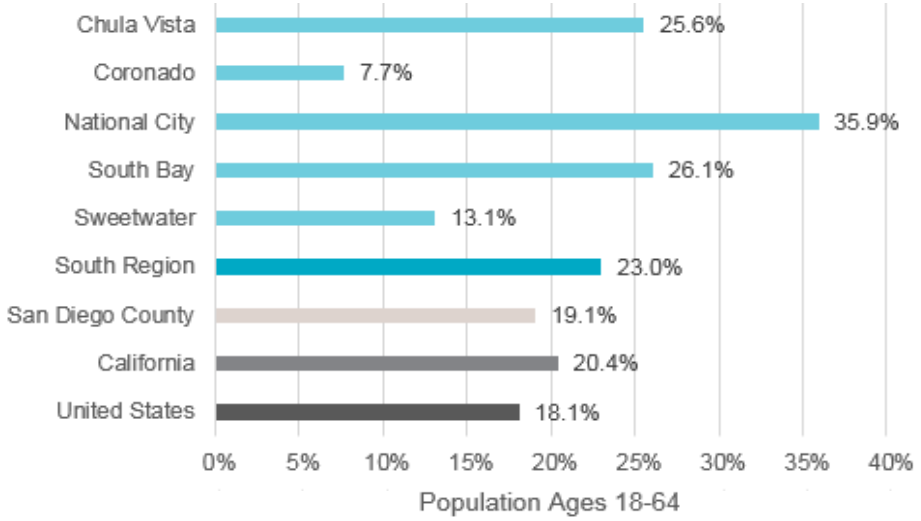
Percent of population considered linguistically isolated. A linguistically isolated household is defined as a household in which no person 14 years old and over speaks only English, and no person 14 years old and over who speaks a language other than English speaks English "very well." All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who may speak only English.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S1602, Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

Health Insurance Status

An individual's ability to live well is influenced by their ability to access the health care system, for both urgent medical issues and preventive care. This indicator measures the lack of health insurance for the non-elderly adult population, or those aged 18 to 64. Children and the elderly often are more likely to be eligible for public health insurance programs, such as Medi-Cal and Medicare, than those adults who fall between the ages of 18 and 64.

Almost 1 in 4 adults ages 18-64 were lacking health insurance in the South Region, which was higher than the 1 in 5 in the County overall. The SRA within the South Region with the highest percent of uninsured adults was National City, at over 1 in 3 adults aged 18-64. The SRA with the lowest percent of uninsured adults was Coronado (Figure 44).

Figure 44. Lack of Health Insurance (Ages 18-64), South Region by Subregional Area, 2015.



Note: Percent of population not currently covered by health insurance, ages 18-64.
Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-year Estimates, Table S2701. Accessed on: 4/2017.
Prepared by: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics Unit, 2018.

For the most current data, be sure to visit:

Community Health Statistics (sandiegocounty.gov) and

Data & Results (livewellsd.org)