San Diego County Senior Health Report

June 2015

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

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SAN DIEGO COUNTY
SENIOR HEALTH REPORT

County of San Diego
Health and Human Services Agency

Public Health Services
Aging & Independence Services

June 2015

For additional information, contact:

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San Diego, CA 92120
(619) 285-6429
www.sdhealthstatistics.com

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

SAN DIEGO COUNTY
SENIOR HEALTH REPORT

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BILL HORN
CHAIRMAN
SUPERVISOR, FIFTH DISTRICT
SAN DIEGO COUNTY BOARD OF SUPERVISORS

Dear San Diego County Residents:

I am pleased to present the ***San Diego County Senior Health Report***. The goal of our Health and Human Services Agency in creating this document has been to offer a regular health report card, with statistics that are monitored as our community partners work with us on interventions for positive health changes.

The good news is that more San Diego seniors report that they are in good to excellent health, compared with seniors in the state as a whole.

This health report card gives our County and other providers of services for seniors the ability to see what areas might need more effort in prevention and education. For instance, the rate of falls continues to increase, especially among residents who are 85 or older.

The report also includes statistics on a variety of chronic diseases, plus demographic information. There are details on mental health issues, as well as injuries and other physical concerns.

Sadly, Alzheimer's disease is now the third leading cause of death in San Diego County. This year's report includes a chapter on Alzheimer's disease, with information about the County's Alzheimer's Project.

Having declared 2015 as the Year of the Veteran, I am proud that veteran information is also included. Veterans are such valued members of our neighborhoods, and, according to this report, nearly one-quarter of all older adults in San Diego County are veterans!

This report supports the County's *Live Well San Diego* wellness plan, helping older adults and other residents thrive in communities that are healthy and safe. We hope that the ***San Diego County Senior Health Report*** will be closely read by all those who are interested in improving health and wellbeing for older citizens.

Sincerely,

BILL HORN
Chairman
San Diego County Board of Supervisors

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County of San Diego

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DEAN ARABATZIS
CHIEF OPERATIONS OFFICER

Dear San Diegans,

Good health is precious. As we get older, we realize how important it is to us, especially as it impacts our independence. As our population ages, government entities, nonprofit organizations, businesses, and individuals must work together to ensure that our seniors have the best opportunities to remain healthy and active.

This ***San Diego County Senior Health Report*** offers key health indicators of particular importance to the health and well-being of older adults. Some of the health problems faced by seniors, like the rest of the population, are the result of lifestyle choices that include poor diet, physical inactivity and the use of tobacco products. Together, we can engage our older neighbors to make healthier choices leading to a longer and more enjoyable life.

This report is a collaboration between Aging & Independence Services (AIS) and Public Health Services (PHS), divisions of the County of San Diego's Health and Human Services Agency. The information highlighted in the report is intended to support the County's *Live Well San Diego* vision of a region that is building better health, living safely, and thriving.

We hope you find this report useful. For additional information on the health status of San Diego County residents, please visit the Community Health Statistics website: www.sdhealthstatistics.com.

For more information on programs offered by AIS, contact the AIS Call Center at (800) 510-2020, or visit the AIS websites: www.ais-sd.org or www.sandiego.networkofcare.org/aging.

Live Well,

NICK MACCHIONE, Director
Health and Human Services Agency

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

ELLEN SCHMEDING, Director
Aging & Independence Services

LIVE WELL SAN DIEGO

San Diego County's long-term initiative for **healthy**, **safe** and **thriving** communities

BUILDING BETTER HEALTH

Improving the health of residents and supporting healthy choices

LIVING SAFELY

Ensuring residents are protected from crime and abuse, neighborhoods are safe, and communities are resilient to disasters and emergencies

THRIVING

Cultivating opportunities for all people and communities to grow, connect and enjoy the highest quality of life

In 2010, the County Board of Supervisors adopted *Live Well San Diego*, a 10-year plan to advance the health, safety and well-being of the region's more than 3 million residents. Based upon a foundation of community involvement, *Live Well San Diego* includes three components: *Building Better Health*, adopted on July 13, 2010; *Living Safely*, adopted on October 9, 2012; and *Thriving*, adopted on October 21, 2014.

Live Well San Diego is built on four strategic approaches:

1. BUILDING A BETTER SERVICE DELIVERY SYSTEM.

Improve the quality and efficiency of County government and its partners in the delivery of services to residents, contributing to better outcomes for clients and results for communities

2. SUPPORTING POSITIVE CHOICES.

Provide information and resources to inspire county residents to take action and responsibility for their health, safety and well-being

3. PURSUING POLICY & ENVIRONMENTAL CHANGES.

Create environments and adopt policies that make it easier for everyone to live well, and encourage individuals to get involved in improving their communities

4. IMPROVING THE CULTURE WITHIN.

Increase understanding among County employees and providers about what it means to live well and the role that all employees play in helping county residents live well

PROGRESS THROUGH PARTNERSHIPS

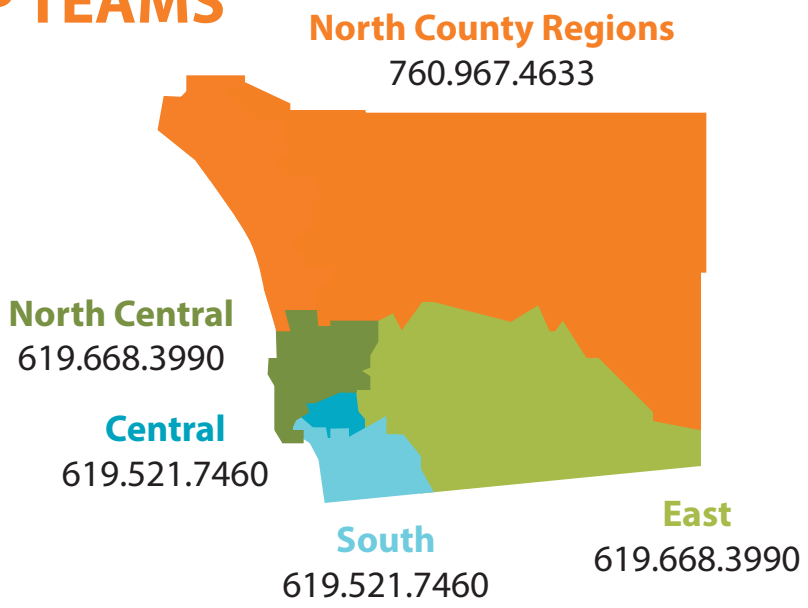
Live Well San Diego involves everyone. Only through collective effort can meaningful change be realized in a region as large and diverse as San Diego County. The County's partners include cities and tribal governments; diverse businesses, including healthcare and technology; military and veterans organizations; schools; and community and faith-based organizations. Most importantly, *Live Well San Diego* is about empowering residents to take positive actions for their own health, safety and well-being.

Every County department is committed to playing an active role and coordinating efforts to make the biggest impact. Annual reports highlight success stories of local communities, organizations and recognized partners who are making positive changes. These reports can be accessed on the *Live Well San Diego* website at **LiveWellSD.org/about/live-well-san-diego-materials/**. This website also includes resources for getting involved; best practice tools for organizations and recognized partners in every sector; and information about the *Live Well San Diego* Indicators, which measure our region's collective progress.

REGIONAL LEADERSHIP TEAMS

Teams of community leaders and stakeholders are active in each of the Health and Human Services Agency (HHSA) service regions. These teams have been involved in community improvement planning and are working to address priority needs over the next few years to realize the *Live Well San Diego* vision. These teams serve as a central point for planning and prioritizing collaborative action at the local level.

Contact your team by calling the phone numbers listed on the map.



RESULTS

How will progress be measured? The Top Ten *Live Well San Diego* Indicators have been identified to capture the overall well-being of residents in the county. These Indicators are part of a framework that allows the County to connect a wide array of programs and activities to measureable improvements in the health, safety and well-being of every resident. The complete framework is posted on the County of San Diego *Live Well San Diego* webpage: **http://sdcounty.ca.gov/content/sdc/live_well_san_diego/indicators.html**

HEALTH	KNOWLEDGE	STANDARD OF LIVING	COMMUNITY	SOCIAL
Life Expectancy	Education	Unemployment Rate	Security	Vulnerable Populations
Quality of Life		Income	Physical Environment	Community Involvement
			Built Environment	

Visit: LiveWellSD.org **Call:** 619.338.2895 **Email:** LWSD.HHSA@sdcounty.ca.gov

LIVE WELL SAN DIEGO

AGING & INDEPENDENCE SERVICES (AIS)

COMMITTEES THAT MAKE A DIFFERENCE

Aging & Independence Services (AIS), a federally designated Area Agency on Aging, provides services to older adults, persons with disabilities, and their family members. These services help keep clients safely in their homes, promote healthy and vital living, and publicize positive contributions made by older adults and persons with disabilities.

To get involved in any of the programs and committees listed, call **(800) 510-2020** or visit www.ais-sd.org.

AIS Advisory Council has 30 members representing older adult and special-needs communities; provides input on existing and proposed AIS programs and services.

Caregiver Coalition, with representatives from caregiving agencies, offers workshops, respite care and helps build communication among service providers.
Visit: www.caregivercoalitionsd.org.

Community Action Networks (NorCAN, ECAN, SanDi-CAN, and SoCAN) meet regularly to implement solutions to the specific needs of older adults and adults with disabilities in their region.

Fall Prevention Task Force provides prevention education, fall risk screenings, and resources to older adults and senior service providers. Visit: www.SanDiegoFallPrevention.org.

Grandparents Raising Grandchildren Workgroup meets quarterly to coordinate services and support to grandparents raising their grandchildren and other kinship families.

Health Promotion Committee meets regularly to help plan the biannual Vital Aging conference and work on older adult community health projects.

In-Home Support Services (IHSS) Advisory Committee has representatives from those receiving IHSS assistance, as well as service providers and other members of the community.

Long-Term Care Integration Project Planning Committee involves consumers, providers, and an array of service and care organizations that give guidance on long-term care issues.

Mature Worker Coalition meets quarterly to work on aiding older adults who want to remain in or return to the workforce. Visit: www.sdmatureworkers.org.

Senior Volunteers in Action (SVA) and Retired and Senior Volunteer Program (RSVP) Advisory Committee provides feedback and input on promoting volunteer opportunities.

Veterans Advisory Council provides input on services for veterans and their families.

For more information about the Aging & Independence Services, visit www.ais-sd.org or call (800) 510-2020.

To learn more about *Live Well San Diego*, visit LiveWellSD.org

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AGENCY DESCRIPTIONS

AGING & INDEPENDENCE SERVICES (AIS)

Aging & Independence Services (AIS) provides services to older adults, people with disabilities and their family members, to help keep clients safely in their homes, promote healthy and vital living, and publicize positive contributions made by older adults and persons with disabilities. AIS is the only single public or private organization in the county that combines so many services for older adults and persons with disabilities under one umbrella -- and mostly at no charge to county residents who use the services. AIS is a division of the County of San Diego's Health and Human Services Agency (HHSA).

PUBLIC HEALTH SERVICES (PHS)

Public Health Services (PHS) is dedicated to community wellness and health protection in San Diego County. PHS works to prevent epidemics and the spread of disease, protect against environmental hazards, prevent injuries, promote and encourage healthy behaviors, respond to disasters and assist communities in recovery and assure the quality and accessibility of health services throughout the county. PHS is a division of HHSA.

EMERGENCY MEDICAL SERVICES (EMS)

Emergency Medical Services (EMS) is a branch of PHS. It is the "local EMS agency" as defined in California law. Its purpose is to ensure that the quality of emergency medical services, which includes 9-1-1 ambulance services, trauma care services, and non-emergency ambulance services, is of the highest quality. As the regulatory agency for emergency medical services, EMS certifies/accredits prehospital personnel and approves training programs for prehospital personnel; designates participants in the countywide EMS system (base hospitals, advanced life support providers, trauma centers, etc.); monitors system activity with a large data collection network; develops policies and protocols governing the delivery of emergency medical services in the county; and provides the framework for medical quality improvement activities. Additionally, it provides services within two ambulance districts (County Service Areas 17 & 69) and implements numerous community education, prevention and research projects.

DATA GUIDE AND DEFINITIONS

Data Sources:
Multiple data sources were used in this document, and are described in Appendix A. The most recent data available for each source are used in this document.

Indicator Definitions:
Indicators and disease definitions are described in Appendix B.

Comparing Data:
Caution must be used when exploring data from multiple sources; comparisons may not be appropriate. Attention to accompanying information is important in order to note differences, including, but not limited to: data sources, diagnosis/case definitions and rate constant (i.e., per 100,000 or 1,000).

Numbers, Rates, Percents:
A number is a count of how many times an event occurred, and answers the question of "how many." It describes the overall size, or magnitude of the problem. However, a number cannot be used to directly compare to other groups or time periods because the size of the populations may be different.

Rates are a measure of risk. They are used to compare groups of unequal size in order to reveal disparities. Rates are calculated by dividing the number of events by the total population represented, then multiplying by a constant. For example, to calculate the annual rate of Emergency Department (ED) discharges among 65 to 74 year olds in San Diego County, the following equation would be used:

$$\frac{\text{2012 Total ED Discharge Patients Aged 65 to 74 years}}{\text{(2012 San Diego County Population Aged 65 to 74 years)}} \times 100{,}000 = \text{Rate per } 100{,}000$$

The interpretation of the rate calculated above is as follows: "In 2012, for every 100,000 people aged 65 to 74 in the population, X number were discharged from the ED." Rates are used in this report for all medical encounter and death data indicators, and are all calculated per 100,000 population.

Using a percent is an easy way to see how a health problem is spread across a population. Percent represents the number of cases out of 100, and is used to describe the proportion within a whole. A percent does not tell how many and does not control for population size, so cannot be compared to different populations over time.

Healthy People 2020:
Healthy People 2020 provides a framework for prevention for the U.S. It is a statement of national health objectives designed to identify the most significant preventable threats to health and to establish national goals to reduce these threats.[1] When possible, comparisons to Healthy People 2020 objectives are made throughout this document.

EXECUTIVE SUMMARY

SAN DIEGO COUNTY SENIOR HEALTH REPORT

EXECUTIVE SUMMARY

INTRODUCTION

The San Diego County Senior Health Report brings together health indicators for seniors in San Diego County in one place. The purpose for this compilation is to better understand the current health of seniors, opportunities for enhancements to existing programs, and areas needed for intervention. This report pulls together information from several data sources, including census data, population surveys, and hospital data, using 2012 as the most current year available. Unless otherwise noted, "seniors" refers to adults 65 years of age and older.

DEMOGRAPHY

In 2012, San Diego County was home to 374,535 seniors aged 65 years or older, representing 11.9% of the County's total population of 3.1 million, which was lower than that of the United States as a whole (13.7%). Many of these residents 65 years or older lived in communities in the western half of the county. By 2030, the number of seniors aged 65 years and older in San Diego County is expected to double to 723,572. Importantly, the fastest growing age group, those aged 85 years and older, is projected to increase from 59,666 in 2012 to 84,048 in 2030.

In 2012, San Diego County was home to 374,535 seniors aged 65 years and older. By 2030, this number will double to 723,572.

For every age group of adults 65 years and older, females outnumbered males, with the proportion of females increasing with each older age group. This trend is projected to continue through 2030. In 2012, 69.4% of all San Diego County seniors were white. This percentage is expected to decrease between now and 2030, primarily because of an increase in the number of Hispanic seniors (from 16.0% in 2012 to an expected 22.9% in 2030).

More than half of all seniors in San Diego County completed at least some college education with only 17.6% having less than a high school education. As of 2012, 23.8% of seniors were veterans, and among those veterans, 6.5% had an income below the federal poverty level.

In San Diego County, 16.7% of seniors aged 65 and older remained in the labor force. Forty-two percent of San Diego County seniors lived alone, the vast majority of these being female (67.9%). The median income in senior households was $44,975, with seniors living alone having significantly lower median incomes than those who live with others. Nearly all senior households have Social Security income, about half have income from retirement plans or savings, and over a third have earnings from someone in the household.

Approximately 8% of seniors in San Diego County live with grandchildren under the age of 18 years. Of those living with grandchildren, one out of six are financially responsible for their grandchildren.

EXECUTIVE SUMMARY

Health Status

In 2012, San Diego County seniors reported good to excellent health, better than California seniors overall (79.4% versus 72.6%) Nearly all seniors reported a usual place to go when sick or needing health advice. In addition, 8.1% of San Diego County seniors reported needing help for an emotional/mental health or alcohol/drug problem, higher than the 7.1% in California.

79.4% of San Diego seniors reported being in good to excellent health in 2012.

Health Behaviors and Prevention

Preventing disease and other poor health outcomes can increase the life span and quality of life of seniors. The following section offers prevention strategies and provides data on health behaviors, by indicator group.

Alzheimer's Disease and Other Dementias

Although currently there is no cure for Alzheimer's disease and other dementias (ADOD), several studies have suggested that it may be possible to delay or prevent the onset of ADOD by practicing brain health strategies. Many of the recommendations for maintaining physical health can be used for brain health, such as eating a balanced diet, managing chronic conditions, and being physically active.

Non-Communicable (Chronic) Disease

Eliminating tobacco use, adopting active lifestyles, eating healthier diets, and decreasing excessive use of alcohol are key transformations that can reduce the burden of non-communicable (chronic) disease among San Diego County seniors.

- In 2012, 10.2% of San Diego County seniors reported eating fast food three or more times in the past week, higher than the 8.8% reported in 2009.
- Thirteen percent of San Diego County seniors reported binge drinking in the past year, higher than the 9.3% reported in California.
- In 2012, 8.5% of San Diego County seniors were current smokers.

Being overweight or obese, as well as having high blood pressure can contribute to or worsen many other health conditions. In 2012, 36.6% of seniors were overweight and 19.3% were obese, which was slightly lower than that of California seniors. In addition, nearly 61% of seniors in the county had ever been told that they have high blood pressure, with 89.5% taking medication to control it.

In 2012, 55.9% of San Diego seniors were overweight or obese.

EXECUTIVE SUMMARY

Behavioral & Mental Health

Seeking help for an emotional, mental health, or alcohol/drug problem, engaging in activities to reduce stress, avoiding social isolation, and fostering environments that reduce the stigma of behavioral health issues are major prevention strategies that can help reduce poor behavioral health outcomes among San Diego County seniors.

- In 2012, only two-thirds of San Diego County seniors who needed help for an emotional, mental health, or alcohol/drug problem reported seeing their primary care physician or another professional for their problem.

One third of San Diego seniors who needed help for an emotional, mental health, or alcohol/drug problem did not receive treatment.

Injury

Of the major causes of disability and death, injuries are among the most preventable. Increased safety education, awareness and implementation of fall prevention strategies, and investing in safer communities are key ways to reduce the burden of injury.

An estimated 45,000 San Diego seniors reported falling more than once in the past year. Of those, 42% reported receiving professional advice about how to avoid falls. In addition, nearly half of seniors who fell more than once in the past year reported receiving medical care. Research shows that individuals can reduce their risk of falls by exercising to improve balance and mobility, getting a medication review, having their vision checked, and improving home safety. It is important that older adults talk with their doctors about their fall risk.

Among seniors who fell more than once in the past year, 42% received professional advice about how to avoid falls.

Communicable Disease

Taking protective measures including vaccination and avoiding close contact with sick individuals, seeking testing and early treatment, and visiting a doctor regularly are key strategies that can reduce the burden of communicable disease among seniors. In 2012, two-thirds of county seniors reported receiving a flu shot.

Two out of every three seniors reported receiving a flu shot in the past year.

EXECUTIVE SUMMARY

Utilization of Medical Services

Seniors in San Diego County use the 9-1-1 system at higher rates than any other age group. 71,655 calls were made to 9-1-1 for seniors in need of emergency medical care in San Diego County in 2012. This represents a call from one out of every five seniors.

There were 108,745 seniors treated and discharged from San Diego County emergency departments, representing nearly one out of every three senior residents in 2012. That same year, 95,679 seniors aged 65 and over were hospitalized in San Diego County.

Leading Causes of Death

In 2012, there were 14,929 deaths among seniors aged 65+ years. The leading cause of death among San Diego seniors was heart disease, followed by cancer.

Among the 65-74 and the 75-84 year old age groups, the leading cause of death was cancer, followed by heart disease and chronic obstructive pulmonary disease (COPD)/chronic lower respiratory diseases. Among the 85+ years age group, the leading cause was heart disease, followed by cancer and Alzheimer's disease.

The leading cause of death among seniors aged 65 years and older was heart disease, followed by cancer.

Alzheimer's Disease and Other Dementias

In 2012, there were 1,420 deaths due to ADOD (379.1 per 100,000) in San Diego County among seniors aged 65 years and older. More than 19,000 San Diegans age 55 years and older were discharged from the emergency department (ED) or hospital with ADOD in 2012. The discharge could result from a visit to the ED or hospital due to ADOD or for another reason but ADOD was also noted.

In 2012, an estimated 60,000 San Diegans age 55 years and older were living with ADOD, accounting for 8.3% of the 55 years and older population. Countywide, the number of San Diegans age 55 years and older living with ADOD is expected to increase by 55.9% between 2012 and 2030, an increase from 60,000 to nearly 94,000 residents living with ADOD by 2030.

60,000 San Diegans aged 55 years and older were living with Alzheimer's disease and other dementias in 2012.

NON-COMMUNICABLE (CHRONIC) DISEASE

Compared to the rest of the county, rates of coronary heart disease (CHD), stroke, diabetes, respiratory disease, and cancer are higher among seniors aged 65+ years, as older adults are at higher risk for these diseases. Three behaviors, lack of physical activity, poor diet, and tobacco use, lead to these four diseases, which account for over 50% of all deaths among seniors.

In 2012, 20.1% of San Diego County seniors had been told by a doctor that they have any kind of heart disease, about the same as seniors in California. The death rate for coronary heart disease was 700.1 per 100,000 in 2012. In the same year, the rates of CHD hospitalization and emergency department (ED) discharge for San Diego County seniors were 1,178.0 per 100,00 and 162.9 per 100,000, respectively.

An estimated 6.5% of San Diego County seniors have been told by a doctor that they have had a stroke. The death rate for San Diego County seniors due to stroke was 228.6 per 100,000 and increased with age. In addition, 332.1 per 100,000 county seniors were treated and discharged from the emergency department due to stroke. The hospitalization rate for stroke among San Diego County seniors was 1,213.2 per 100,000.

In San Diego County, 16.0% of seniors reported ever being told by a doctor that they had diabetes. In addition, 14.3% of San Diego seniors had been told they had prediabetes or borderline diabetes. However, according to the CDC, nine out of ten adults who have prediabetes do not know they have it. The death rate from diabetes for San Diego County seniors was 130.3 per 100,000 in 2012. The rate of emergency department discharge for patients with a principal diagnosis of diabetes was 339.1 per 100,000 while the rate of hospitalization was 308.4 per 100,000.

In 2012, the chronic obstructive pulmonary disease (COPD) death rate for San Diego County seniors was 240.8 per 100,000 and increased with age. The emergency department discharge rate for seniors with a principal diagnosis of COPD was 549.2 per 100,000. In the same year, the hospitalization rate for COPD was 550.3 per 100,000.

In addition, the death rate from cancer among seniors in San Diego County was 928.9 per 100,000, which has decreased since 2007.

Since 2007, rates of medical encounters due to arthritis have increased among San Diego seniors aged 65 years and over. The rate of emergency department discharge due to arthritis for seniors in San Diego County was 865.6 per 100,000 and the hospitalization rate was 1,449.5 per 100,000 in 2012.

700 per 100,000 seniors died due to coronary heart disease in 2012.

An estimated 6.5% of San Diego county seniors have been told by a doctor that they have had a stroke.

EXECUTIVE SUMMARY

Behavioral and Mental Health

Behavioral health is an important factor that contributes to the disease burden of the elderly. The risk of depression increases for the elderly when other illnesses are present, and when the ability to function normally becomes limited. Further, alcohol and substance use may be used as coping mechanisms.

In 2012, 65 seniors were admitted to a hospital (17.4 per 100,000) and 786 seniors were treated and discharged from an emergency department (209.9 per 100,000) for an anxiety disorder-related condition. The rate of hospitalization and ED discharge due to a mood disorder was 266.2 per 100,000 and 107.9 per 100,000, respectively. In addition, 655 seniors aged 65 years and older were also hospitalized (174.0 per 100,000) and 352 were discharged from an emergency department (94.0 per 100,00) for schizophrenia and other psychotic disorders.

786 seniors were treated and discharged from an emergency department for an anxiety-disorder related condition.

In the United States, older adults are at an increased risk of suicide. In San Diego County, 69 seniors committed suicide in 2012 (18.4 per 100,00). Additionally, 124 seniors were hospitalized (33.1 per 100,000) and 68 seniors were treated and discharged from an emergency department (18.2 per 100,000) due to self-inflicted injury.

124 seniors were admitted to a hospital for a self-inflicted injury.

In 2012, there were 177 seniors aged 65 years and older hospitalized (47.3 per 100,000) and 313 seniors treated and discharged from an emergency department (83.6 per 100,000) due to an acute alcohol-related disorder. Additionally, 115 seniors aged 65 years and older were admitted to a hospital (30.7 per 100,000) and 89 seniors were treated and discharged from the emergency department for an acute substance-related disorder (23.8 per 100,000).

Injury

Unintentional (accidental) injuries are among the leading causes of death for seniors, most of which are preventable. In 2012, there were 337 seniors that died due to an unintentional injury (90.0 per 100,000). Additionally, 10,040 seniors were hospitalized for an unintentional injury (2,680.7 per 100,000) in 2012. The hospitalization rate increased with age to 6,335.3 per 100,000 for seniors aged 85+ years; 4.5 times greater than 65 to 74 year-olds. There were also 24,615 seniors aged 65 years and older discharged from an emergency department due to unintentional injury (6,572.1 per 100,00).

6,335 per 100,000 San Diego seniors were hospitalized due to unintentional injury.

The most frequent type of unintentional injury among seniors are falls. Risk factors for falls include lack of physical activity, lower limb weakness or trouble walking, impaired vision, medications, low vitamin D, osteoporosis, and environmental hazards.

EXECUTIVE SUMMARY

227 seniors died due to unintentional fall injury (60.6 per 100,000) in 2012. The death rate was nearly fifteen times higher for seniors aged 85+ years than for seniors aged 65 to 74 years. That year, 7,303 seniors were also hospitalized (1,949.9 per 100,000) and 16,076 seniors were treated and discharged (4,292.3 per 100,000) for an unintentional fall injury. Hip fracture is a common injury due to a fall. In 2012, there were 2,127 seniors hospitalized (567.9 per 100,000) and 279 seniors discharged from an emergency department due to a hip fracture (74.5 per 100,000).

In addition, 42 seniors died due to motor vehicle injury (11.2 per 100,000), which included occupants, pedestrians, and cyclists. There were also 344 hospitalizations (91.8 per 100,000) and 1,184 emergency department discharges (316.1 per 100,000) among seniors due to motor vehicle injury. That same year, 44 seniors died (11.7 per 100,000), 504 were hospitalized (134.6 per 100,000), and 409 were treated and discharged from the emergency department (109.2 per 100,000) due to overdose/poisoning. Twenty-one seniors aged 65 years and older also reported heat-related illness that year.

The death rate due to falls was nearly 15 times higher for seniors aged 65 years and older compared to those aged 65 to 74.

Among the senior population, elder abuse is of great concern. In fiscal year 2013/2014, there were 6,131 investigations of abuse of seniors to Adult Protective Services, of which 34.0% were confirmed cases of abuse. Of the confirmed cases, the most common allegations involved were physical abuse, financial abuse, mental suffering, and neglect. In addition, 60 seniors were hospitalized (16.0 per 100,000) and 151 seniors were treated and discharged from an emergency department for an assault injury (40.3 per 100,000). Fewer than five seniors died as a result of an assault injury (homicide).

COMMUNICABLE DISEASE

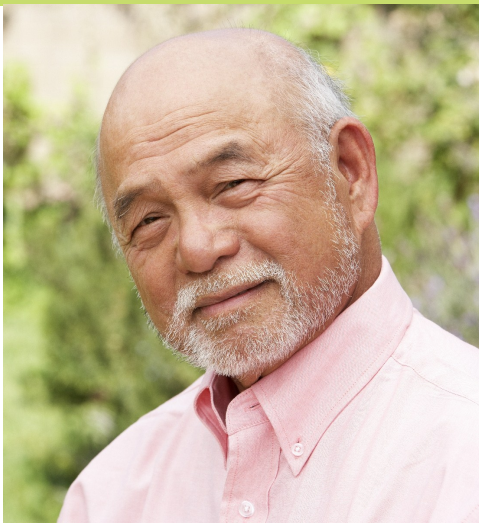
Compared to the rest of the county, seniors aged 65 years and older were at higher risk for tuberculosis, flu, and pneumonia. In 2012, there were 261 deaths due to influenza (flu) and pneumonia among individuals aged 65 years and older in San Diego County (69.7 per 100,000). There were also 94 hospitalizations (25.1 per 100,000) and 77 emergency department discharges (20.6 per 100,000) of seniors for influenza (flu). Compared to influenza, there was an even greater number of hospitalizations and ED discharges due to pneumonia in 2012. Among seniors aged 65 years and older, there were 3,235 hospitalizations due to pneumonia (863.7 per 100,000) and 1,102 discharges from an emergency department (294.2 per 100,0000).

Among seniors aged 65 years and older, there were 3,235 hospitalizations due to pneumonia in 2012.

In the same year, there were 48 (12.8 per 100,000) new active cases of tuberculosis reported in San Diego County among seniors aged 65 years and older. In 2012, there were 556 seniors aged 55 years and older in San Diego County known to be living with HIV or AIDS. Only a small number of chlamydia, gonorrhea, and syphilis cases were reported among San Diego County seniors.

EXECUTIVE SUMMARY

Live Well San Diego



Through the leadership of the Board of Supervisors, the County of San Diego is committed to advance the health and overall well-being for all residents. The County's *Live Well San Diego* vision of a region that is building better health, living safely, and thriving is a collective effort and involves residents, community and faith-based organizations, businesses, schools, law enforcement, local city and tribal jurisdictions, and other partners. For more information on *Live Well San Diego*, visit **www.LiveWellSD.org**.

The County of San Diego's Aging & Independence Services (AIS) helps to support *Live Well San Diego* by offering more than 30 programs for seniors and persons with disabilities. These programs are in the following areas: protection and advocacy, health independence, home-based services, enrichment and involvement, and caregiver services. A list of some of these programs can be found at the end of this document.

AIS also offers a single phone number, (800) 510-2020, as the gateway for services and reporting elder abuse. You can also visit www.sandiego.networkofcare.org/aging/. In fiscal year 2013/2014, there were 61,167 calls made to the AIS Call Center.

In fiscal year 2013/2014, there were 61,167 calls made to the AIS Call Center.

Selected Senior Health Indicators

The following table (Table 1) shows some of the leading health indicators discussed in this report. These indicators were selected because they represent issues affecting older adults and can be improved upon through participation in the county's programs. These indicators cut across different areas and are compiled for quick reference. These selected indicators will be tracked over time.

EXECUTIVE SUMMARY

TABLE 1: LEADING HEALTH INDICATORS

	INDICATOR	MEASURE	SD			CA		
***General Health*[1]**			**2007**	**2009**	**2012**	**2007**	**2009**	**2012**
1	Health Status	Percent of population reporting excellent, very good, or good health	76.2%	81.0%	79.4%	69.4%	72.4%	72.6%
2	Needed Help for Mental Health/ Substance Abuse	Percent of the population that needed help for emotional/ mental health problems or use of alcohol/drugs in past year	5.1%	6.9%	8.1%	6.0%	6.0%	7.1%
***Health Behaviors*[1]**								
3	Overweight and Obese	Percent of population that is overweight and/or obese	56.0%	58.2%	55.9%	55.7%	58.6%	61.4%
4	Physical Activity	Percent of population that walks for transportation, fun, or exercise in past week	N/A	68.9%	N/A	N/A	67.3%	N/A
5	Diet	Percent of population that ate fast food 3 or more times in the past week	7.9%	8.8%	10.2%	6.6%	7.7%	9.5%
6	Smoking	Percent of population that currently smokes	6.4%	7.0%	8.6%	6.4%	7.5%	6.5%
***Prevention Activities*[1]**								
7	Flu Vaccination	Percent of population that reported they had a flu vaccine in past 12 months	71.2%	69.4%	66.7%	68.9%	65.9%	68.3%
8	Mammogram Screening	Percent of female population who had a mammogram in past 2 years	75.6%	81.9%	81.9%	77.4%	80.1%	81.4%

EXECUTIVE SUMMARY

	INDICATOR	MEASURE	SD			CA		
ADOD Indicators [2,3]			2007	2009	2012	2007	2009	2012
9	Alzheimer's Disease and Other Dementias	Rate of death due to ADOD	N/A	N/A	379.1 per 100,000	N/A	N/A	N/A
Non-Communicable (Chronic) Disease Indicators [2,3]								
10	Diabetes	Rate of death due to diabetes	110.7 per 100,000	111.1 per 100,000	130.3 per 100,000	135.9 per 100,000	119.1 per 100,000	124.7 per 100,000
11	Heart Disease	Rate of death due to CHD	829.2 per 100,000	773.7 per 100,000	700.1 per 100,000	978.0 per 100,00	869.3 per 100,000	764.9 per 100,000
12	Stroke	Rate of death due to stroke	277.3 per 100,000	249.6 per 100,000	228.6 per 100,000	311.4 per 100,000	272.4 per 100,000	249.2 per 100,000
13	Asthma	Rate of death due to asthma	3.2 per 100,000	3.0 per 100,000	3.7 per 100,000	5.4 per 100,000	5.1 per 100,000	4.5 per 100,000
14	COPD	Rate of death due to COPD	252.8 per 100,000	220.3 per 100,000	240.8 per 100,000	268.1 per 100,000	262.0 per 100,00	240.0 per 100,000
15	All Cancer	Rate of death due to all cancer	992.9 per 100,000	904.1 per 100,000	928.9 per 100,000	961.3 per 100,000	929.1 per 100,000	870.8 per 100,000
Behavioral Health Indicators [4,5]								
16	Suicide	Rate of death due to suicide	19.0 per 100,000	17.1 per 100,000	18.4 per 100,000	14.8 per 100,000	15.9 per 100,000	16.5 per 100,000
17	Acute Substance-Related Disorder	Rate of hospitalization due to an acute substance-related disorder	N/A	N/A	30.7 per 100,000	N/A	N/A	N/A

EXECUTIVE SUMMARY

INDICATOR		MEASURE	SD			CA		
Injury Indicators			**2007**	**2009**	**2012**	**2007**	**2009**	**2012**
18	Unintentional Injury[2,3]	Rate of death due to unintentional injury	82.5 per 100,000	79.0 per 100,000	90.0 per 100,000	70.5 per 100,000	68.2 per 100,000	70.1 per 100,000
19	Unintentional Fall Injury[3,4]	Rate of ED discharge due to fall injury	3,267.0 per 100,000	3,595.8 per 100,000	4,292.3 per 100,000	3,309.9 per 100,000	3,619.6 per 100,000	4,108.9 per 100,000
20	Hip Fracture[5]	Rate of hospitalization due to hip fracture	595.5 per 100,000	591.5 per 100,000	567.9 per 100,000	N/A	N/A	N/A
Service Indicators[6]								
21	Elder Abuse	Number of investigations of elder adult abuse	6,902	6,423	6,131	N/A	N/A	N/A
	Elder Abuse	Percent confirmed cases of elder adult abuse	19.7%	22.4%	34.0%	N/A	N/A	N/A

**N/A = Not available.
2 Source: Death Statistical Master Files (CDPH) County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch, 2012.
3 Source: Death Statistical Master Files, CDPH, 2012.
4 Source: Emergency Discharge Database (CA OSHPD), County of San Diego, Health & Human Services Agency, Emergency Medical Services Branch, 2012.
5 Source: Patient Discharge Database (CA OSHPD), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch, 2012.
6 Source: County of San Diego, Health & Human Services Agency, Aging & Independence Services, APS Data, FY 2013/2014.

CHAPTER

1

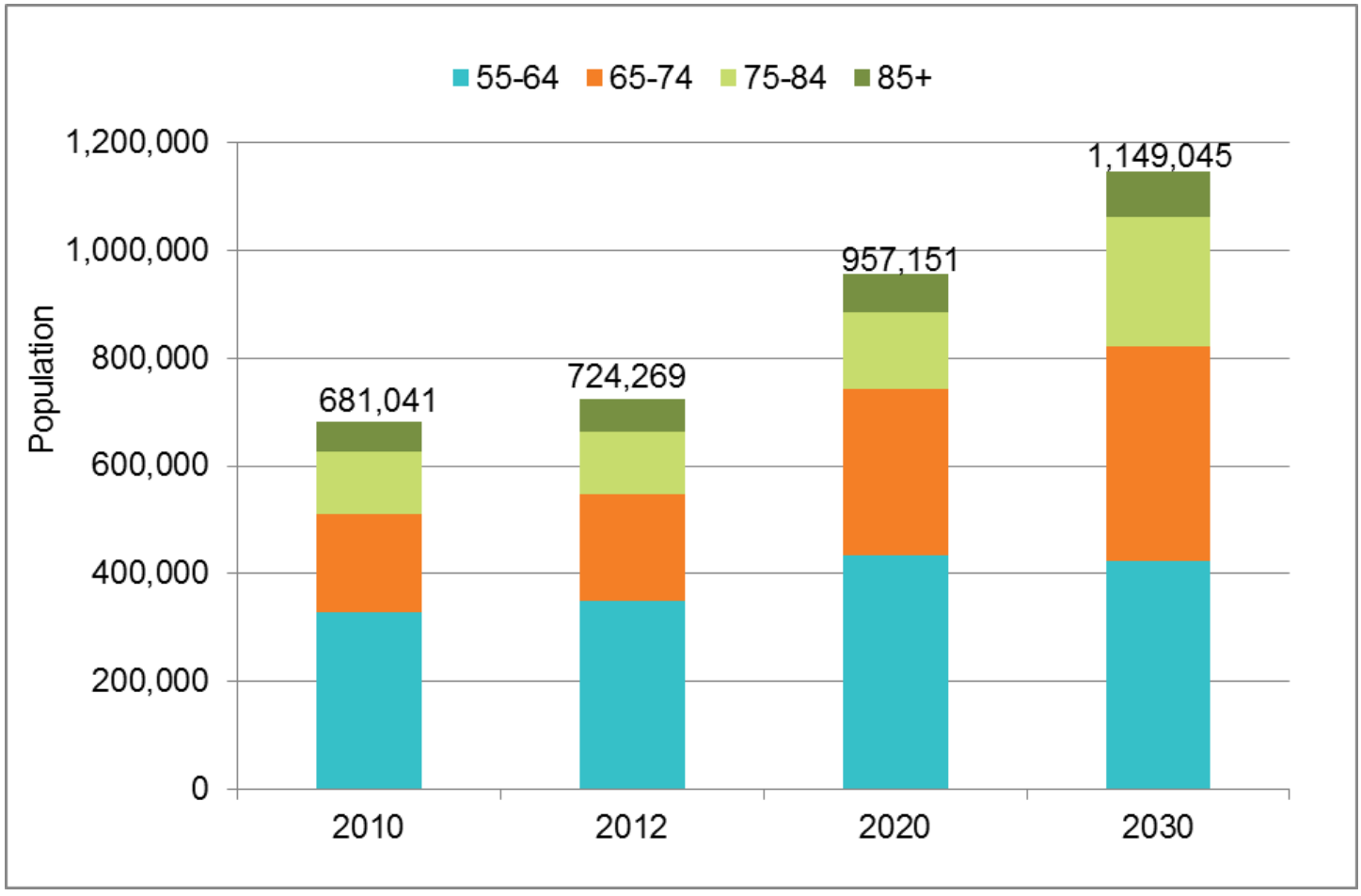
DEMOGRAPHICS

DEMOGRAPHICS

Population and Projected Growth by Age

In 2010, there were 681,041 people aged 55 and over in San Diego County, 53,960 (7.9%) of which were 85 years or older. As of 2012, there were 724,269 people over the age of 55 years. The San Diego County senior population has been growing steadily, and the number of those aged 55 years and older is expected to increase to 1,149,045 by 2030, 84,048 of which will be 85 years or older. It is during this time period that baby boomers join this age group.

Figure 1. Senior Population by Age Group, San Diego County, 2010-2030

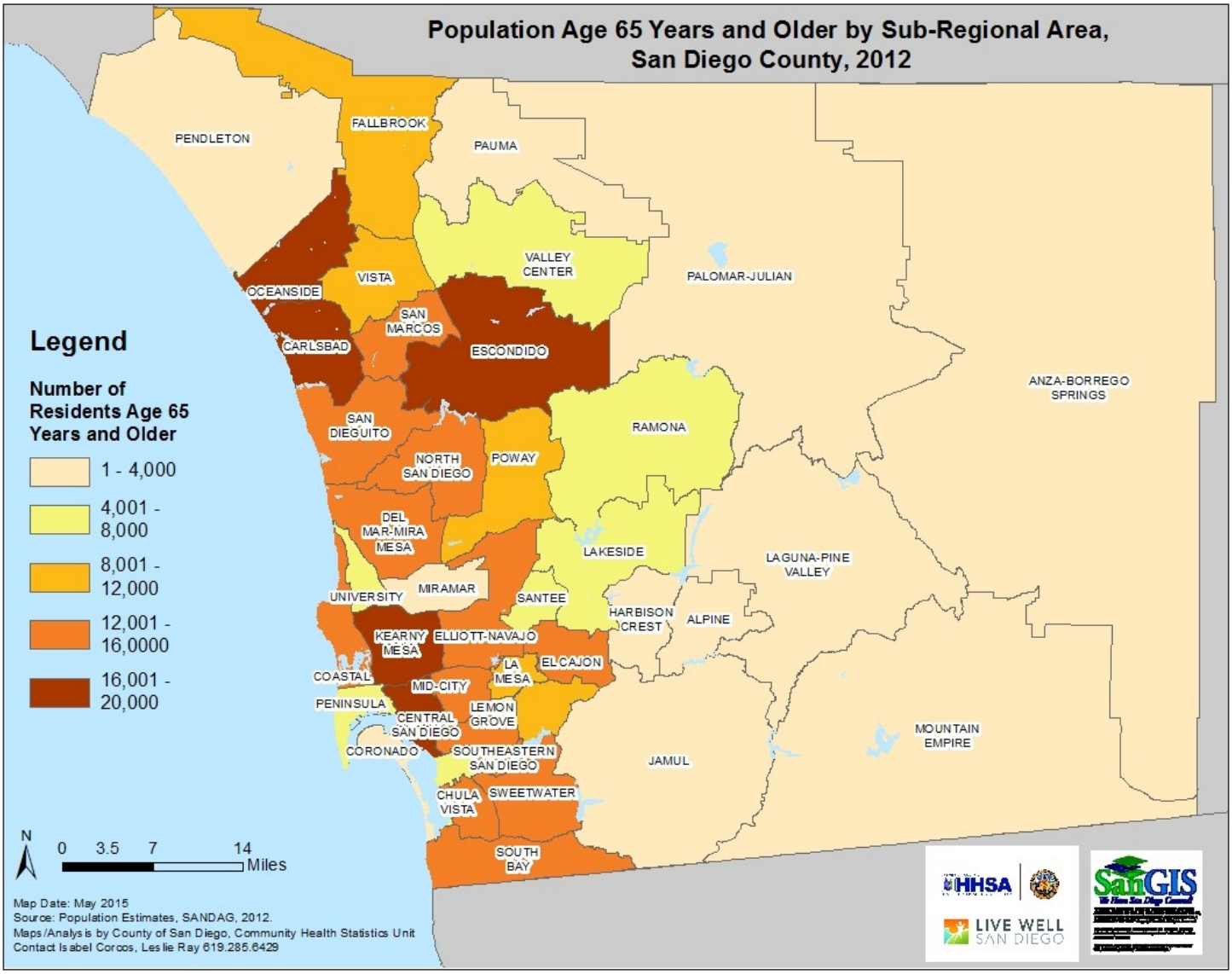


Source: SANDAG Population Estimates, 2010-2030.

Population Geographic Distribution

In 2012, there were 374,535 people aged 65 years or older living in San Diego County. Many of these seniors lived in communities located in the western half of the county. Communities with the greatest number of seniors included Oceanside, Carlsbad, Escondido, Kearny Mesa, and Central San Diego.

Figure 2. San Diego County Senior Population, 65+ Years, 2012

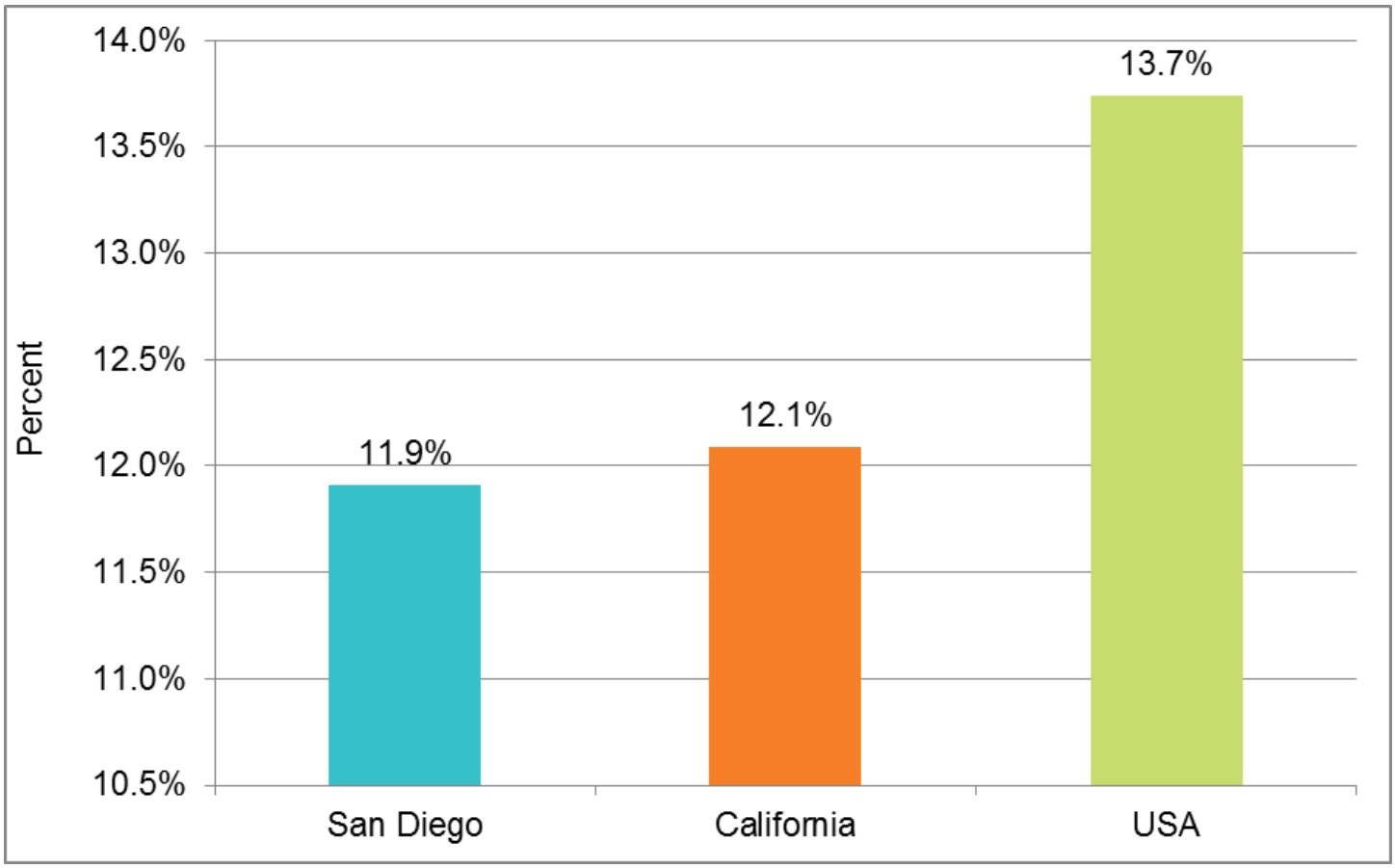


DEMOGRAPHICS

Senior Population as a Percentage of Total Population

In both San Diego County and the State of California, approximately 12% of the total population were seniors aged 65 years or older. In the United States, nearly 14% of the population were seniors aged 65 years and older.

Figure 3. Senior Population (65+ Years) as a Percentage of the Total Population, San Diego County, California, United States, 2012

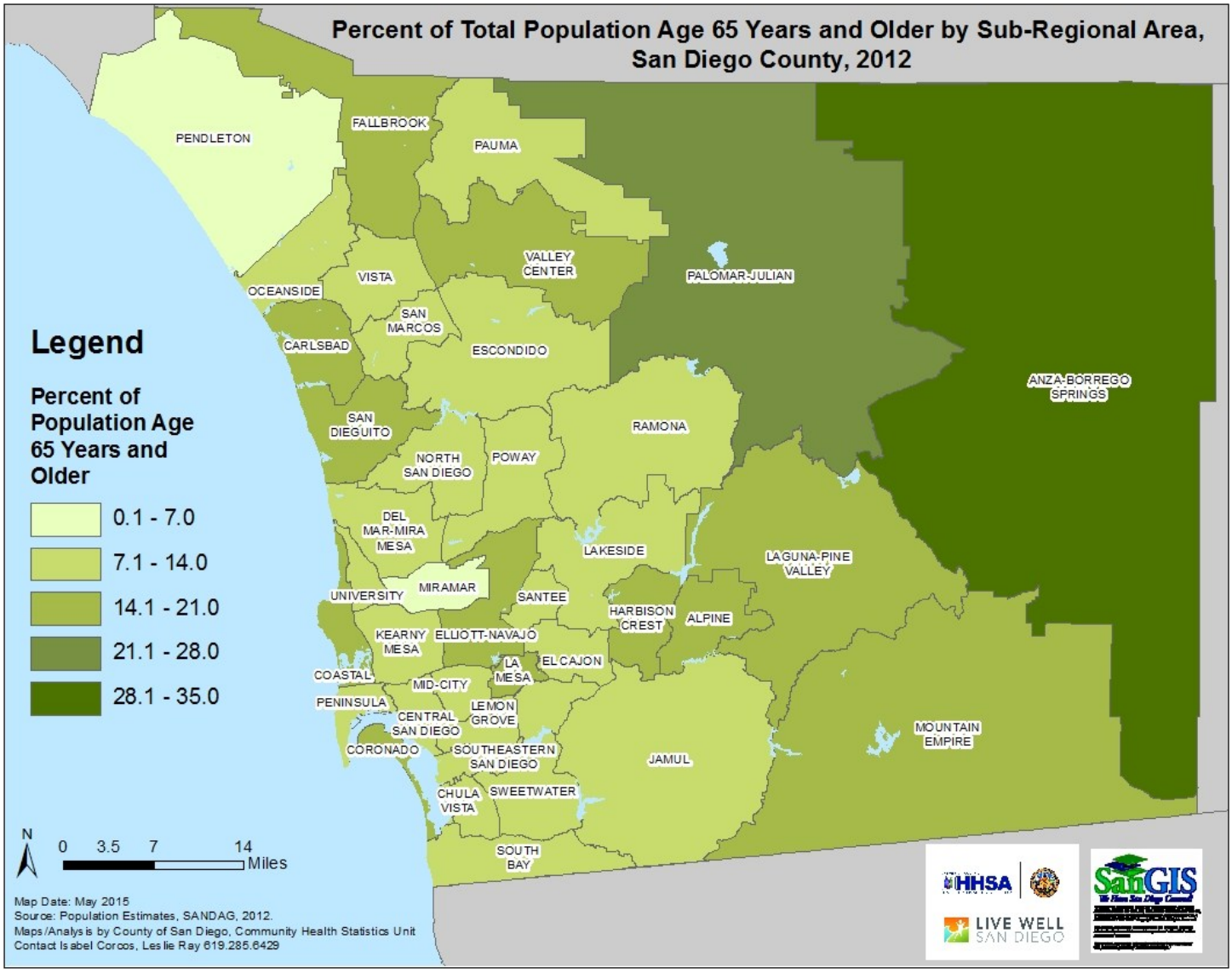


Source: SANDAG Population Estimates, 2012; U.S. Census Bureau, American Community Survey, 2012.

Population Geographic Distribution as a Percentage of Total Population

Nearly 12% of all residents of San Diego County were 65 years or older in 2012. By 2030, an estimated 23% of the population will be 65 years or older.

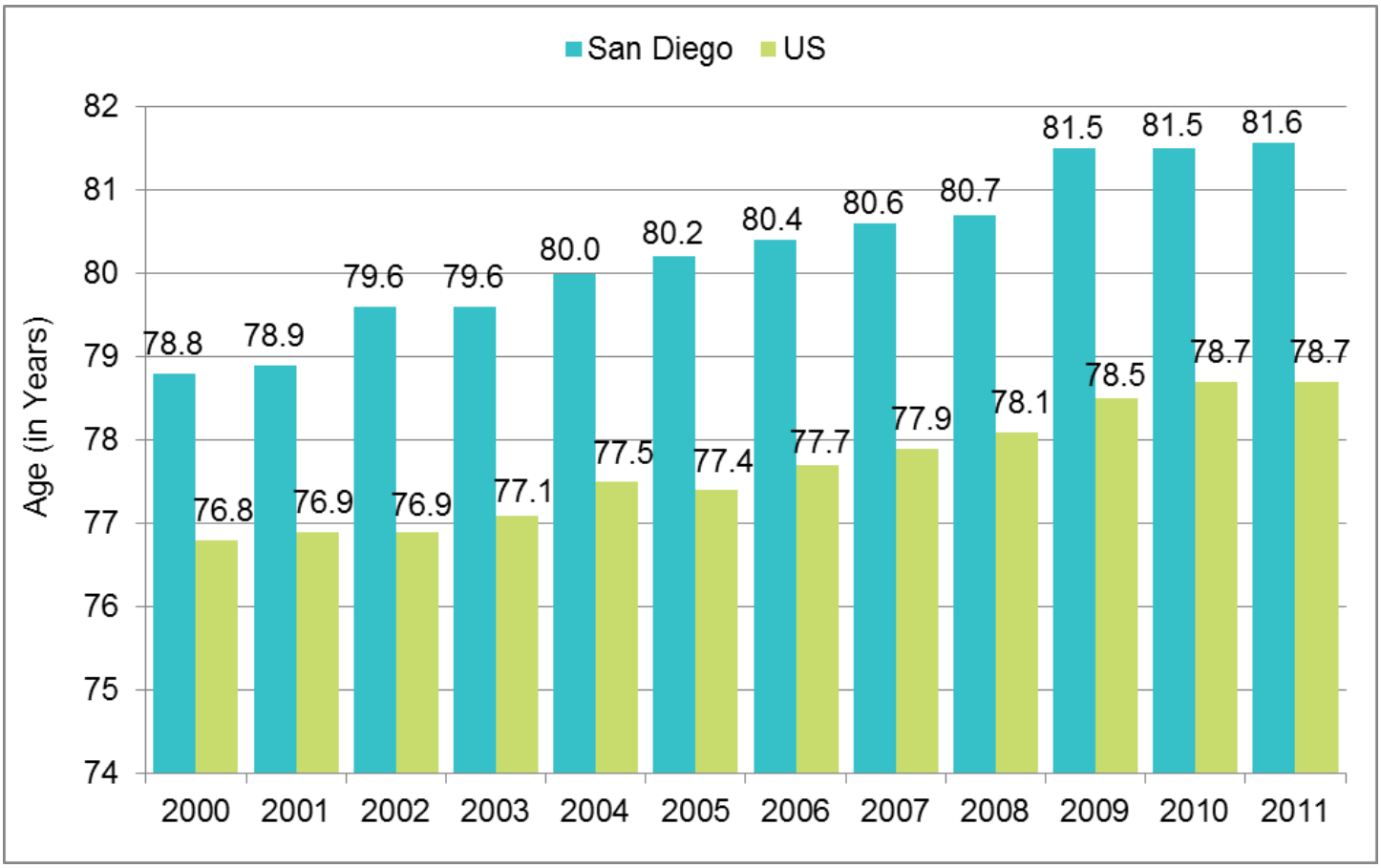
Figure 4. Persons 65+ Years as a Percentage of the Population by Sub-Regional Area, 2012



Life Expectancy

Life expectancy at birth in the United States was 76.8 years in 2000 and increased to 78.7 years in 2011. San Diego County residents had a life expectancy that was approximately 3 years longer than residents of the United States, in 2011.

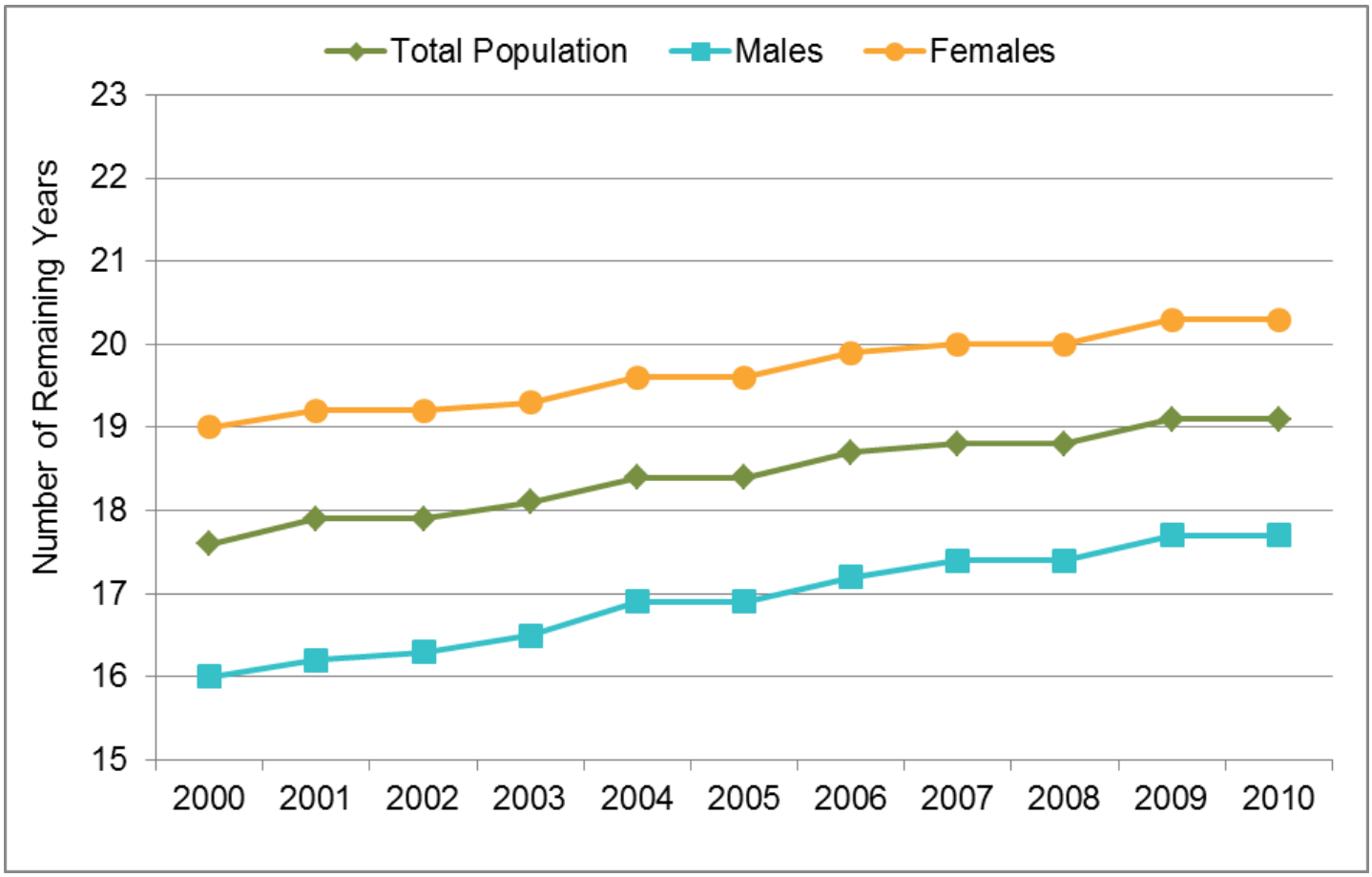
Figure 5. Life Expectancy at Birth, San Diego County vs. United States Population, 2000-2011



Source: County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch

In the United States, females have a longer life expectancy than males, although the gap has been steadily decreasing since 1975. In 2010, females aged 65 years and older were expected to live another 20.3 years, to age 85, while males were expected to live another 17.7 years, to age 82.

Figure 6. United States Life Expectancy at Age 65 Years, 2000-2010

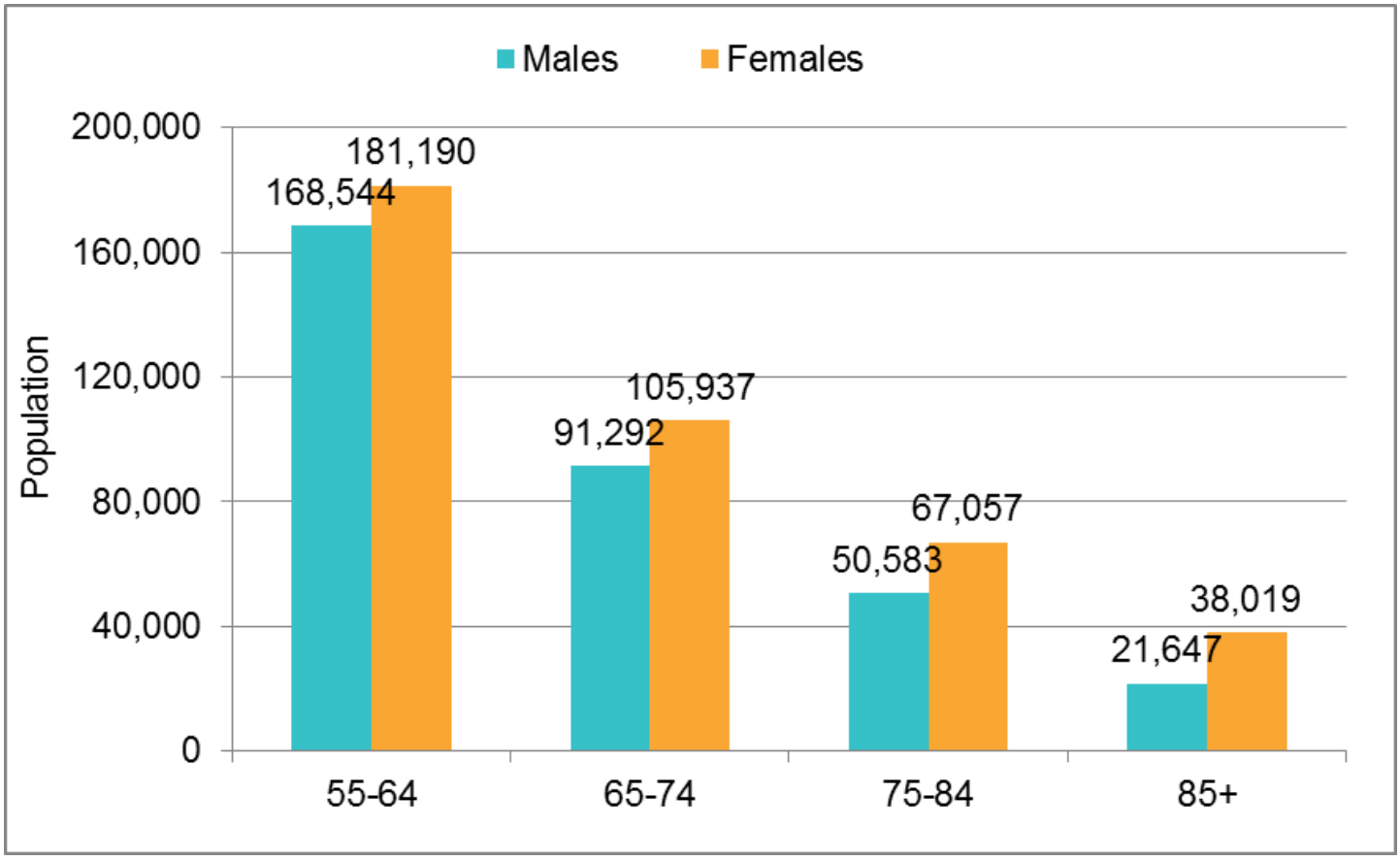


Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, United States Life Tables, 1900-2010. Accessed online at http://www.cdc.gov/nchs/data/hus/hus13.pdf#018.

Age and Gender Distribution

There was a higher proportion of females than males in all senior age groups. The proportion of females increased with increasing age group, from 52% of 55-64 year olds to 64% of 85+ year olds.

Figure 7. Senior Population by Age Group and Gender, 55+ Years, San Diego County, 2012

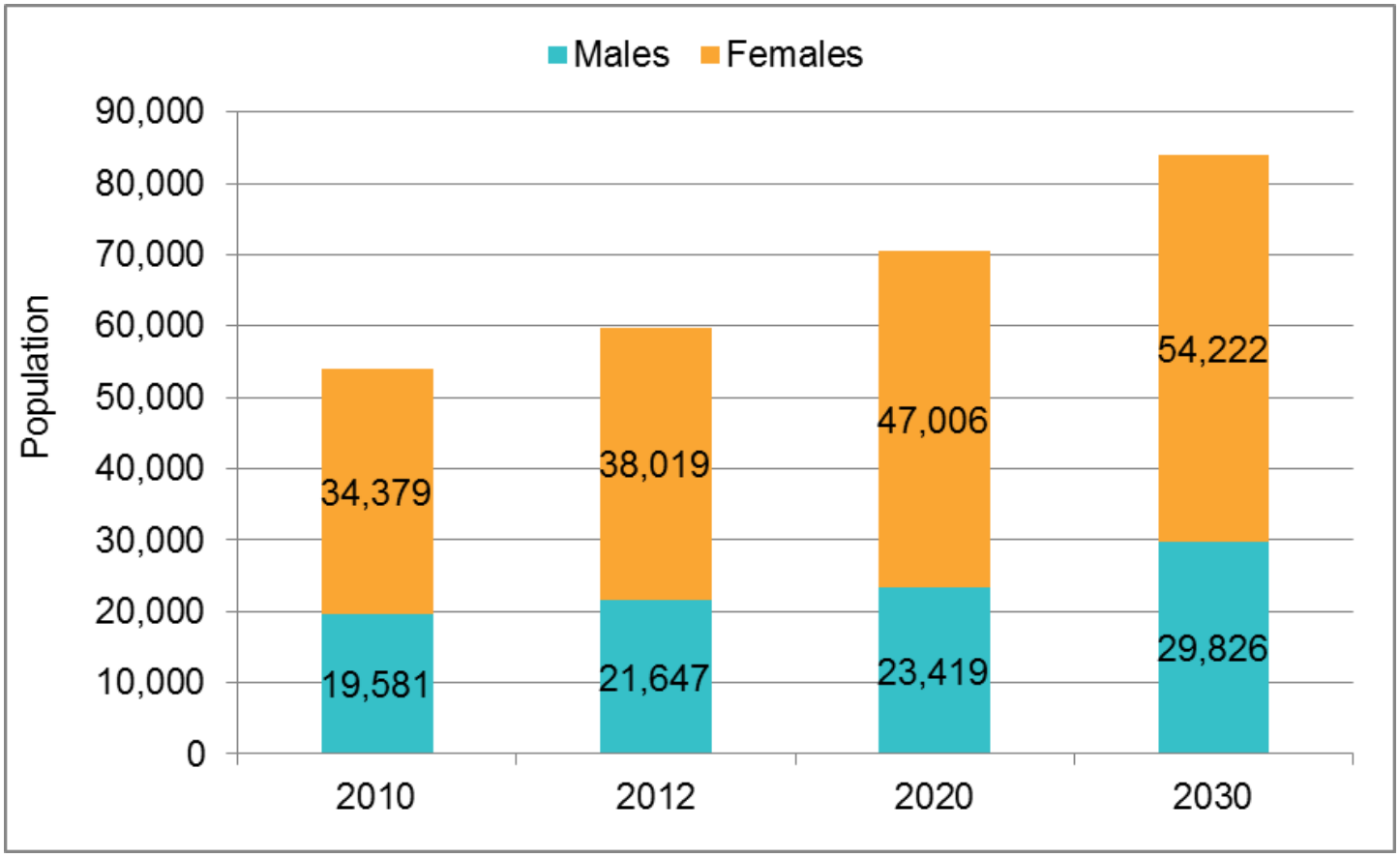


Source: SANDAG Population Estimates, 2012.

Population and Projected Growth by Age and Gender, 85-Plus Years

The 85 year and older population will increase by 156% between 2010 and 2030, from 53,960 people aged 85 and older, to 84,048 people in 2030. This growth is greatest among females, in part due to their traditionally longer life expectancies. However, more males are living to be 85 years and older than ever before in San Diego County. The 85 year and older male population will increase by 152% between 2010 and 2030.

Figure 8. Senior Population 85+ Years by Gender, San Diego County, 2010-2030

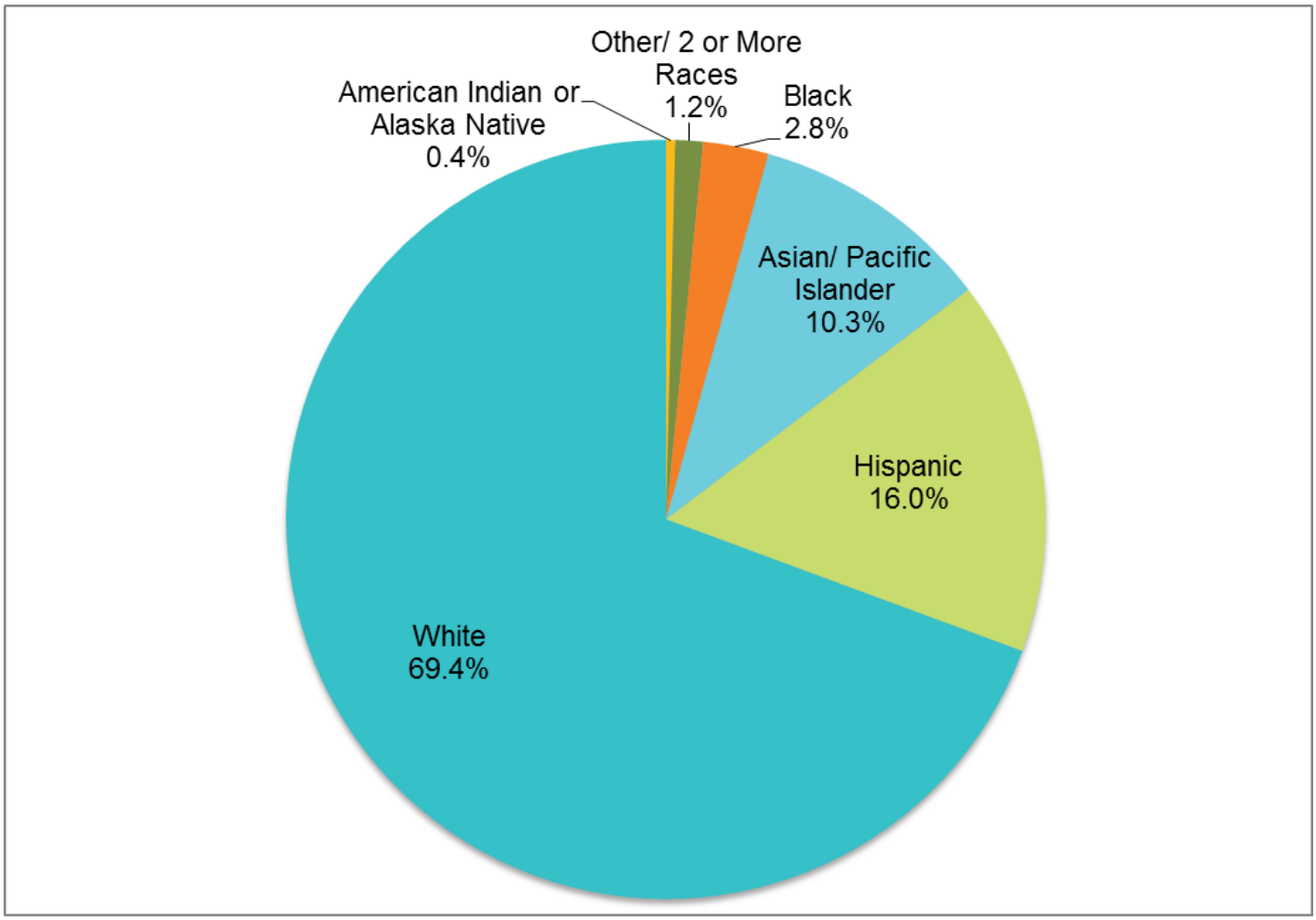


Source: SANDAG Population Estimates, 2010 – 2030.

Racial/Ethnic Distribution

In 2012, an estimated 69.4% of all San Diego County seniors aged 65 years or older were white, 16.0% were Hispanic, 10.3% were Asian/Pacific Islander, 2.8% were black, 1.2% were other or two or more races, and 0.4% were either American Indian or Alaska Native.

Figure 9. Senior Population by Race/Ethnicity, 65+ Years, San Diego County, 2012

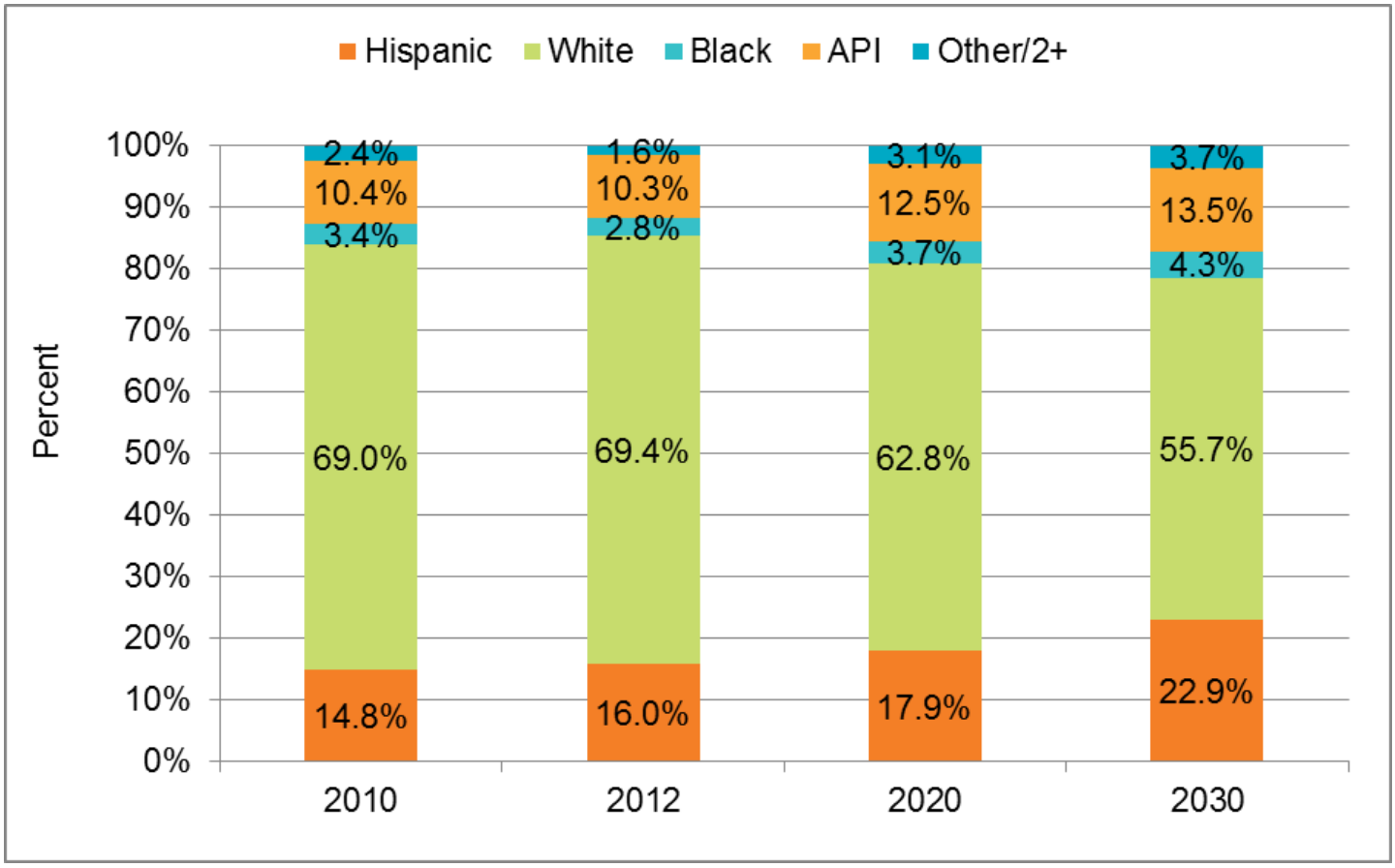


Source: SANDAG Population Estimates, 2012.

Changes in Racial/Ethnic Distribution

While all racial/ethnic groups are expected to increase in size between now and the year 2030, the Hispanic population will grow most dramatically both in magnitude and proportion of the total population. The number of Hispanic seniors living in San Diego County will nearly triple from 54,408 in 2010 to 169,741 in 2030. In 2010, Hispanics represented 14.8% of the senior population, and are expected to represent nearly one-quarter (23%) of the senior population by 2030. Similarly, the black and Asian/Pacific Islander (API) senior populations are expected to nearly triple in size. Both will also increase as a proportion of the total population. Though the white senior population will increase in size, it will decrease as a percent of the total senior population from 69% in 2010 to 55.7% in 2030.

Figure 10. Race/Ethnicity Categories as Percentages of the Total Senior Population, San Diego County, 2010-2030

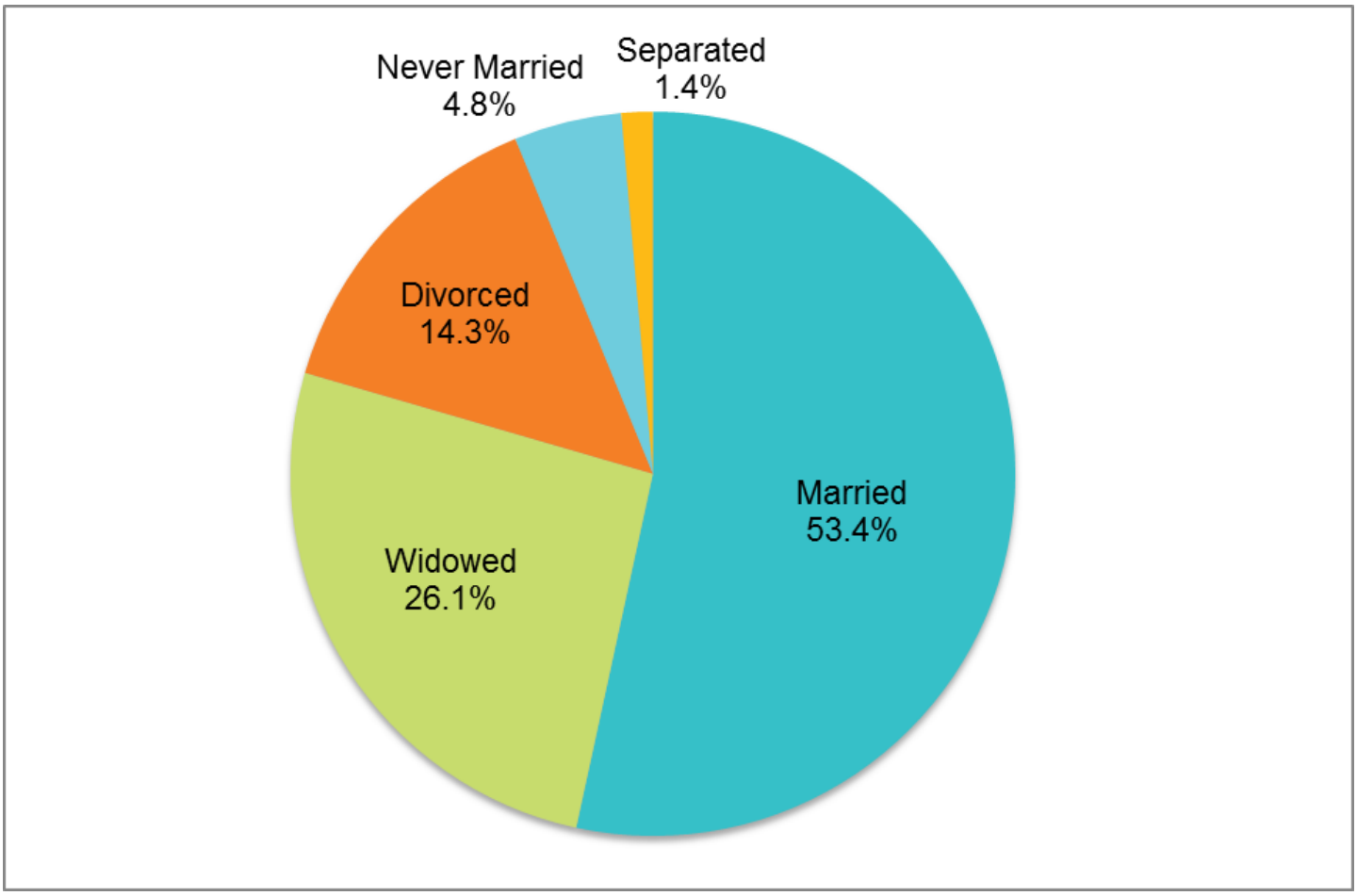


Source: SANDAG Population Estimates, 2012. “Other/2+” = Other or two or more races; “API” = Asian/Pacific Islander.

Marital Status

Married people, in general, have better health than those who are divorced, widowed, never-married or living with a partner.[2] In 2012, more than half of all San Diego County seniors were married (53%) and 26% were widowed.

Figure 11. Marital Status of Population, 65+ Years, San Diego County, 2012

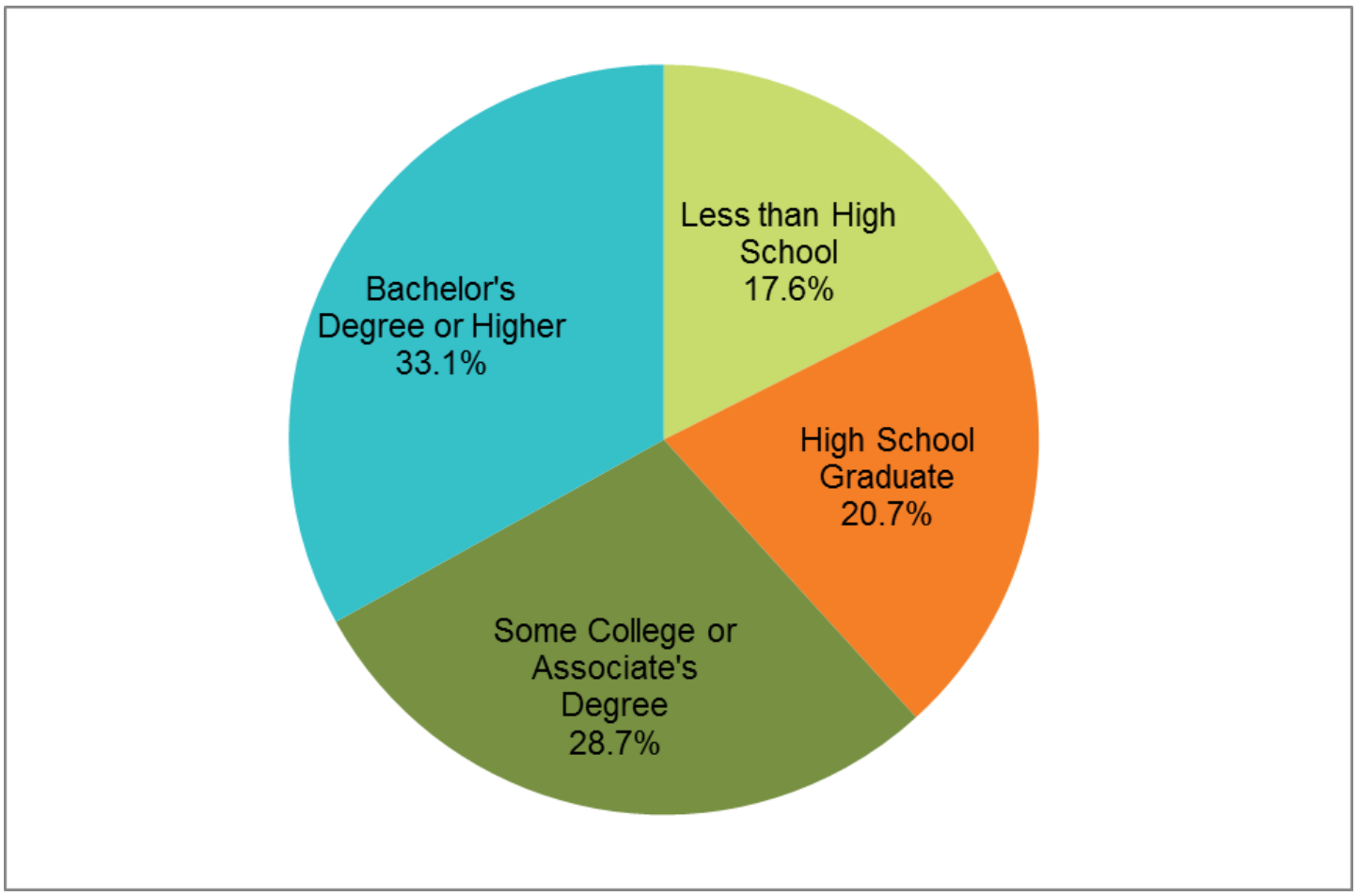


Source: U.S. Census Bureau, American Community Survey, 2012.

Educational Attainment

A high proportion of seniors with a college education increases the ability of communities to contribute to the quality of life of seniors.[3] In 2012, more than a quarter of all seniors had completed at least some college education (29%) and a third of seniors had earned a bachelor's degree or higher. For 20.7% of seniors, a high school diploma was the highest level of education completed, and 17.6% had never graduated from high school.

Figure 12. Educational Attainment of Population, 65+ Years, San Diego County, 2012

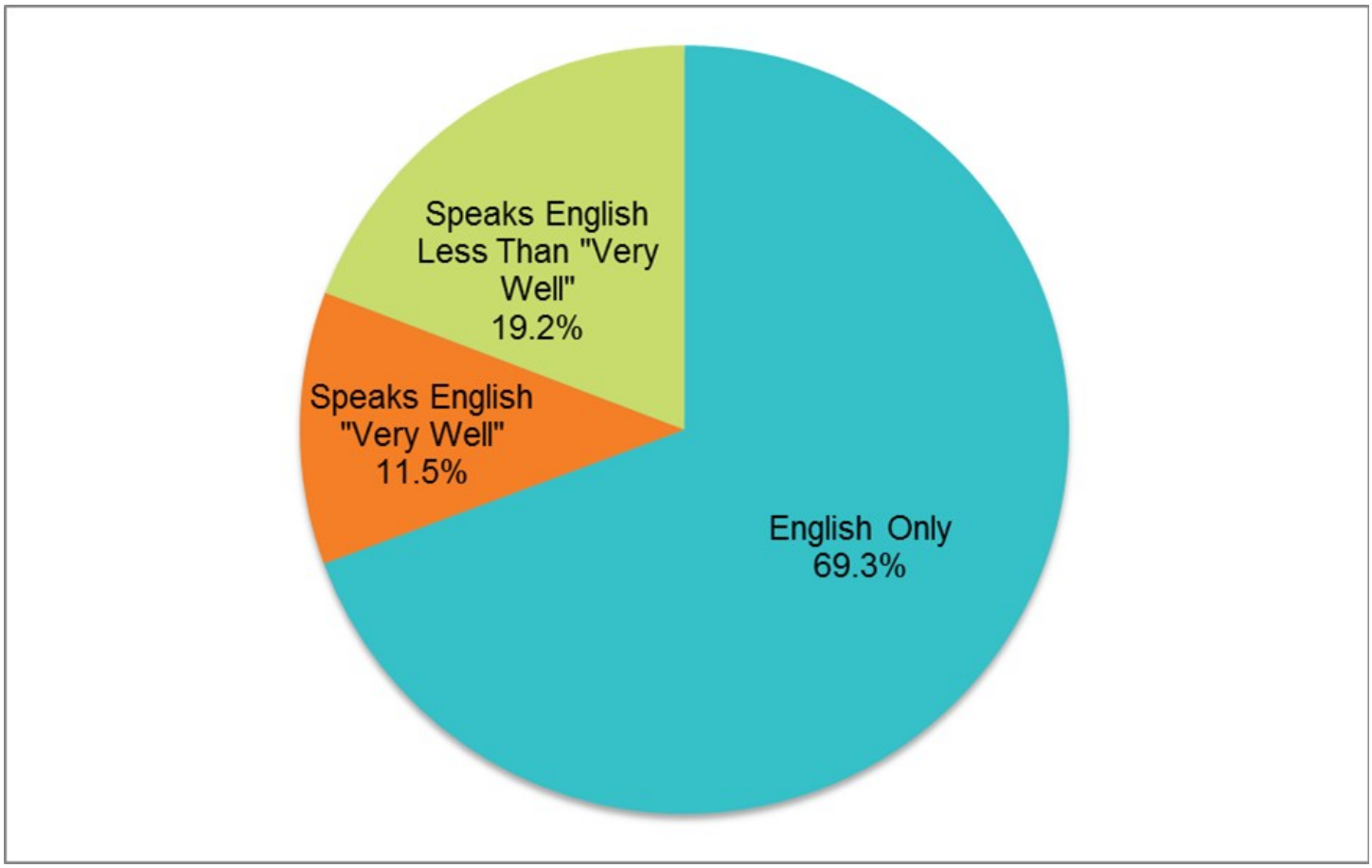


Source: U.S. Census Bureau, American Community Survey, 2012.

Language Spoken at Home

Persons with limited English proficiency in the United States are less likely to have a regular source of primary care and are less likely to receive preventive care. They are also less satisfied with care they do receive, more likely to report overall problems with care, and may be at increased risk of experiencing medical errors.[4] San Diego County is linguistically diverse, even throughout the senior population. While the majority of seniors speak English only (69.3%), 19.2% speak English less than very well.

Figure 13. Language Spoken at Home, 65+ Years, San Diego County, 2012

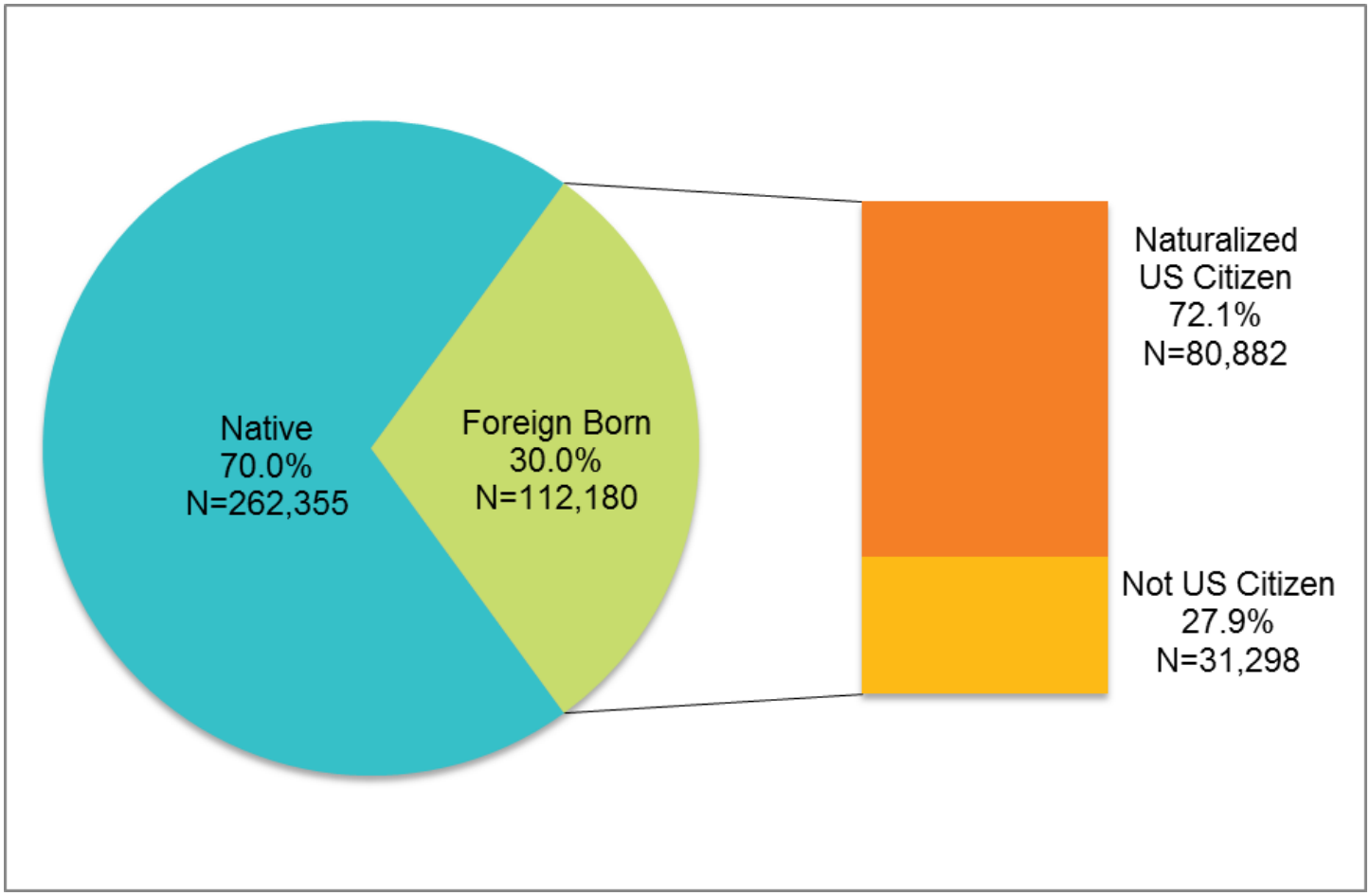


Source: U.S. Census Bureau, American Community Survey, 2012.

Place of Birth and Citizenship Status

In 2012, about one out of every three senior residents of San Diego County was foreign born. Approximately 32,000 foreign born San Diego residents were not naturalized United States citizens (28%) as of 2012.

Figure 14. Place of Birth and Citizenship Status, 65+ Years, San Diego County, 2012

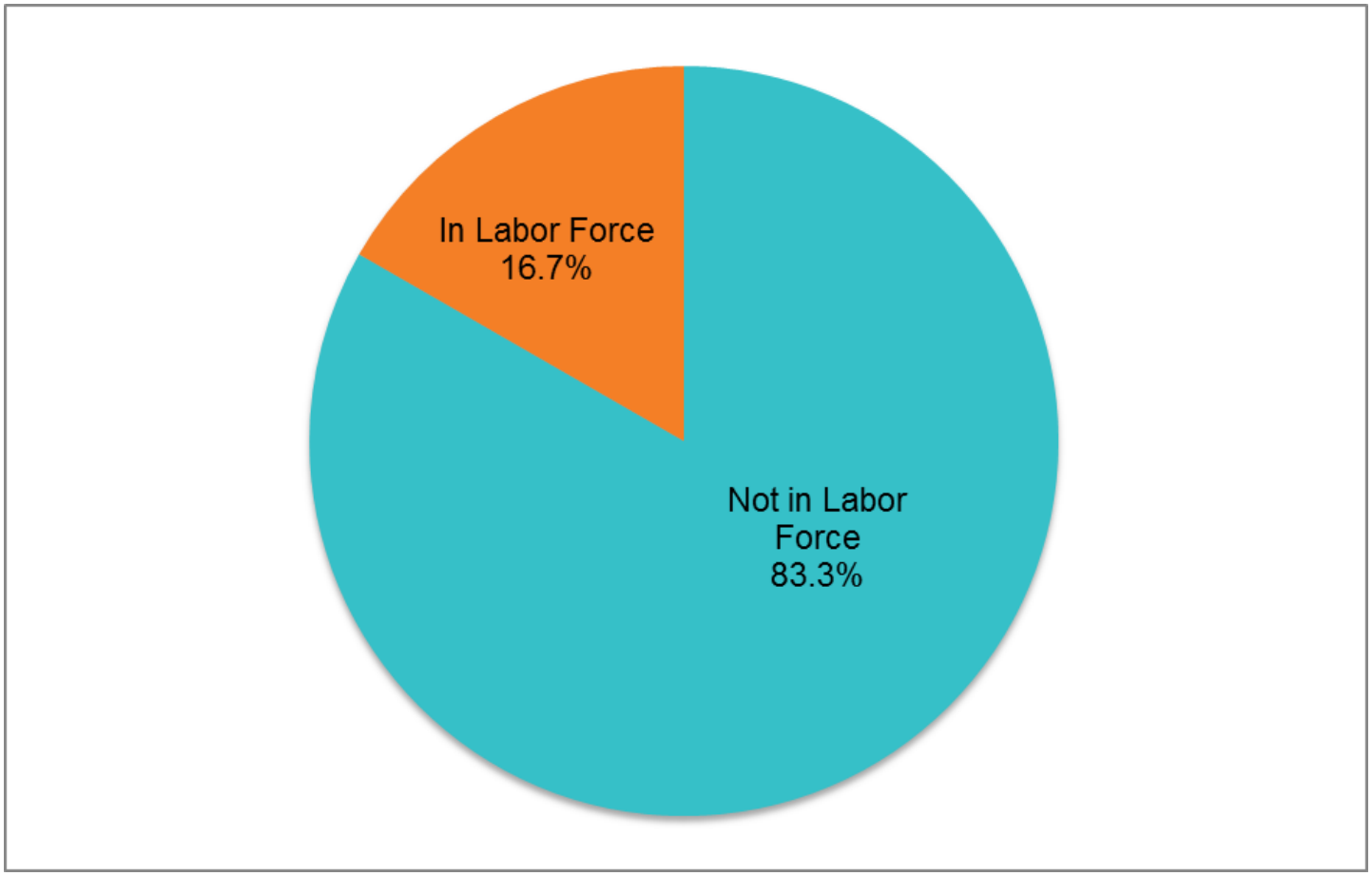


Source: U.S. Census Bureau, American Community Survey, 2012.

Employment Status

An increasing number of seniors are remaining in the workforce well after retirement age. Despite whether work is a choice or a necessity, these seniors remain healthier longer, learn to be more open-minded, and often have a higher quality of life.[5] In San Diego County, about one out of every six seniors aged 65 years or older were in the labor force in 2012.

Figure 15. Percent of Population Ages 65+ Years in the Labor Force, San Diego County, 2012



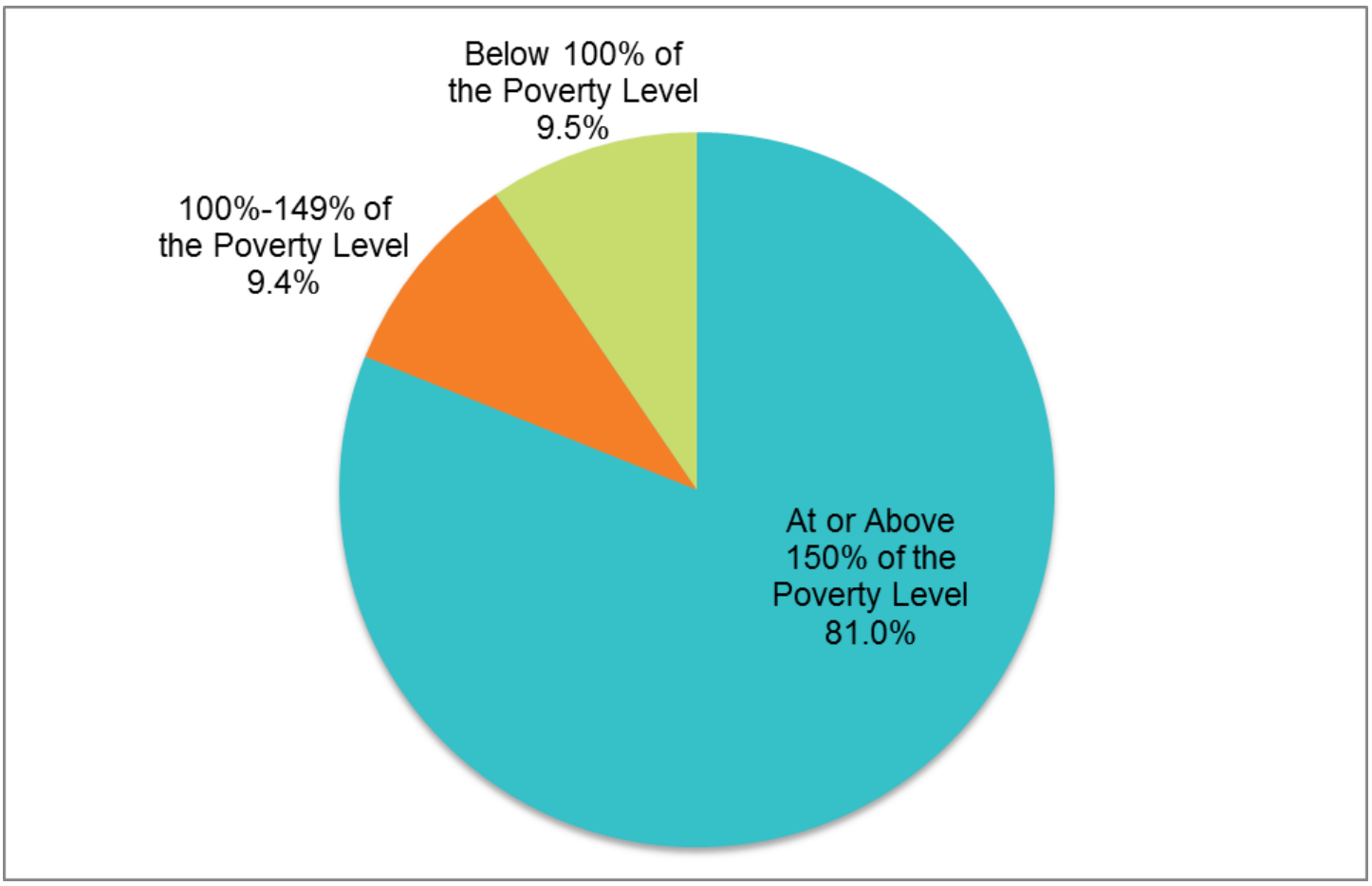
Source: U.S. Census Bureau, American Community Survey, 2012

Poverty Status

Low income has been shown to be a risk factor for poor health. The Federal Poverty (FPL) is set at different dollar amounts that vary according to several factors, including how many people live in one household. In 2012, the FPL for a one person family/household was $11,170 per year. For more information on federal poverty guidelines, visit http://aspe.hhs.gov/poverty/index.cfm

In San Diego County, 9.5% of all seniors lived below the poverty level and 9.4% lived between 100% and 149% of the poverty level in 2012. Since women generally live longer than men, a higher percent of women live on a single income. This may result in a greater number of senior women living in poverty than men.

Figure 16. Poverty Status in the Past 12 Months, 65+ Years, San Diego County, 2012



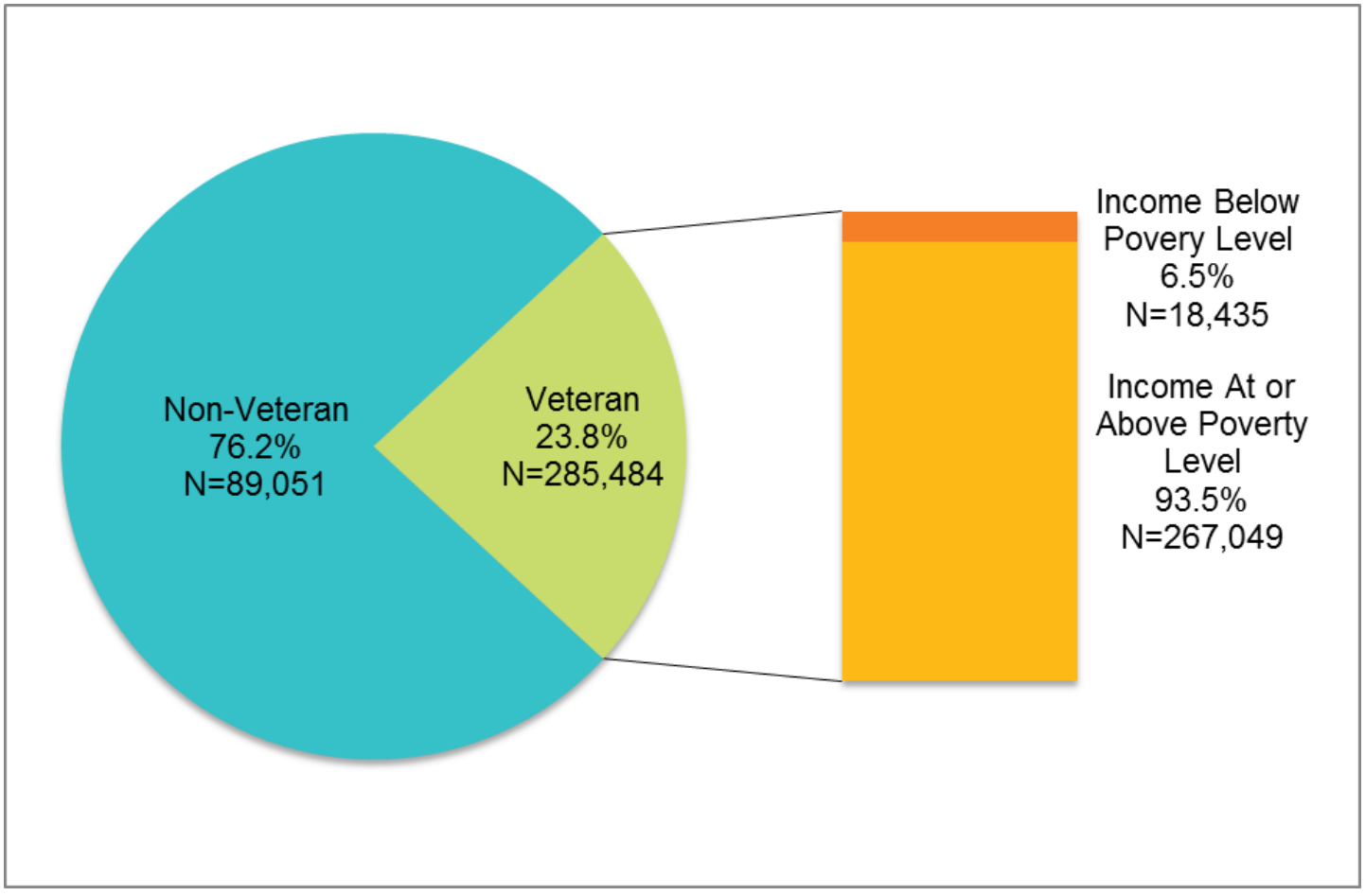
Source: U.S. Census Bureau, American Community Survey, 2012.

Veteran Status

As of 2012, 23.8% of seniors aged 65 years and older were veterans. Among those, an estimated 6.5% had an income below the federal poverty level.

Among veterans aged 65+ years and had an income below the poverty level, nearly 50% had a disability.

Figure 17. Percentage of Population Ages 65+ Years Veteran Status and Income Level, San Diego County, 2012

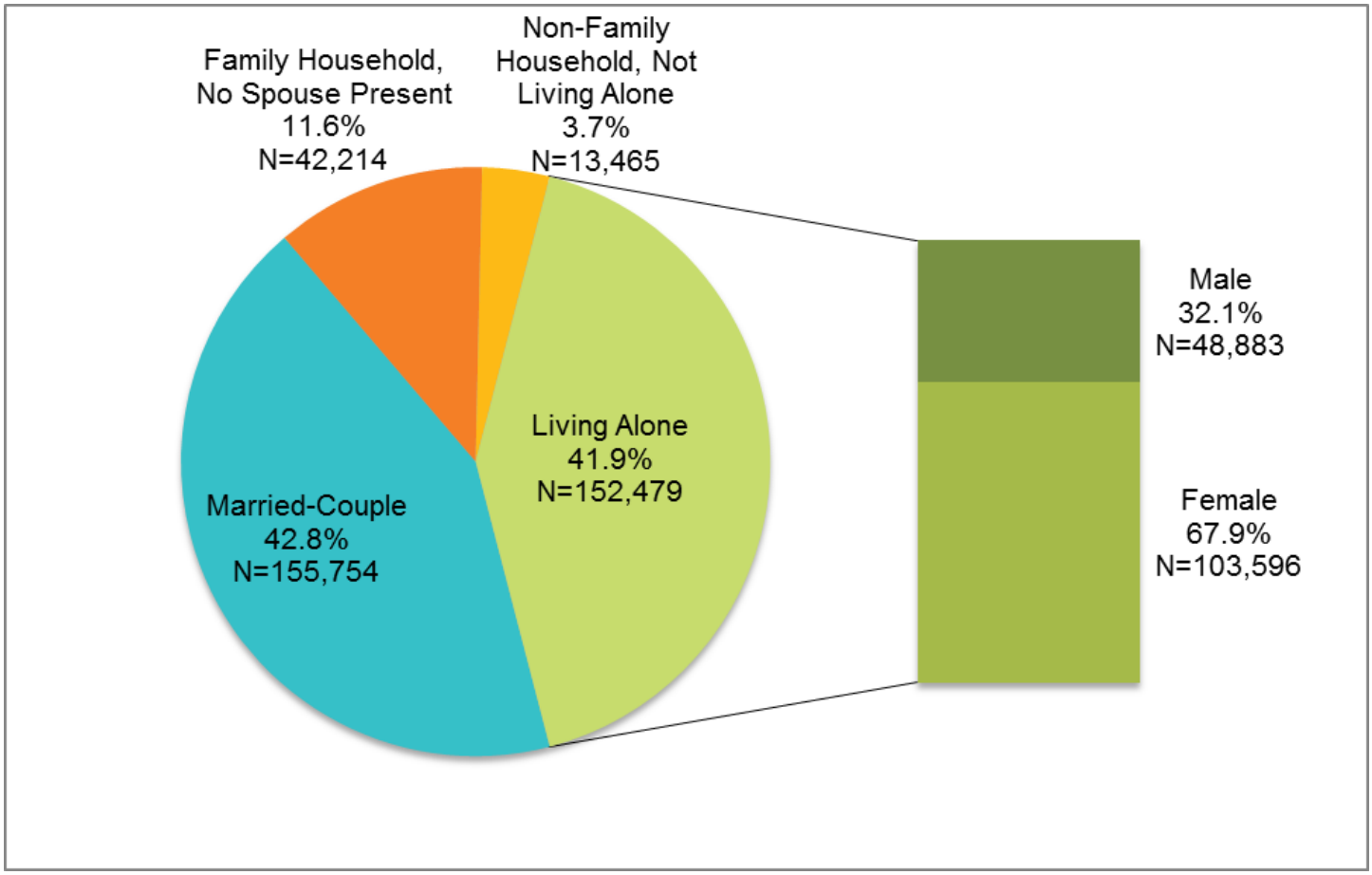


Source: U.S. Census Bureau, American Community Survey, 2012

Households by Type and Population Living Alone

Overall health can be influenced by a person's social well-being and support. Family life enhances the senior population's well-being; the absence of this support may be detrimental in coping with health conditions. Of the 374,535 seniors aged 65 years and older in the county, 97.2% lived in households (N=363,911). Of those in households, 54% live in family households, but another 42% live alone. Women are more likely than men to live alone (68% vs. 32%), primarily due to longer life expectancies. However, men who live alone are typically at greater risk of poor health outcomes than women.[6]

Figure 18. Households by Type and Percent of Population Living Alone by Gender, San Diego County, 2012

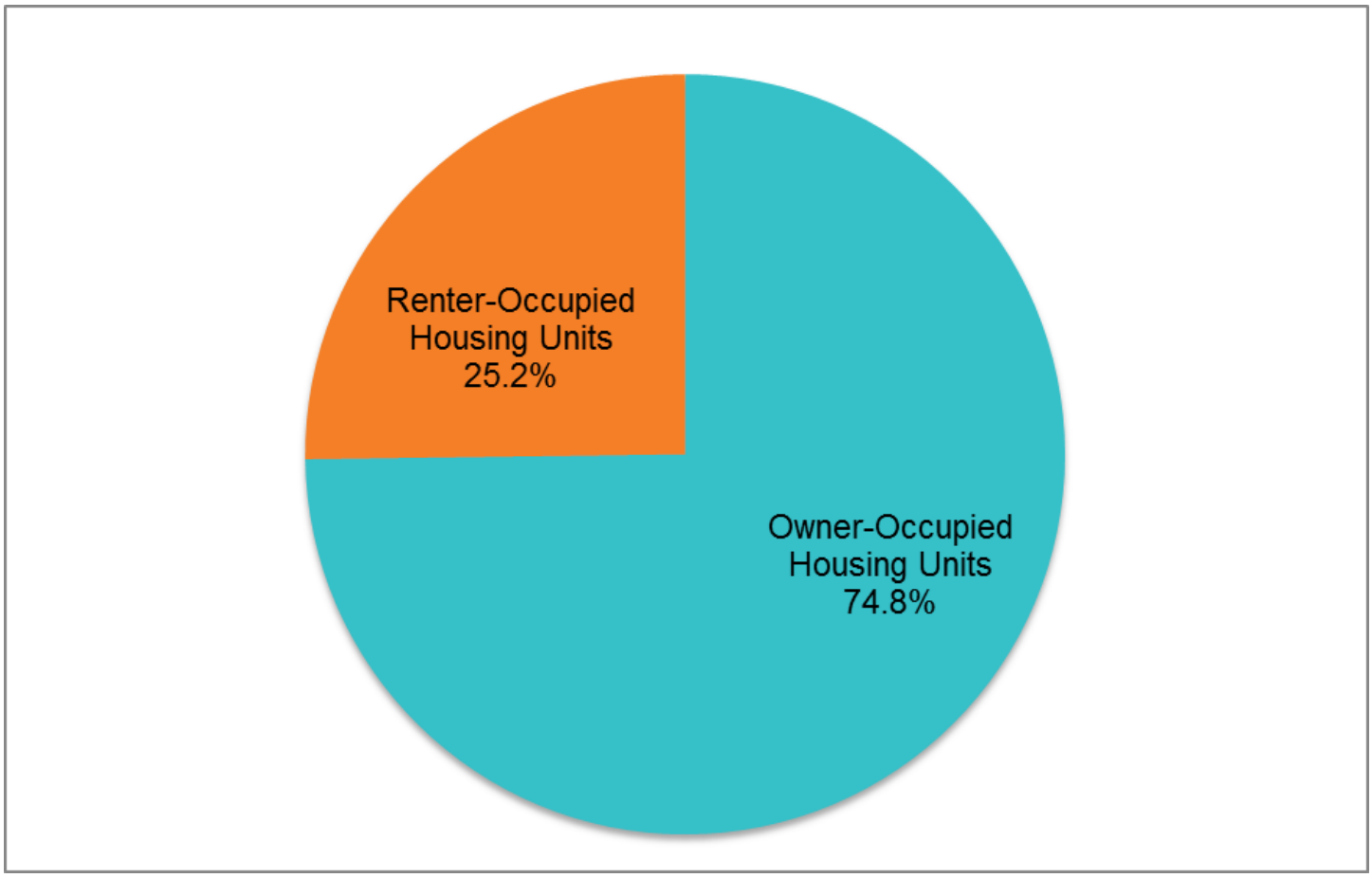


Source: U.S. Census Bureau, American Community Survey, 2012

Housing Tenure

Seniors' housing needs are more likely to be met if they live in owner-occupied housing. In 2012, 74.8% of senior households were owner-occupied and 25.2% were renter-occupied. Approximately 37% of senior homeowners in San Diego County had a mortgage.[7]

Figure 19. Housing Tenure, 65+ Years, San Diego County, 2012



Source: U.S. Census Bureau, American Community Survey, 2012.

Owner-Occupied vs. Renter-Occupied Housing

The U.S. Department of Housing and Urban Development (HUD) considers families who pay more than 30% of their income for housing as cost burdened. These families may have difficulty affording necessities such as food, clothing, transportation and medical care. In 2012, the median gross rent for renter-occupied units was $1,028, and for nearly two-thirds of households this amount was more than 30% of the total household income. The median monthly owner costs for seniors with a mortgage was $1,857 compared to $449 for owners without a mortgage. Monthly owner costs were greater than 30% of the total household income for one-third of senior homeowners.

Figure 20. Renter-Occupied vs. Owner-Occupied Housing Characteristics, Householder 65+ Years, San Diego County, 2012

Renter-Occupied Units	
Average Household Size	1.84
Median Gross Rent	$1,028
Gross Rent as a Percentage of Household Income	
Less than 30%	36.6%
30% or more	63.4%

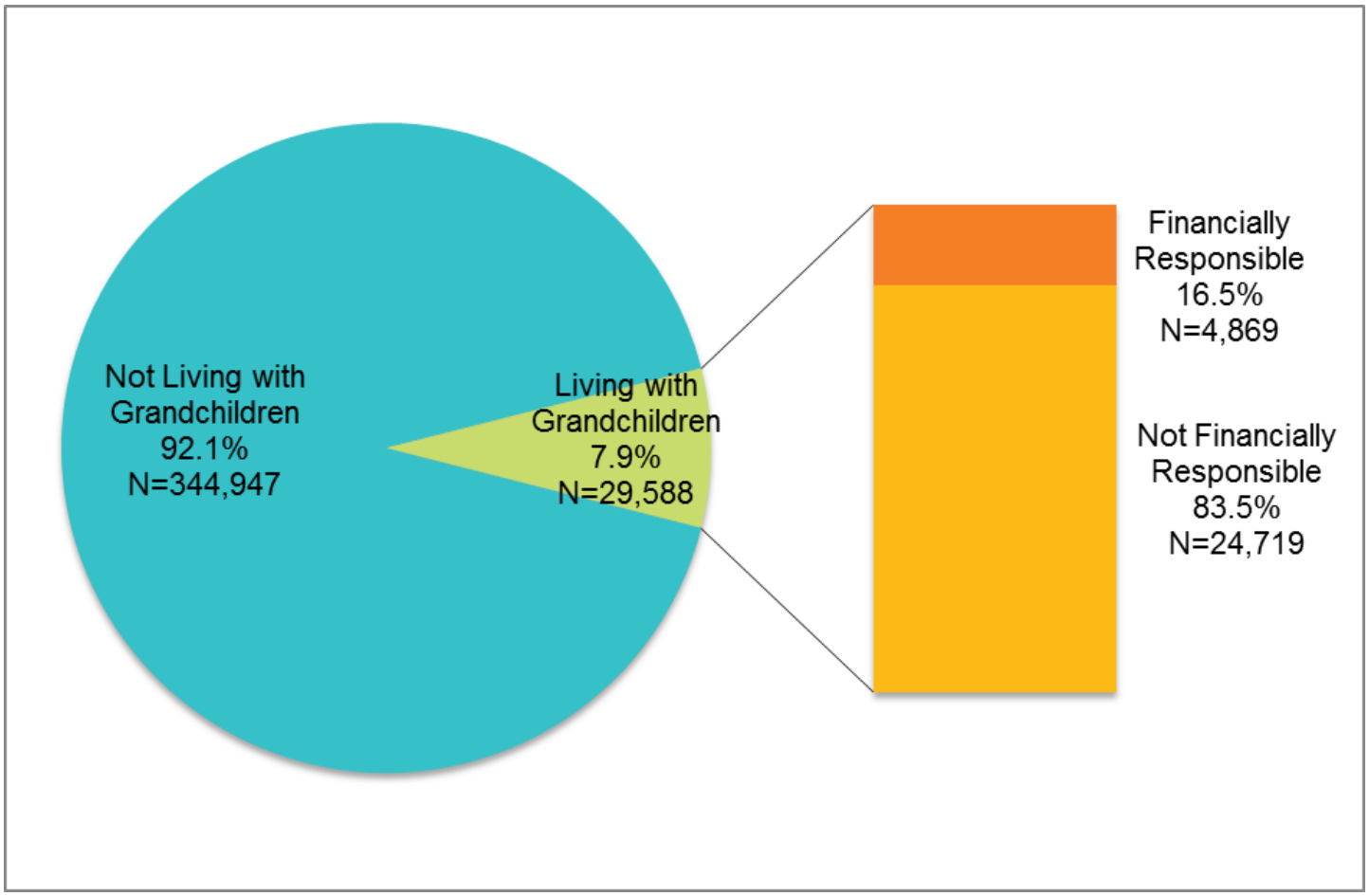
Owner-Occupied Units	
Average Household Size	2.07
Median Value.....	$381,200
Monthy Owner Cost as a Percentage of Houshold Income	
Less than 30%	67.2%
30% or more	32.8%
Median Monthly Owner Costs with a Mortgage	$1,857
Median Monthly Owner Costs without a Mortgage	$449

Source: U.S. Census Bureau, American Community Survey, 2012.

Grandparents Living With Grandchildren <18 Years

Grandparents today are more involved in caring for their grandchildren than ever before. While there are substantial benefits to both grandparent and grandchild, caregiving can be stressful both emotionally and financially. In 2012, about 8% of all seniors living in San Diego County lived with grandchildren under the age of 18 years. Of these, 17% were financially responsible for their grandchildren (N=4,869).

Figure 21. Grandparents Living With Grandchildren <18 Years, 65+ Years, San Diego County, 2012



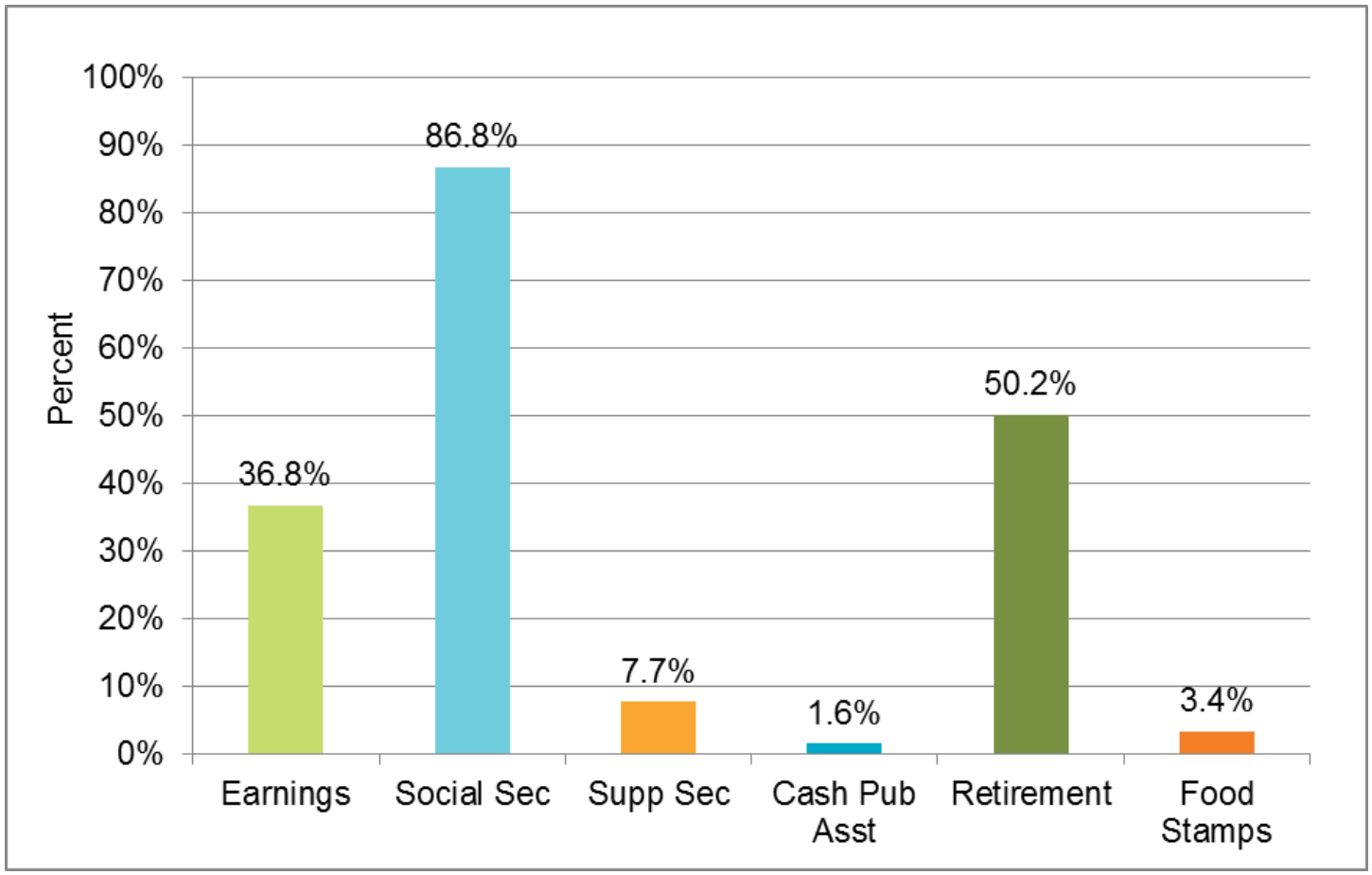
Source: U.S. Census Bureau, American Community Survey, 2012.

Income Type

In 2012, nearly all senior households had social security income (86.8%). Approximately half had income from retirement, and more than one-third had earnings. An estimated 3.4% of senior households received food stamps (Supplemental Nutrition Assistance Program, SNAP).

There are multiple factors that determine eligibility for supplemental programs such as SNAP; therefore, it is not possible to determine the exact number of eligible seniors at any given point in time. Eligibility requirements for SNAP include citizenship or legal residence, earnings of less than 130 percent of the federal poverty level (FPL), and purchasing and preparing food separately or with other low income household members who are eligible to the program.

Figure 22. Percent of Households With Each Income Type, 65+ Years, San Diego County, 2012

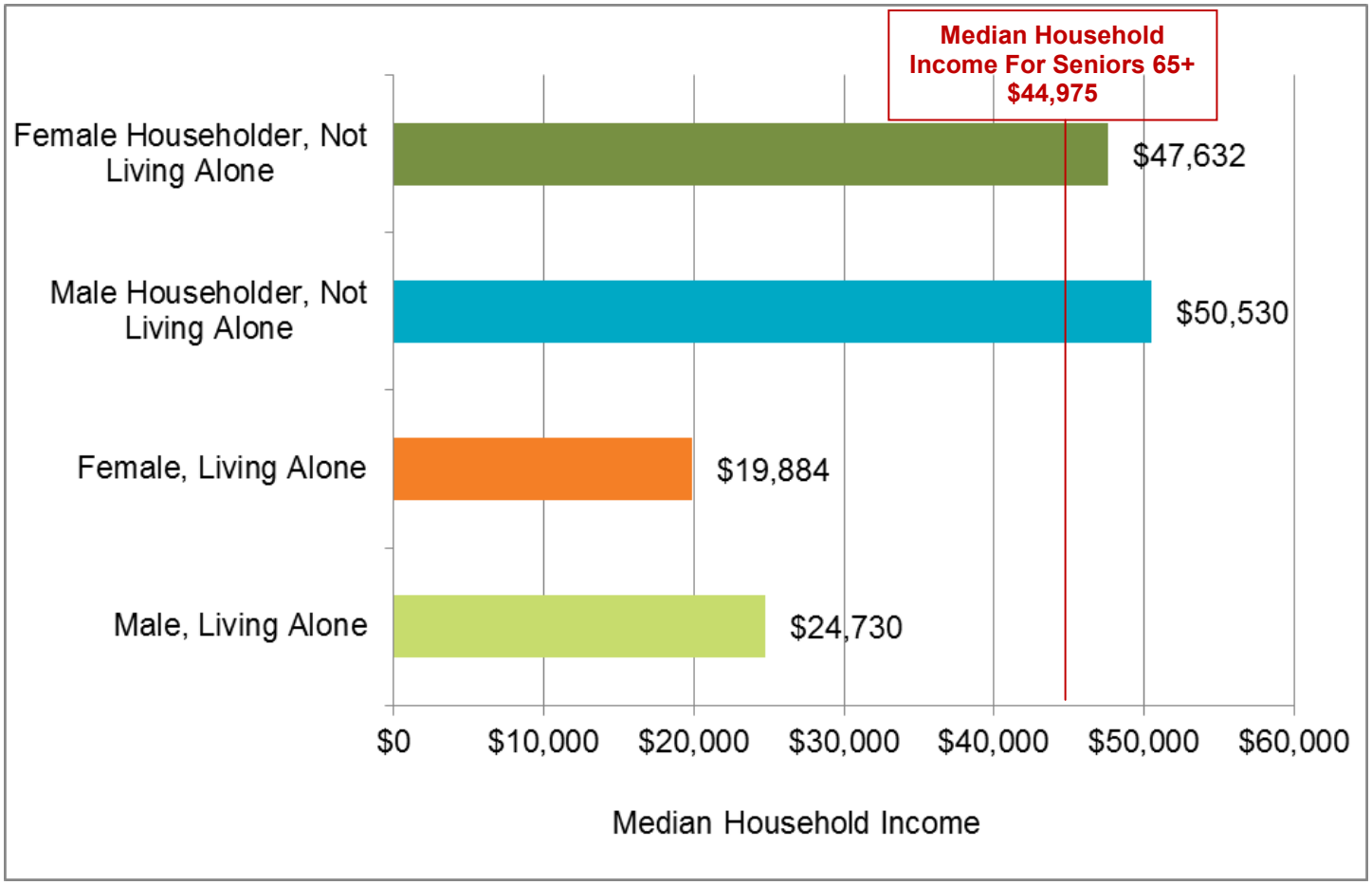


Source: U.S. Census Bureau, American Community Survey, 2012. “Soc Sec” = Social Security; “Supp Sec” = Supplemental Security; “Cash Pub Asst” = Cash Public Assistance.

Median Household Income

In 2012, the median household income for seniors aged 65 years and older was $44,975. Seniors living alone had significantly lower median incomes compared to seniors who live with others. Women living alone had a median income of $19,884 and men living alone had a median income of $24,730. A male householder who did not live alone had a median income of $50,530.

Figure 23. Median Household Income by Householder, 65+ Years, San Diego County, 2012



Source: U.S. Census Bureau, American Community Survey, 2012

Development of the Elder Standard Index

Typically the Federal Poverty Line (FPL) is used to determine eligibility for public programs. The FPL is determined based on the Consumer Price Index (CPI).[8] It does not take into account expenses actually incurred by the elderly, such as health status or housing type, and is the same across the nation.[9]

The California Elder Economic Security Standard Index (Elder Standard Index) is one method that was developed in order to take into account some of these differences. It provides a measure for the income needed for a retired senior to adequately meet his or her basic needs without public or private assistance. The Index was developed by the Insight Center for Community Economic Development and applied by the University of California Los Angeles (UCLA) Center for Health Policy Research.

This Index is based on basic daily costs, such as housing, food, medical expenses, transportation, and other necessities. It provides a more realistic estimate of how much it costs older adults to make ends meet,[10] many of whom rely exclusively on social security income.[11] The Elder Standard Index answers the question, "what does it take to live" and varies by household size.

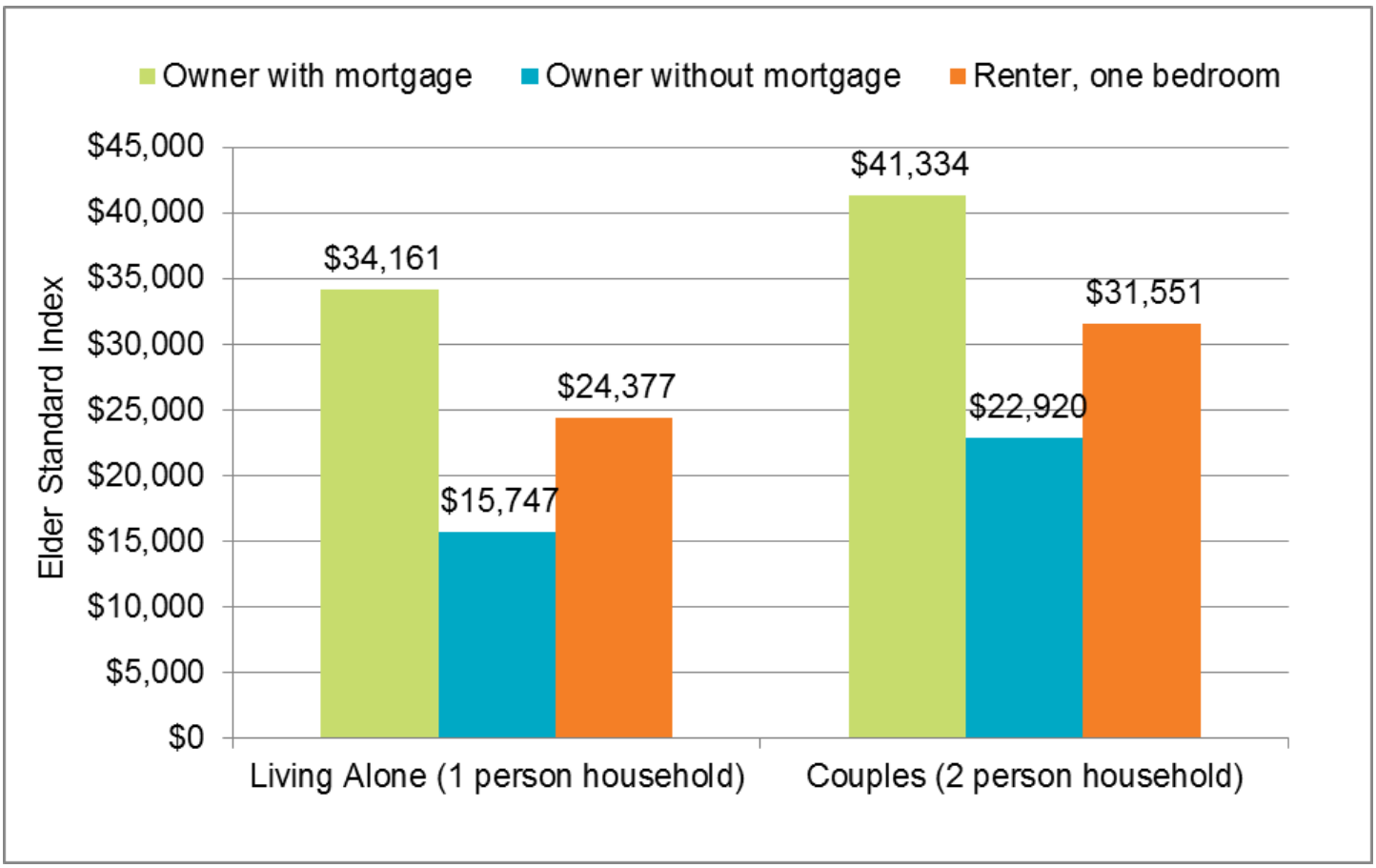
Additional Resources

- *Insight Center for Community Economic Development, California Elder Economic Security Initiative,* http://www.insightcced.org/index.php?page=cal-eesi
- *UCLA Center for Health Policy Research, Elder Standard Index, http://www.healthpolicy.ucla.edu/ProgramDetails.aspx?id=35*
- *The Development and History of the U.S. Poverty Thresholds, http://aspe.hhs.gov/poverty/papers/hptgssiv.htm*
- *For more detailed information on the Elder Standard for San Diego seniors, visit: http://www.insightcced.org/communities/cfess/eesiDetail.html?ref=38*

Elder Standard Index for San Diego County

The Elder Standard Index for seniors aged 65 years and older living alone or as a couple in a two person household varies by home ownership and whether or not there is a mortgage. According to the index, in 2011, a senior living alone who owned their home with a mortgage needed $34,161 annually to meet their basic needs; a single homeowner without a mortgage needed $15,747, and a renter needed $24,377. Senior couples who owned their home with a mortgage needed $41,334 annually to meet their basic needs, compared to $22,920 for homeowners without a mortgage, and $31,551 for couples who rent, according to the same index.

Figure 24. Elder Standard Index by Housing Type for Seniors Living Alone and Couples, 65+ Years, San Diego County, 2011[+]



Source: Insight Center for Community Economic Development, UCLA Center for Health Policy Research, Elder Economic Security Initiative, Elder Economic Security Standard Index, San Diego County Elder Standard Index, 2011, Available at http://www.insightcced.org.

[+]2012 data not available. Most recent data is shown.

CHAPTER

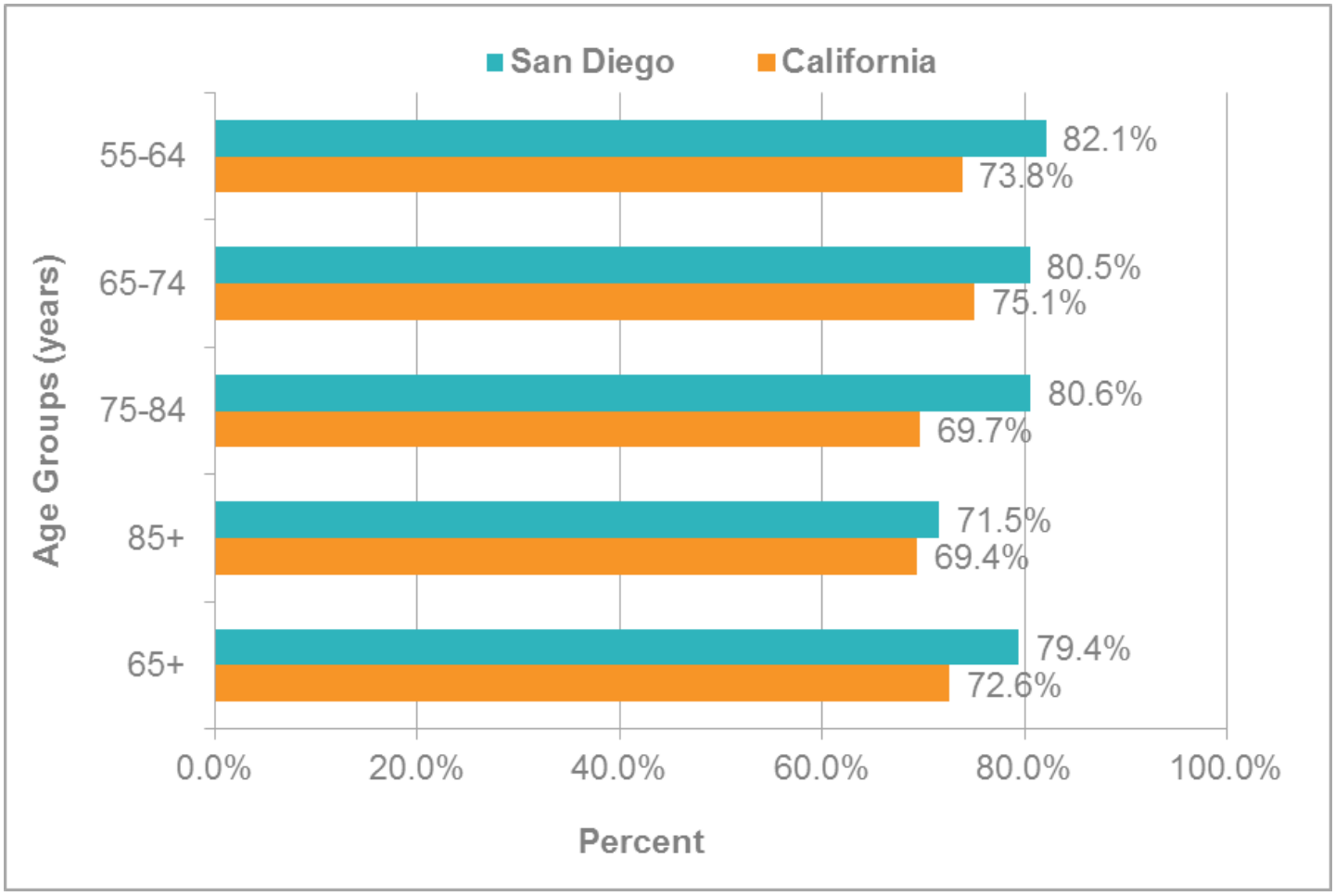
2

HEALTH STATUS

General Health Status

San Diego seniors reported that they were in better health than California seniors overall. Seventy-nine percent of San Diego residents aged 65 years and older reported good to excellent health, compared to 72.6% of California residents.

Figure 25. Percent of Population with Good to Excellent Health Status by Age Group, California vs. San Diego County, 2012

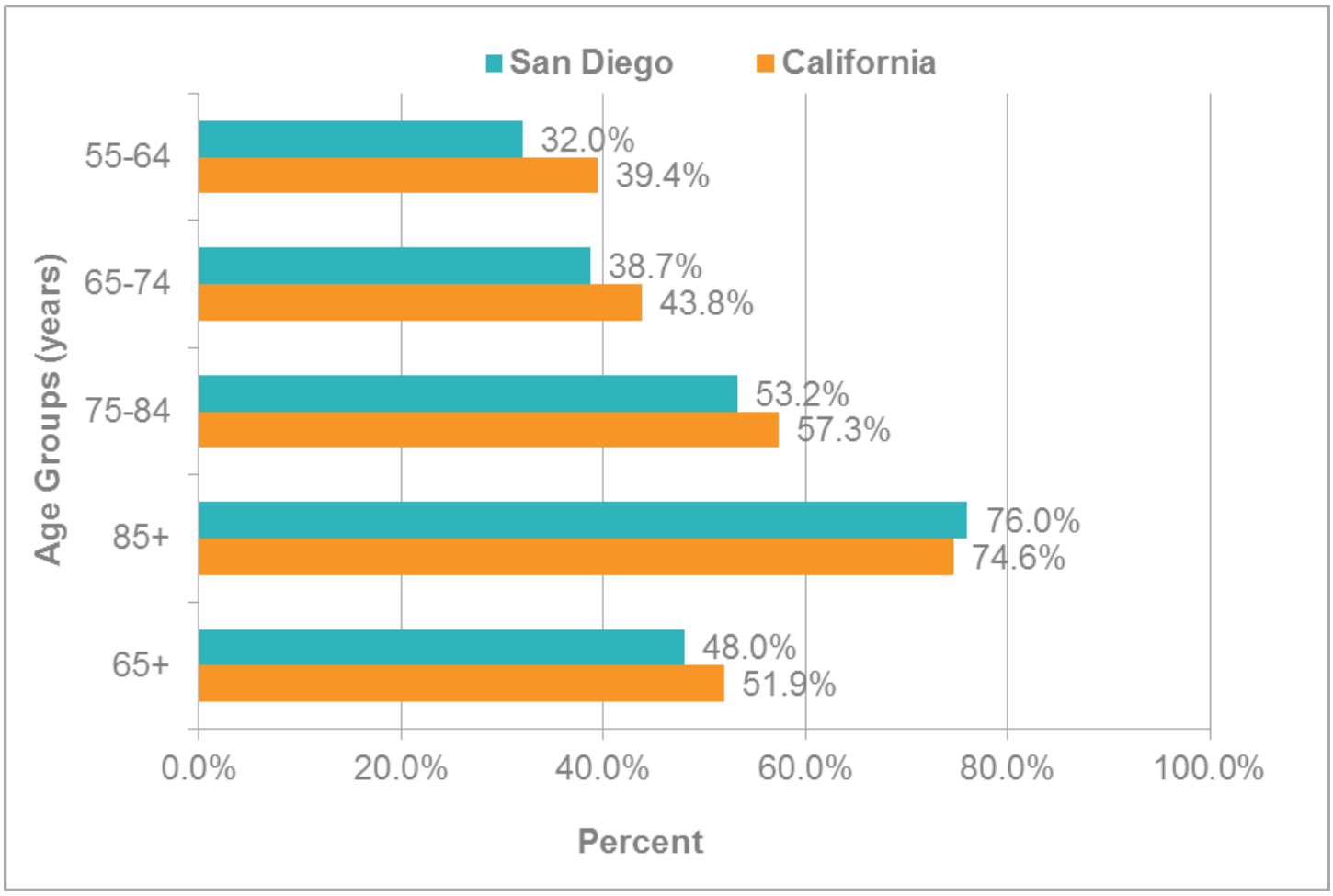


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

Disability Status

While San Diego seniors aged 65+ years reported better health overall, they also reported having a disability at a lower percentage than the state. An estimated 48.0% of 65+ year-old San Diego residents reported having a disability due to a physical, mental, or emotional condition, compared to 51.9% of California residents.

Figure 26. Percent of Population Having a Disability Due to a Physical, Mental or Emotional Condition by Age Group, California vs. San Diego County, 2012

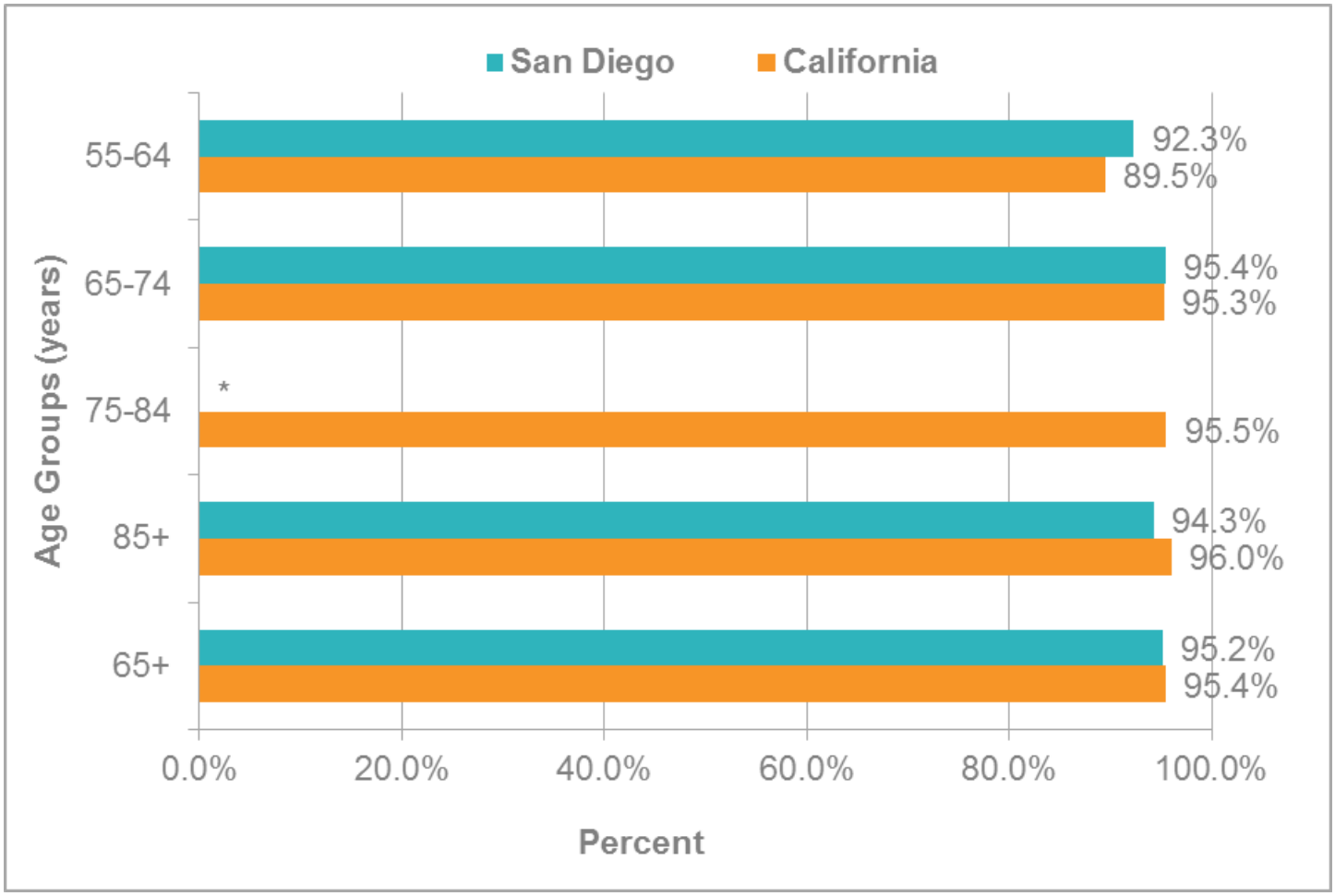


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

Usual Source of Care

Nearly all seniors, both in San Diego County and in the State of California reported a usual place to go when sick or needing health advice. For 80% of San Diego seniors 65+ years of age, the usual source of care was a doctor's office or HMO, and for 15% the usual source of care was a community clinic.

Figure 27. Percent of Population That Has a Usual Place to Go When Sick or Need Health Advice by Age Group, California vs. San Diego County, 2012

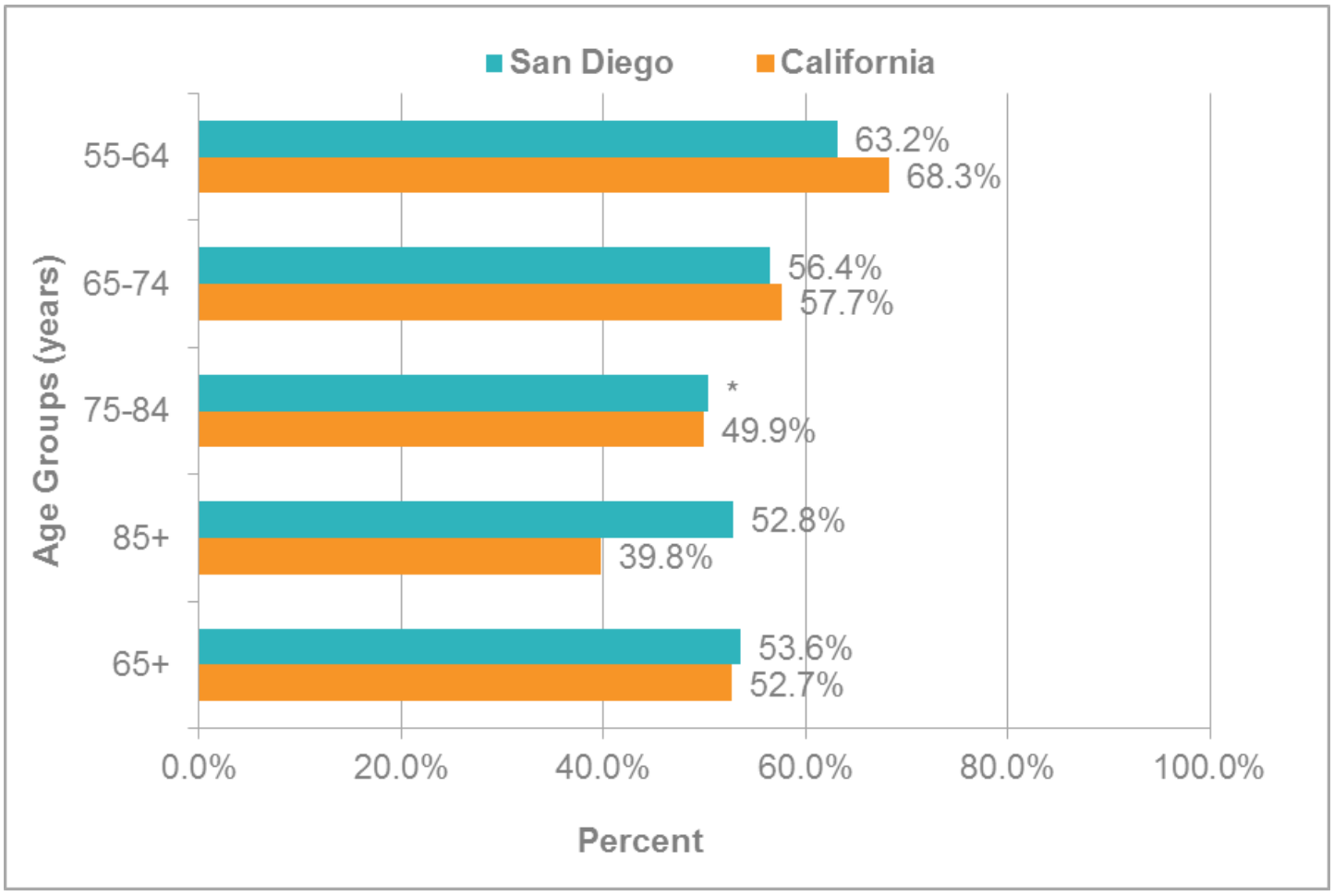


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.
*Statistically unstable, percentages not reported.

Dental Health

Aging puts many older adults at risk for a number of oral health problems, including darkened teeth, dry mouth, diminished sense of taste, root decay, gum disease, tooth loss, uneven jawbone, and denture-induced stomatitis.[12] Good oral health can be maintained by brushing at least twice a day, flossing at least once a day, and visiting the dentist on a regular schedule. In San Diego County, 46.4% of seniors aged 65 years and older did not have dental insurance in the year prior to the survey.

Figure 28. Percent of Population That Had Dental Insurance in the Past Year by Age Group, California vs. San Diego County, 2007+



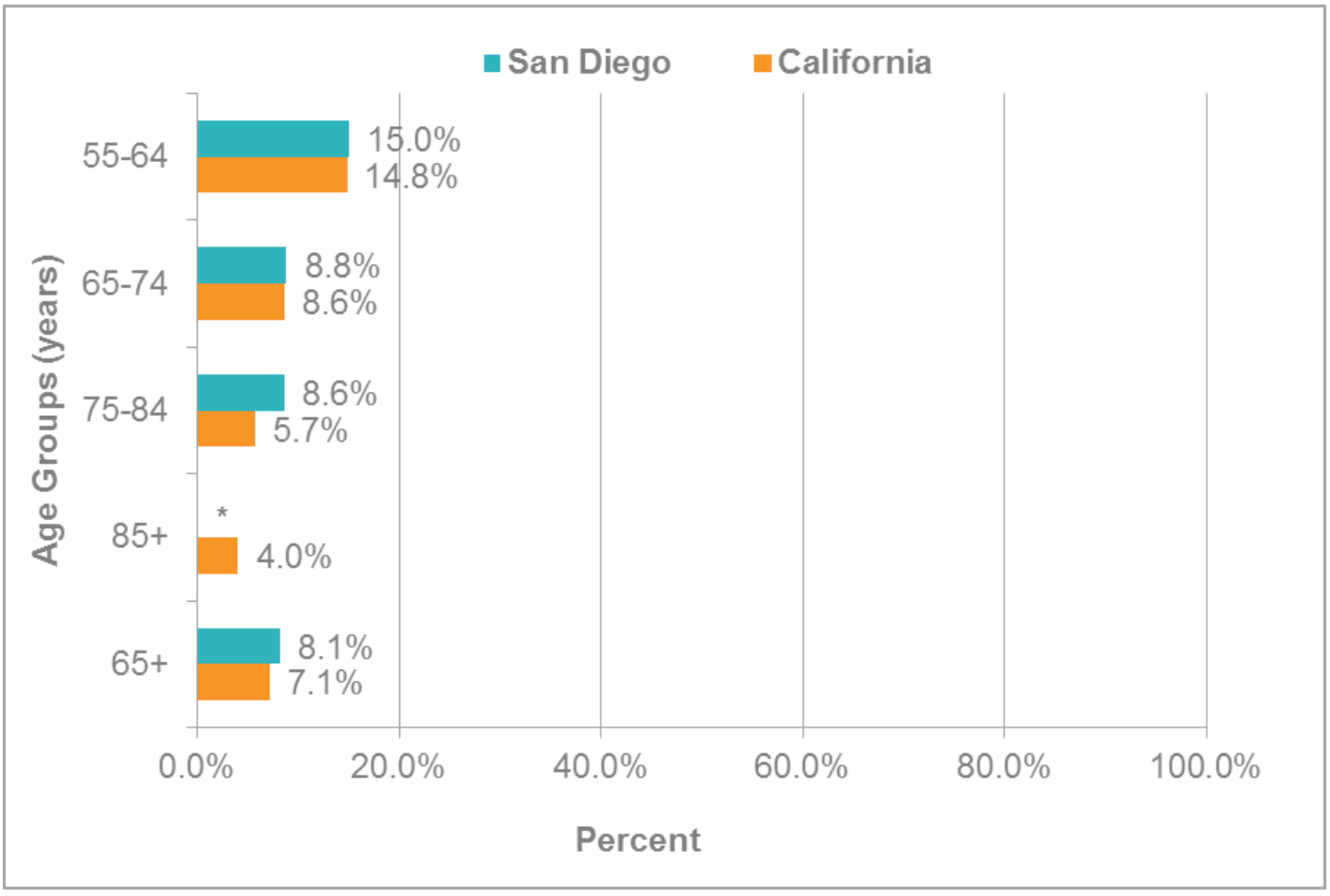
Source: California Health Interview Survey, 2007; Accessed online at www.chis.ucla.edu.

+2012 data not available. Most recent data is shown.

Mental Distress

Poor mental health is defined as stress, depression, or problems with emotions. Nationally, an estimated 20% of adults aged 55 or older experience some type of mental health concern or distress (http://www.cdc.gov/aging/pdf/mental_health.pdf).[13] Treatment and help with mental health issues are extremely important, affecting overall health and well-being. However, not all those who need help actually receive it. In San Diego County, 15.0% of adults aged 55-64 needed help for an emotional/mental health problem or use of alcohol/drugs, compared to 8.1% of adults aged 65 and over. Compared to California, a slightly higher percentage of adults aged 65 and over reported needing help for an emotional/mental health problem or use of alcohol/drugs in San Diego County.

Figure 29. Percent of Population Needing Help for an Emotional/Mental Health Problem or Use of Alcohol/Drugs, California vs. San Diego County, 2012

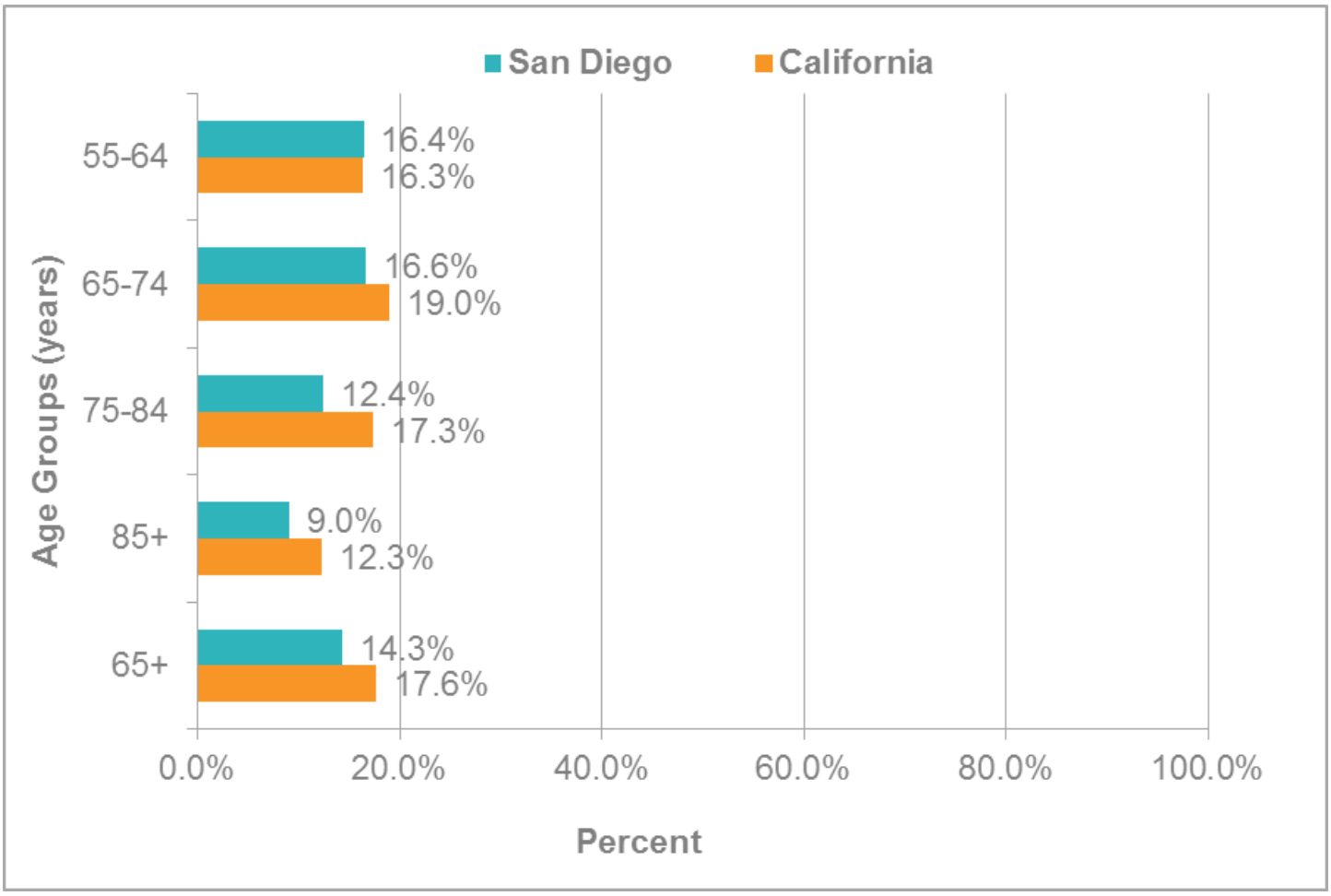


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.
*Statistically unstable, percentages not reported.

PRE-DIABETES

An individual with pre-diabetes has a blood sugar level higher than what it considered normal, but not high enough for a diabetes diagnosis.[14] If changes do not occur to improve health, 15-30% of individuals with pre-diabetes will develop type 2 diabetes within 5 years. Changes include losing 5% to 7% of your body weight and getting at least 150 minutes of physical activity weekly. According to CHIS in 2012, 14.3% of San Diego residents aged 65 years and older have ever been told by a doctor that they have high pre-diabetes or borderline diabetes, a lower percentage compared to California residents overall.

Figure 30. Percent of Population Who Have Ever Been Told+ by a Doctor They Have Pre-Diabetes or Borderline Diabetes, California vs. San Diego County, 2012



Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

+Excludes pregnancy.

CHAPTER

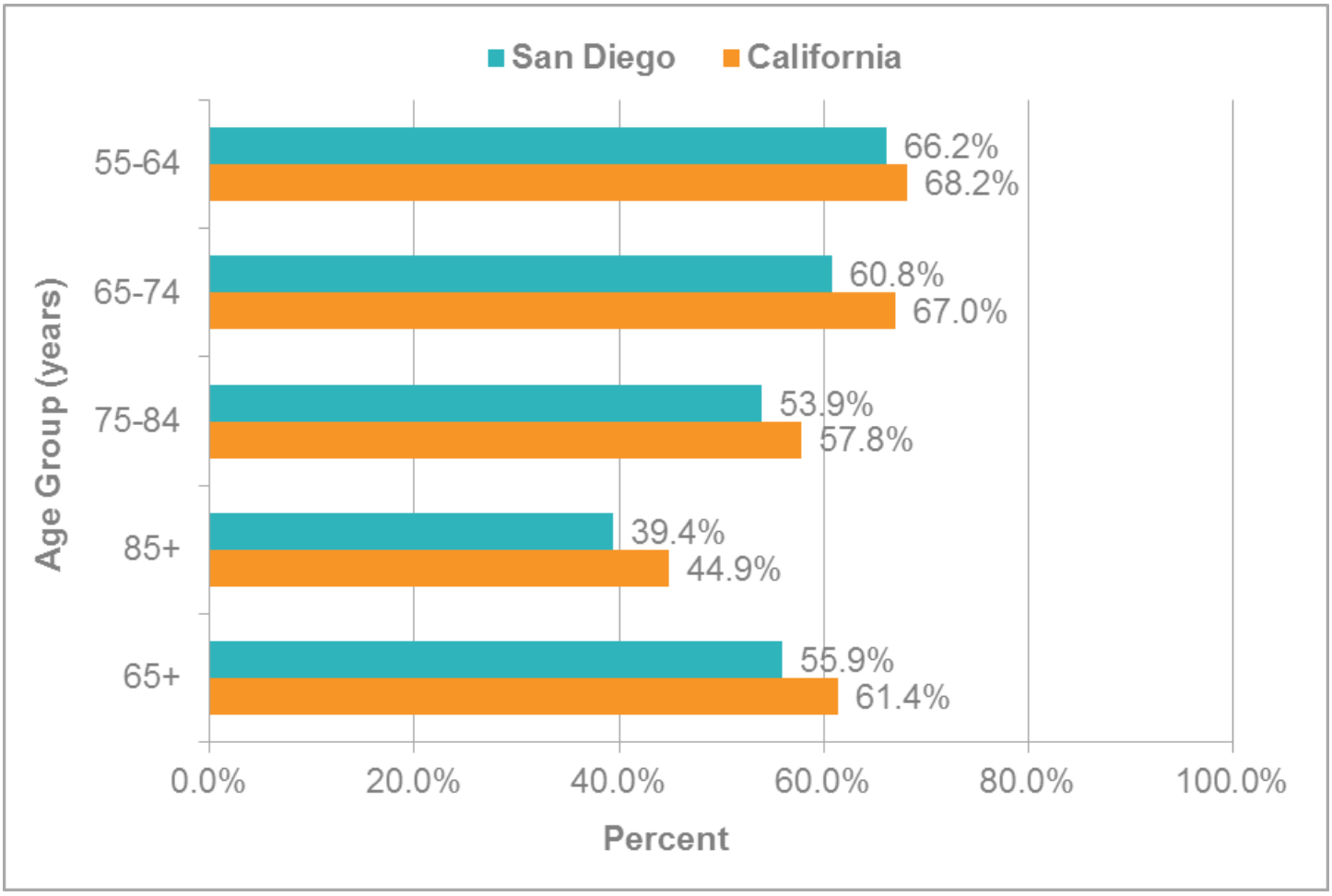
3

HEALTH BEHAVIORS

OVERWEIGHT AND OBESE

Older adults benefit from maintaining a healthy body weight. Overweight and obesity are risk factors that contribute to a number of diseases and chronic conditions among seniors, including four of the ten leading causes of death in the United States – coronary heart disease, diabetes, stroke, and several forms of cancer.[15] Overweight and obesity can also worsen conditions such as arthritis, and are associated with activity limitations and feelings of sadness and hopelessness.[16] Body Mass Index (BMI) is used to measure overweight and obesity, and is calculated by dividing a person's weight in kilograms by his or her height in meters squared (kg/m^2). The percent of San Diego seniors who were overweight (BMI 25.0-29.99) or obese (BMI >30.0) was less than that of California seniors. An estimated 37% of seniors aged 65 years or older were overweight, and 19% were obese.

Figure 31. Percent of Population That is Overweight or Obese by Age Group, California vs. San Diego County, 2012

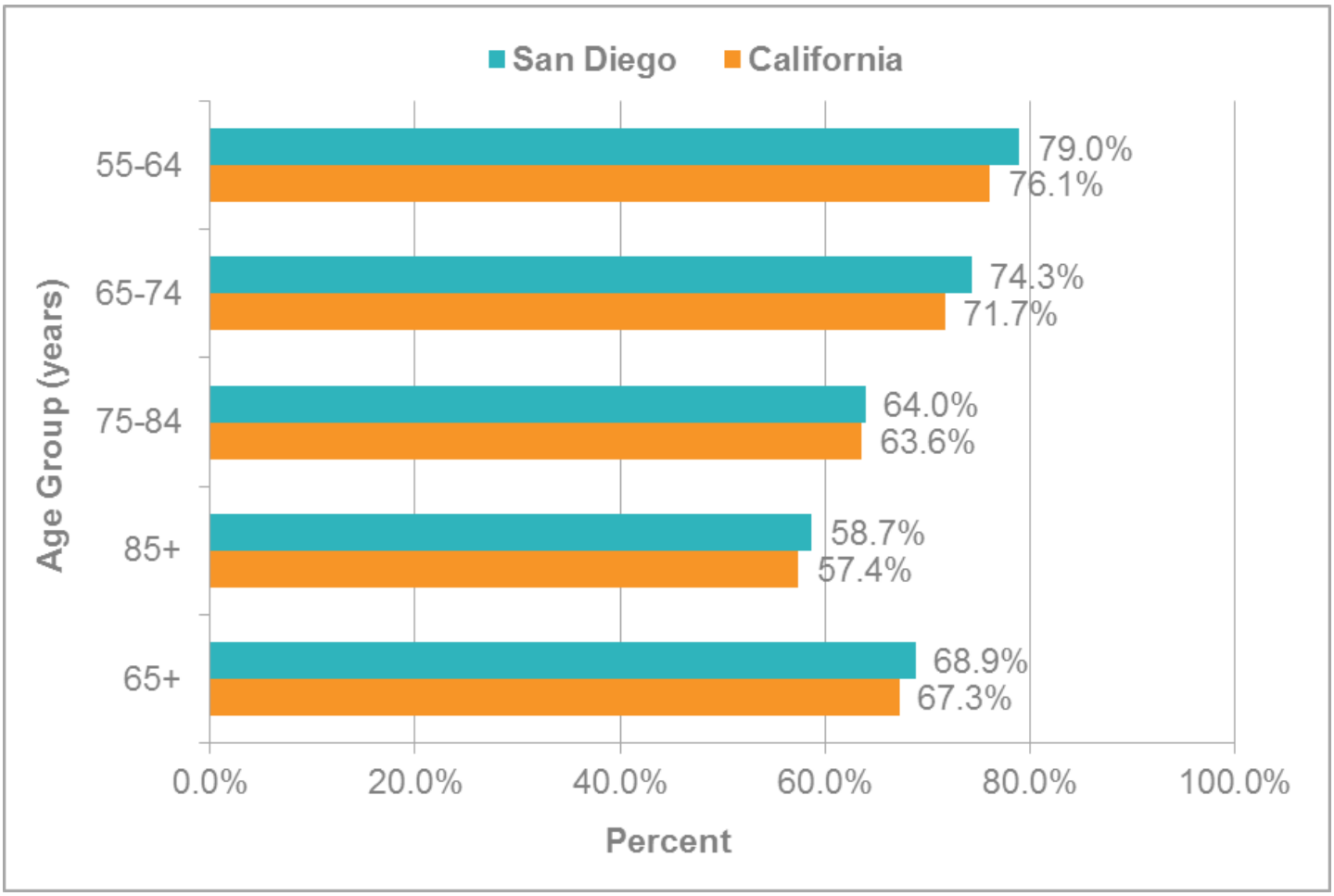


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

PHYSICAL ACTIVITY

Physical activity contributes greatly to healthy aging. Regular exercise can prevent or control health conditions such as obesity, depression and high blood pressure that often reduce the quality and/or length of life for older adults. Physical activity includes cardiovascular activity, such as walking, as well as strength, balance and flexibility training. Strength training is especially important because it can strengthen bones, improve balance, and provide pain relief from conditions such as arthritis. Balance and flexibility training such as yoga or Tai Chi can help to improve stability and reduce the risk of falling. Unfortunately, adults tend to become less active as they age. Sixty-nine percent of San Diego seniors aged 65 years and older reported walking for transportation, exercise, or fun in the past week, compared to 67.3% of California seniors.

Figure 32. Percent of Population That Walked for Transportation, Fun, or Exercise in the Past Week by Age Group, California vs. San Diego County, 2009+



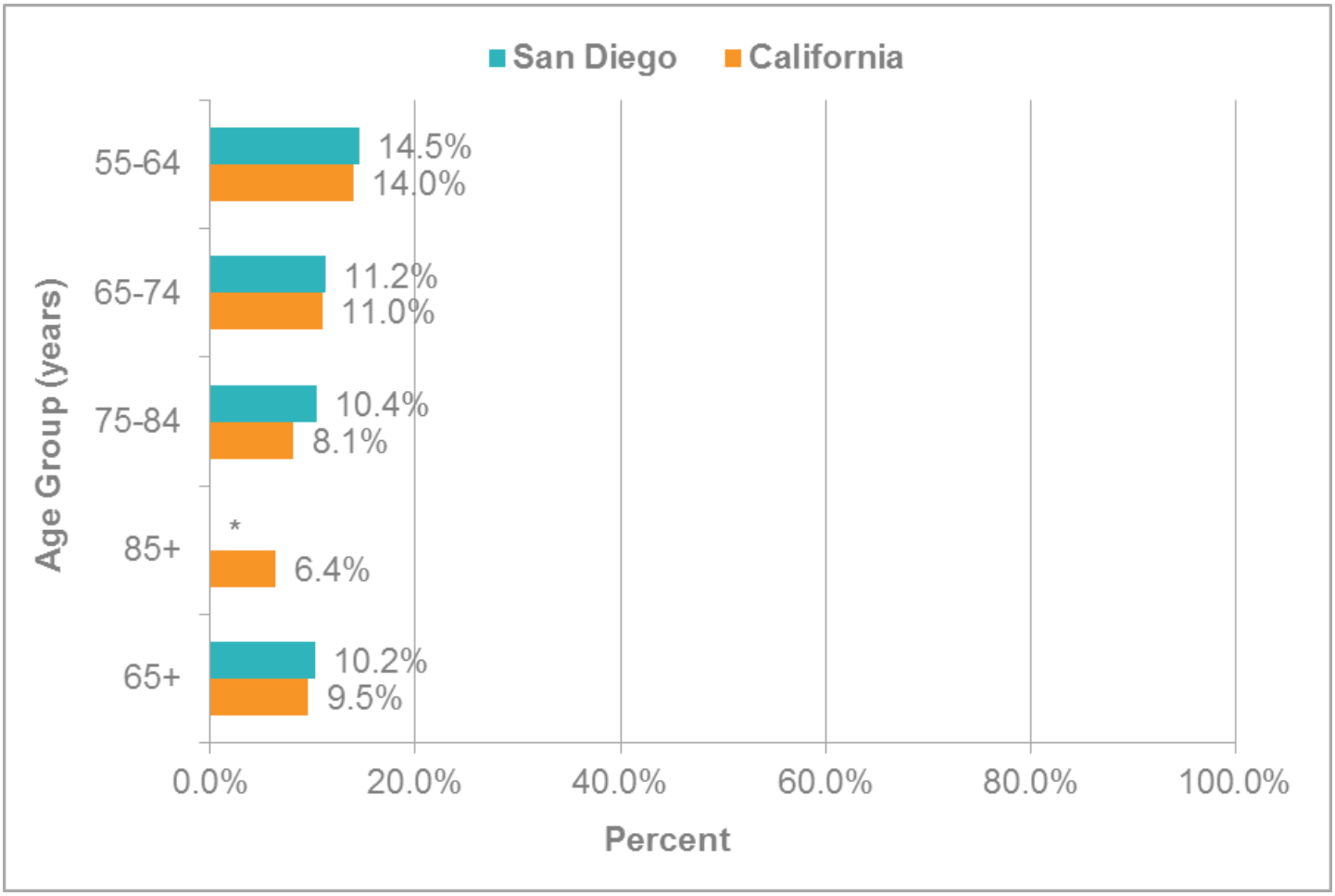
Source: California Health Interview Survey, 2009; Accessed online at www.chis.ucla.edu.

+2012 data not available. Most recent data is shown.

DIET

A healthy diet rich in fruits and vegetables may reduce the risk for some cancers and chronic diseases. Fruits and vegetables provide essential vitamins, minerals and fiber that are important for good health. However, in recent years, fast food has increasingly become the option for those in search of a quick meal or on a fixed income. In San Diego County, one out of ten seniors aged 65 years and older ate fast food three or more times per week.

Figure 33. Percent of Population That Ate Fast Food Three or More Times per Week by Age Group, California vs. San Diego County, 2012



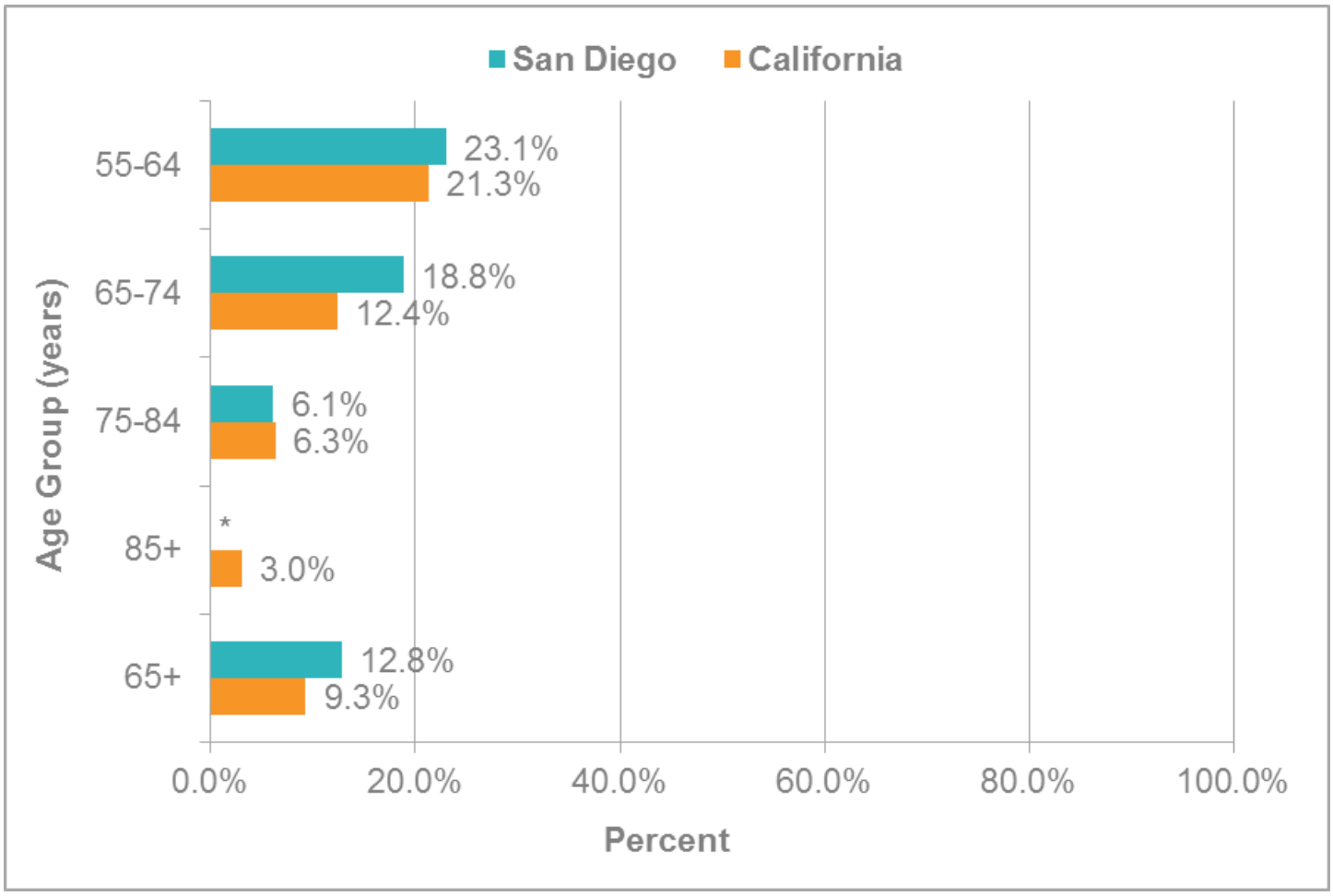
Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.
*Statistically unstable, percentages not reported.

Alcohol Use & Binge Drinking

Aging related physiological changes affect risks that are associated with alcohol. Older adults have higher blood alcohol levels per amount consumed than younger adults, and have an increased sensitivity to alcohol. In addition, 90% of older adults use medications, which may interact adversely with alcohol.[17]

Binge drinking is defined as drinking five or more drinks (for men) or four or more drinks (for women) on the same occasion. Long term binge drinking is associated with serious health problems such as liver damage, pancreatitis, certain cancers, and shrinkage of the brain. A higher percent of San Diego County seniors, aged 65 and over, engaged in binge drinking during the past year (12.8%) than California seniors (9.3%).

Figure 34. Percent of Population That Engaged in Binge Drinking in the Past Year by Age Group, California vs. San Diego County, 2012

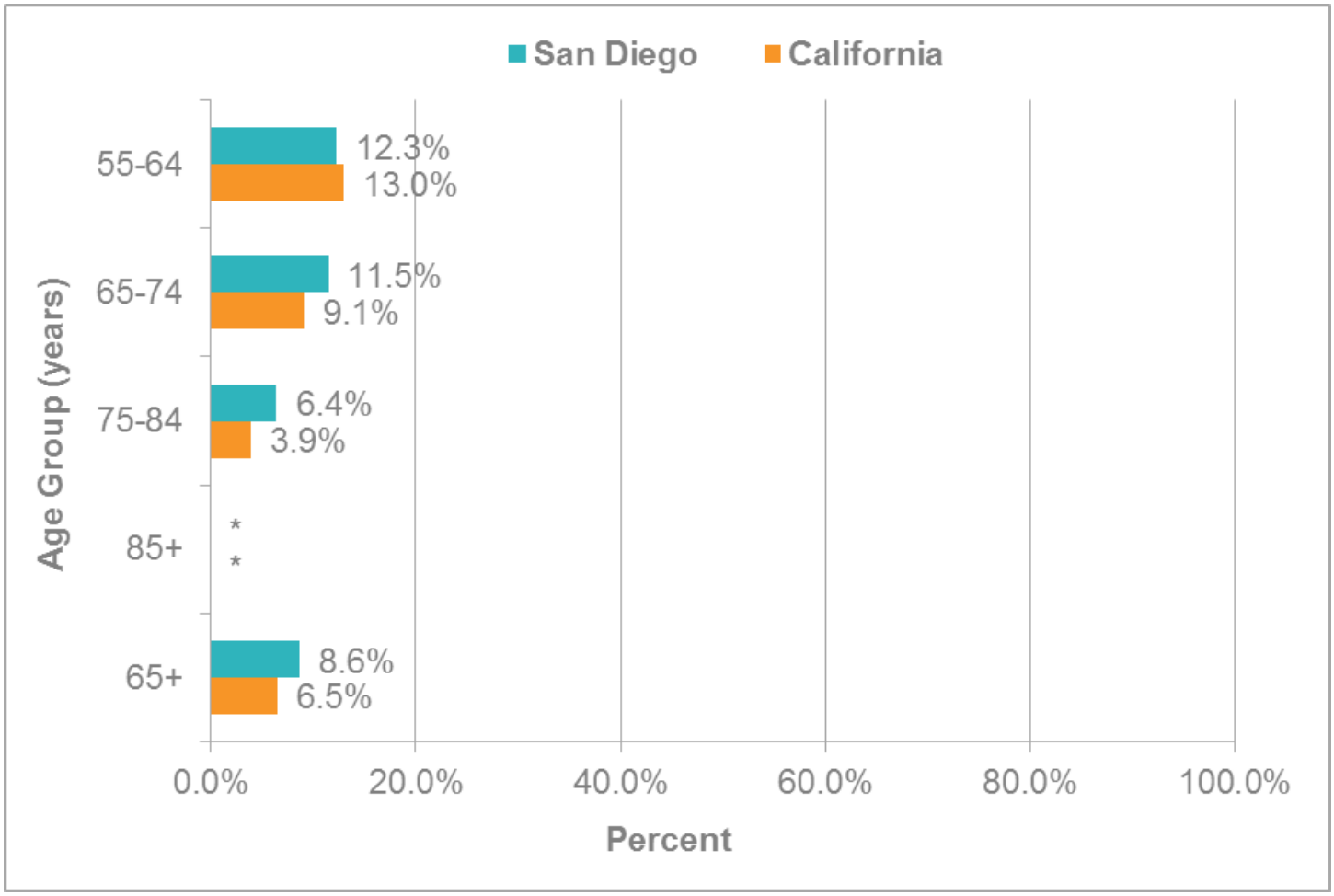


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.
*Statistically unstable, percentages not reported.

SMOKING

Smoking reduces one's life expectancy by an average of 13 to 15 years, and is a major risk factor for chronic diseases such as lung cancer, chronic obstructive pulmonary disease, asthma, and coronary heart disease. Older adults are at greater risks because they have smoked longer, tend to be heavier smokers, and are more likely to suffer from smoking related illnesses.[18] For seniors aged 65 years and older, San Diego County has exceeded the Healthy People 2020 current smoking goal of ≤12%. About nine percent of San Diego County seniors, aged 65 and over, were current smokers in 2012.

Figure 35. Percent of Population That Currently Smokes by Age Group, California vs. San Diego County, 2012

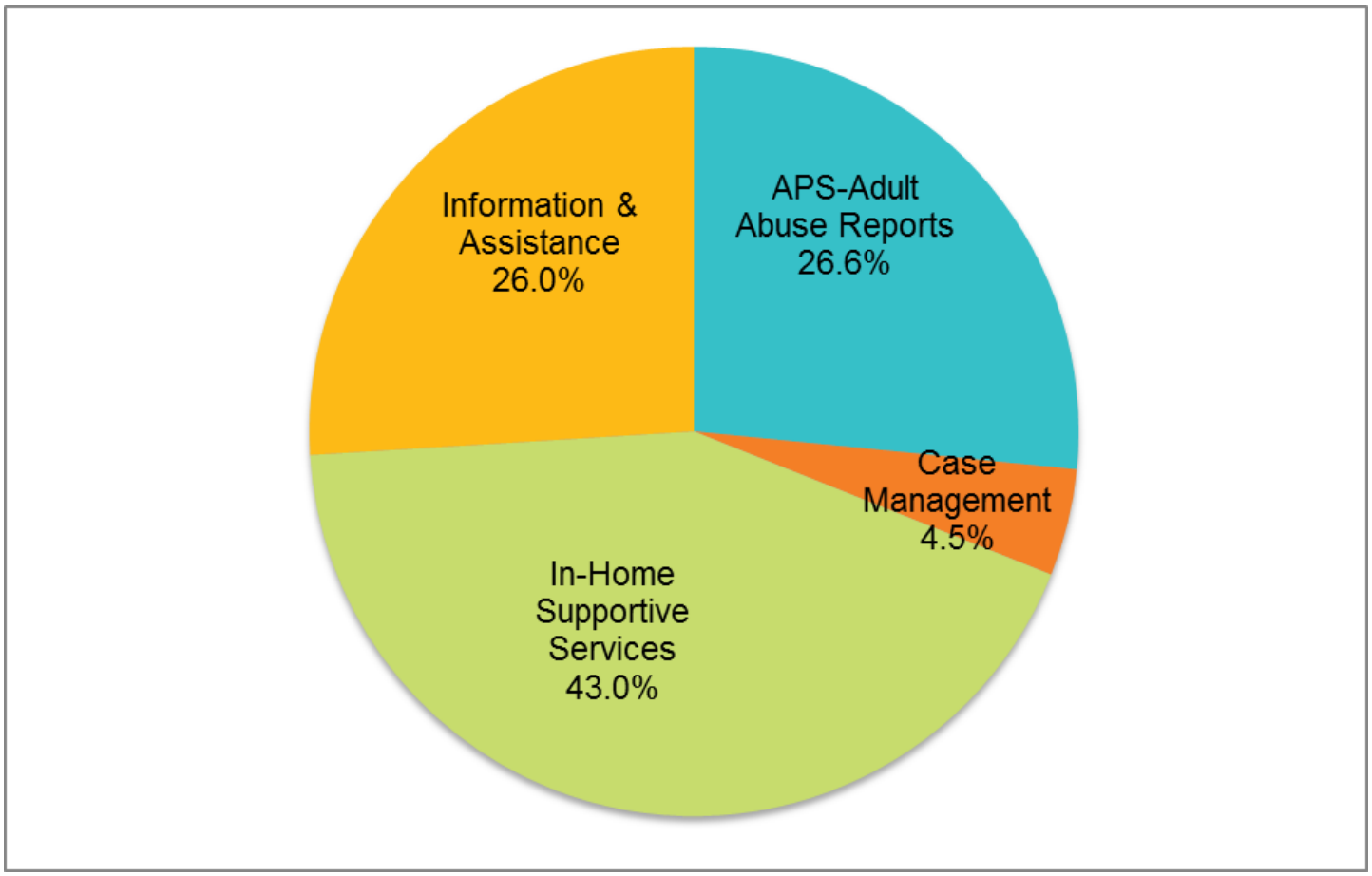


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu
*Statistically unstable, percentages not reported.

AIS Call Center Information

Aging & Independence Services offers one easy phone number (800-510-2020) as the gateway to information, to report elder abuse, or to apply for a variety of services for older adults, people with disabilities, and their families. During fiscal year 2013-2014, there were 61,167 calls made to the call center. Twenty-six percent of these calls were for information and assistance, 43% were for in-home supportive services, and 27% were for adult abuse reports. Another 4.5% were case management calls.

Figure 36. AIS Call Center Calls by Type of Call, San Diego County, FY 2013/2014



Source: County of San Diego, Health and Human Services Agency, Aging & Independence Services, Call Center Data, FY 2013/2014.

CHAPTER

4

PREVENTION

Adult Immunization Schedule

Adults often believe the vaccines they receive as children will be effective for the rest of their lives. In general, this may be true. However, some adults were never vaccinated as children and newer vaccines are now available. In addition, immunity can fade over time and adults become more susceptible to diseases caused by ordinary infections as they age.[19] For this reason, the following vaccinations are recommended for older adults. See the recommendations and guidelines for adults published by the Centers for Disease Control and Prevention (CDC) for more information on age-based and indication-based schedules.

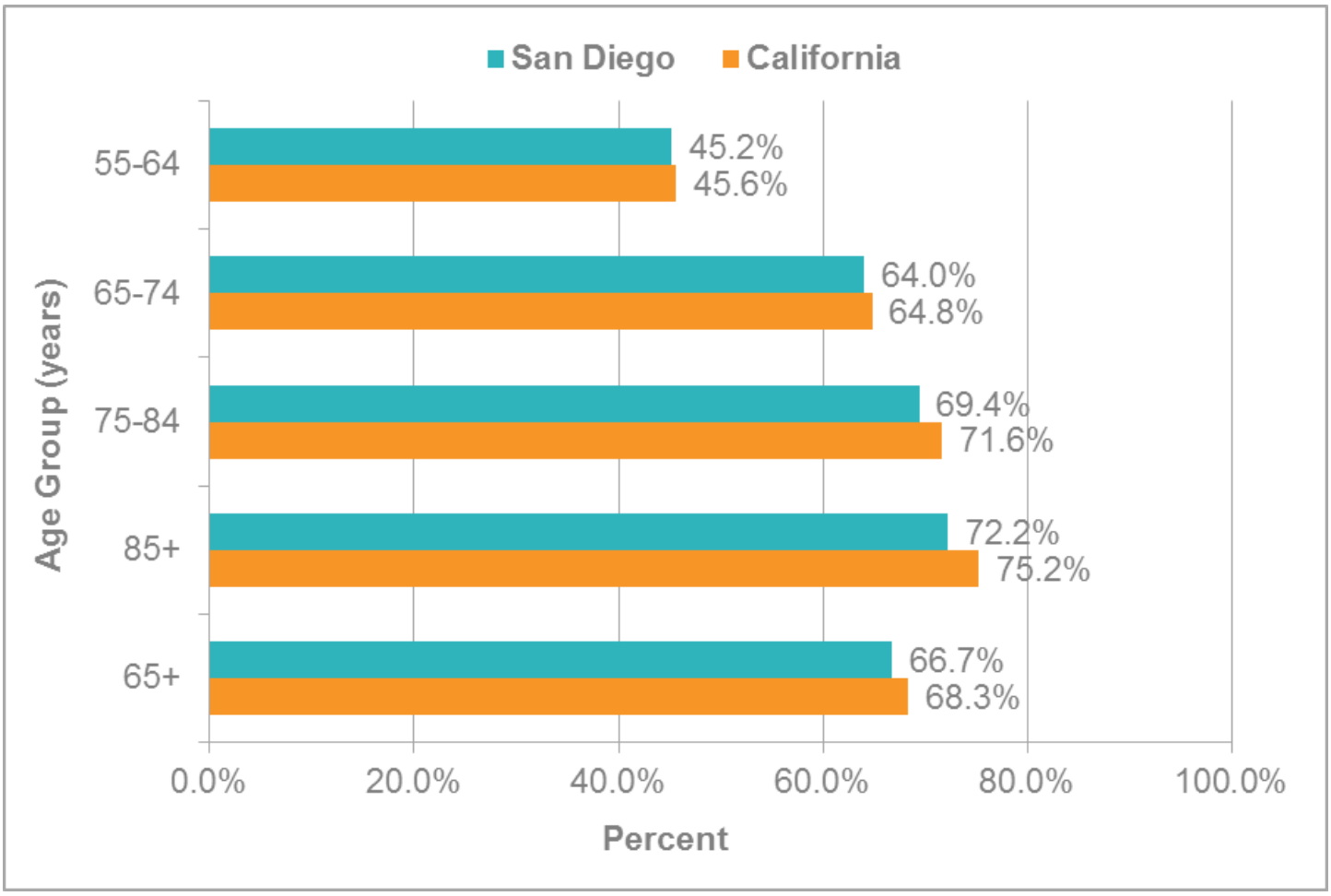
- ❑ *Tetanus, Diphtheria, Pertussis (Td/Tdap)*: All adults need the Tdap vaccine. After that, one Tdap booster is recommended every ten years, or sooner for persons who lack documentation of prior vaccination.
- ❑ *Measles, Mumps, Rubella (MMR)*: All adults born in 1957 or later need at least 1 dose of MMR. A second dose is recommended for older adults if some other risk factor is present.
- ❑ *Varicella*: All adults without evidence of immunity (documentation of vaccination or prior infection) should receive two doses of varicella.
- ❑ *Influenza*: All adults should receive one dose annually during fall or winter.
- ❑ *Pneumococcal:* All adults aged 65 years and older need 1 dosage of PPSV23 if they have never have been vaccinated or were previously vaccinated at least 5 years ago before turning 65. Those with certain risk factors (e.g., smokers) need 1-2 doses. Adults aged 65 years and older should also receive 1 dosage of PCV13 if not previously received.
- ❑ *Hepatitis A*: All adults with certain risk factors should receive two doses.
- ❑ *Hepatitis B*: All adults with certain risk factors should receive three doses.
- ❑ *Meningococcal*: All adults with certain risk factors should receive one or more doses.
- ❑ *Zoster (shingles)*: All adults aged 60 years and older should receive one dose.

Flu and Pneumonia Vaccinations

Influenza and pneumonia hospitalize and kill older adults in San Diego County every year, even though both diseases are largely preventable through vaccines. The Healthy People 2020 target for annual flu vaccine is 70%. San Diego County has not yet met this goal. Based on the California Health Interview Survey results in 2012, 66.7% of seniors aged 65 years and older received the flu vaccine.

The Healthy People 2020 target for ever having a pneumonia vaccine is also 90%. According to the San Diego County random digit dial survey, the 2010 pneumonia vaccination rate was 70% among residents aged 65 years and over.

Figure 37. Percent of Population That Received a Flu Shot in the Past 12 Months, San Diego County, 2012



Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

Recommended Health Screenings

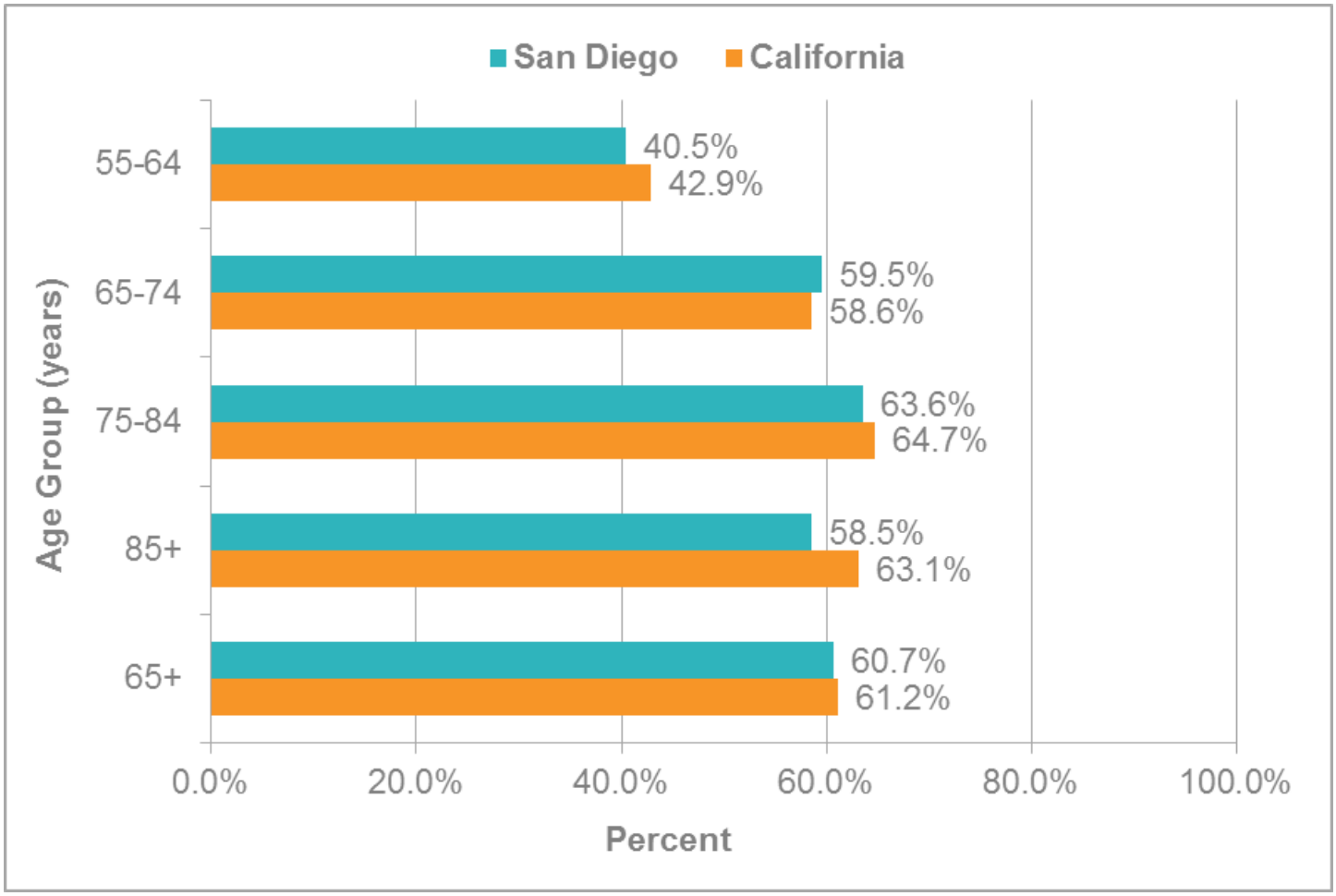
Regular physical examinations and health screenings are a critical component of preventive health care to help ensure that common, serious diseases and conditions are detected and treated. The following recommendations have been described for persons aged 65 years and older.[20]

- ❑ *Blood Pressure:* A blood pressure reading is recommended at least every two years for early detection of high blood pressure, which can put seniors at greater risk of heart attack, stroke and kidney damage.
- ❑ *Breast Cancer:* A mammogram and clinical breast exam is recommended for older women every one to three years in order to detect calcifications, breast lumps, and other suspicious changes.
- ❑ *Cholesterol:* A lipid test is recommended at least every five years to evaluate the level of cholesterol and triglycerides in the blood. Poor lipid levels increase the risk of heart attack and stroke.
- ❑ *Cervical Cancer:* A Papanicolaou (Pap) test is recommended for women who were not screened regularly before age 65 to detect cancer and precancerous changes of the cervix. Continued screening after age 65 is recommended if Pap tests were abnormal in the past or with new sexual partners.
- ❑ *Colorectal Cancer:* Colon and rectal cancer screening should begin at age 50 to detect cancer and precancerous changes. Several screenings are available, including barium enema, colonoscopy, fecal occult blood test (FOBT), flexible sigmoidoscopy and stool DNA test.
- ❑ *Dental Health:* A dental check is recommended every six months to detect tooth decay, gum disease and oral cancer.
- ❑ *Diabetes:* A fasting blood sugar test to detect high glucose levels is recommended for adults who are at risk of diabetes.
- ❑ *Eye Health:* An eye exam is recommended every one to two years to determine if vision correction is needed or if vision problems such as glaucoma, macular degeneration or cataracts are present.
- ❑ *Osteoporosis:* A bone density measurement is recommended at least one time around age 65 to detect low bone density or osteoporosis.
- ❑ *Weight:* Frequent measurements of body mass index (BMI) should be taken to monitor overweight and obesity, which can lead to diabetes, high blood pressure and risk factors for other diseases.
- ❑ *Prostate Cancer:* A yearly prostate exam and prostate-specific antigen (PSA) test is recommended to detect prostate enlargement or prostate cancer.

Blood Pressure

High blood pressure, or hypertension, is a common condition that is a significant risk factor for poor health outcomes, including heart attack and stroke.[21] The U.S. Preventive Services Task Force (USPSTF) recommends regular screening for high blood pressure in all adults as a first step toward reducing it. According to CHIS in 2012, 60.7% of San Diego residents aged 65 years and older have ever been told that they have high blood pressure. Of these adults with high blood pressure, 90% take medication to control it.

Figure 38. Percent of Population Who Have Ever Been Told They Have High Blood Pressure by Age Group, San Diego County, 2012

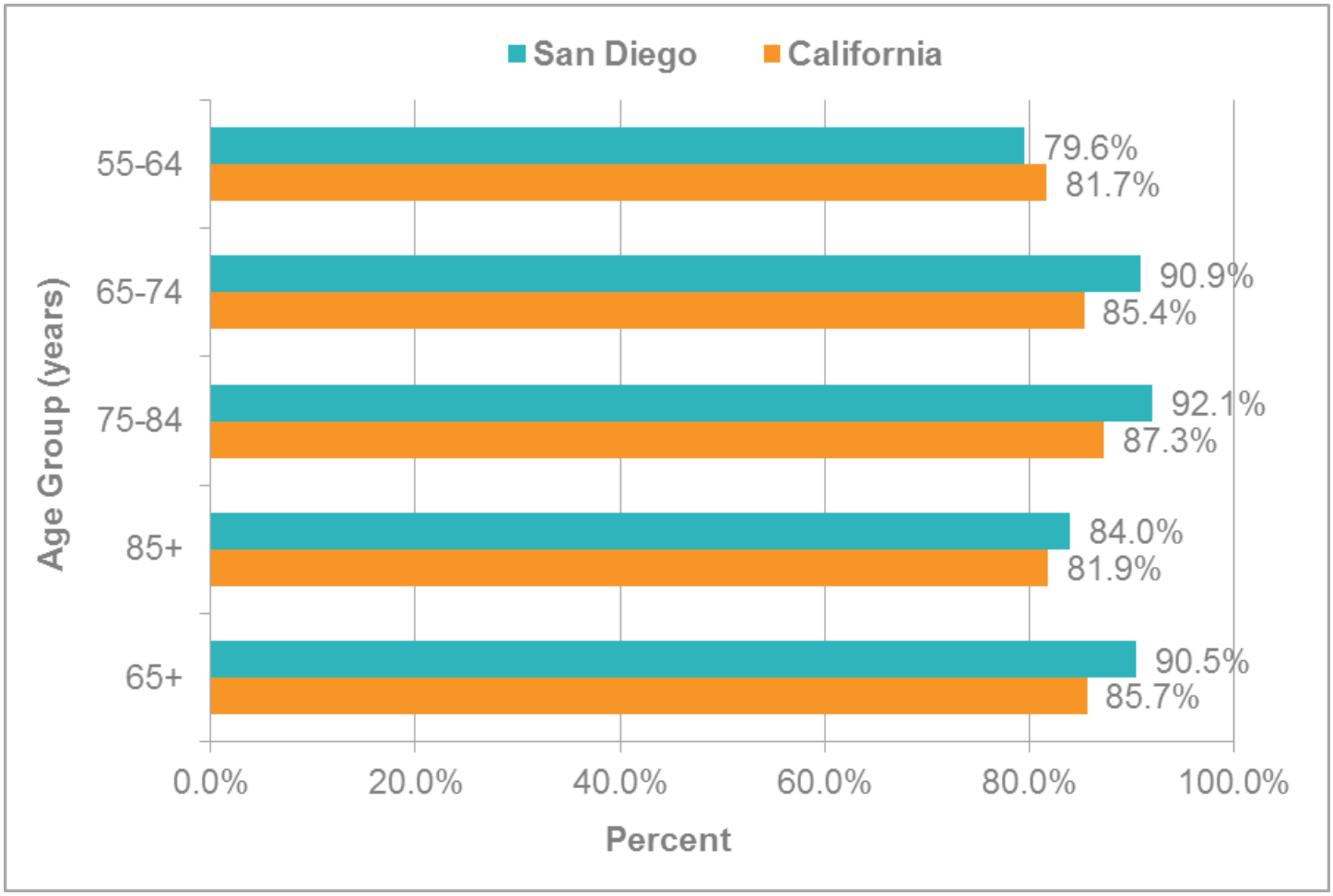


Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

Colorectal Cancer Screening

Colorectal cancer is the second leading cause of cancer death in the United States.[22] The American Cancer Society (ACS) and the U.S. Preventive Services Task Force (USPSTF) recommend screening to include one or more of the following for the 50+ population – a fecal occult blood test (FOBT) every year, flexible sigmoidoscopy every 5 years, a double contrast barium enema every 5 years, or a colonoscopy every 10 years. At the time of recommendation by their doctor, 79% of adults aged 65 years and older were compliant (CHIS 2009). The Healthy People 2020 goal for ever having had a sigmoidoscopy, colonoscopy, or FOBT is 70.5%. San Diego County seniors ages 65 years and older exceeded this goal. According to CHIS in 2009, 91% of seniors had ever had a sigmoidoscopy, colonoscopy or FOBT.

Figure 39. Percent of Population Who Have Ever Had a Sigmoidoscopy, Colonoscopy or FOBT by Age Group, San Diego County, 2009+



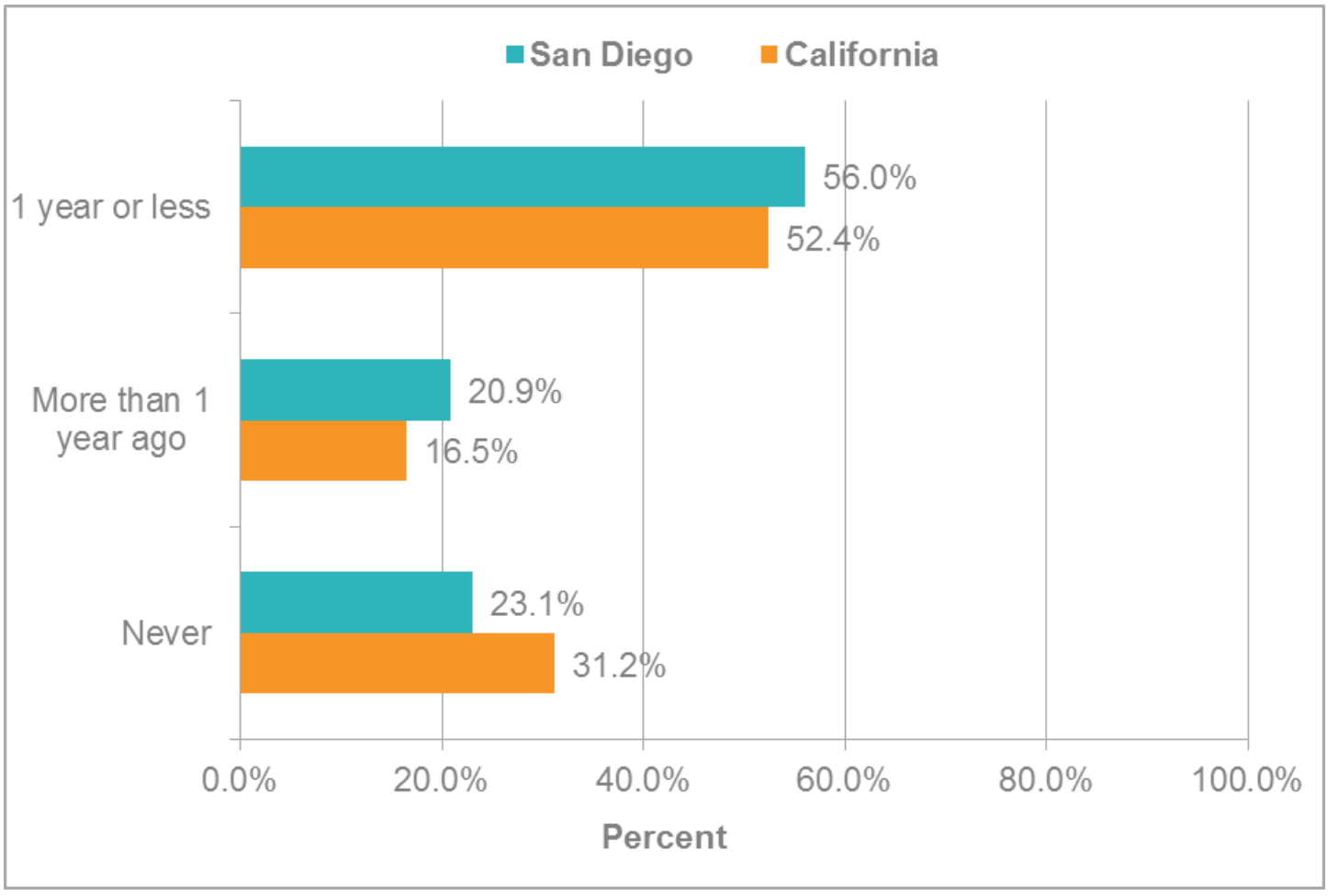
Source: California Health Interview Survey, 2009; Accessed online at www.chis.ucla.edu.

+2012 data not available. Most recent data is shown.

Prostate Cancer Screening

Prostate cancer is found mainly in older men. In San Diego County, 241 men aged 65 years and older died from prostate cancer in 2012 (147.2 per 100,000). Two types of tests are currently being used to screen for prostate cancer: a digital rectal exam and a prostate-specific antigen (PSA) test. PSA is a substance made mostly by the prostate that may be found in an increased amount in the blood of men who have prostate cancer.[23] In San Diego County, 23.1% of men aged 65 years and older have never had a PSA test (CHIS 2009).

Figure 40. Prostate-Specific Antigen (PSA) Test History, 65+ Year-Old Males, San Diego County, 2009+



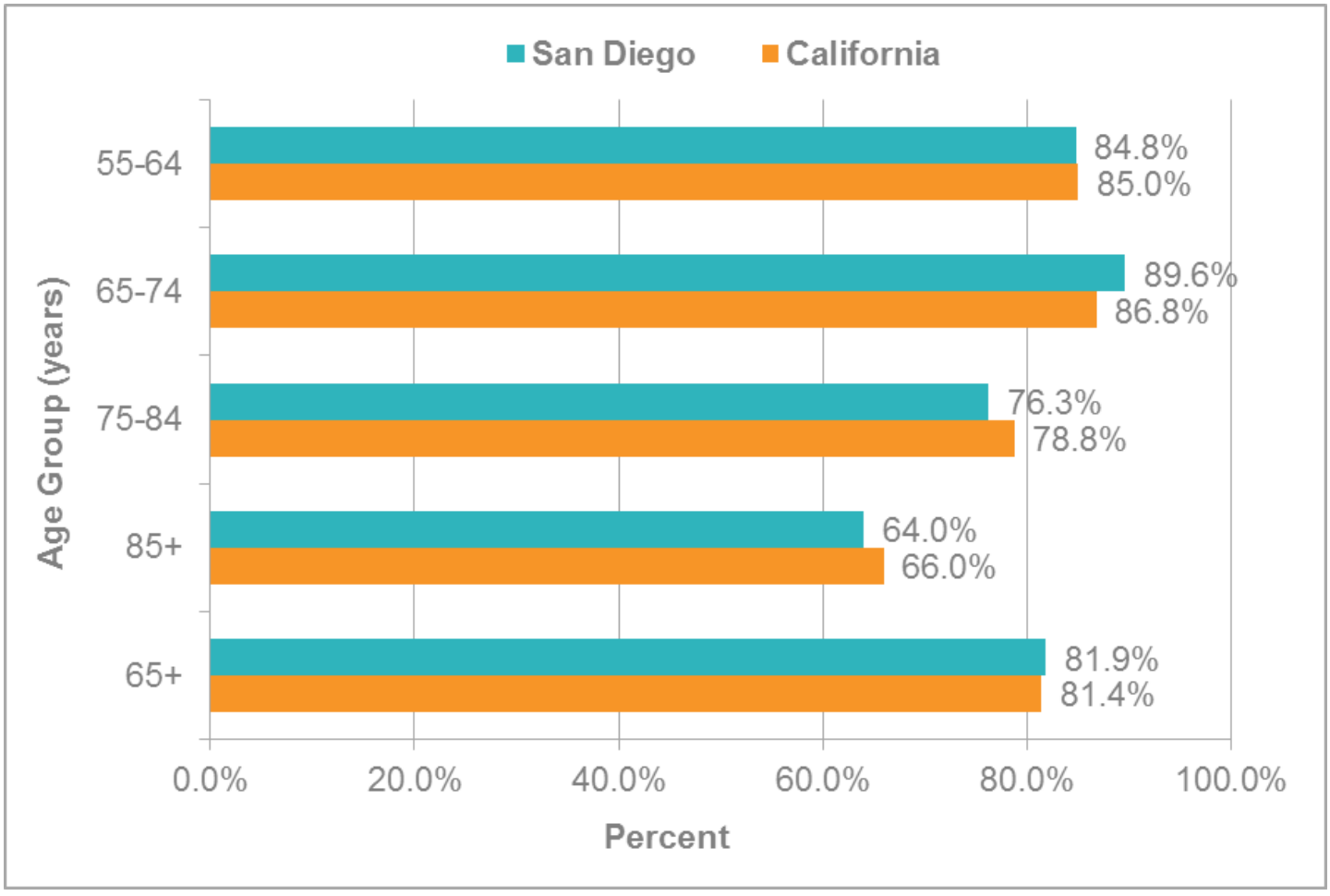
Source: California Health Interview Survey, 2009; Accessed online at www.chis.ucla.edu.

+2012 data not available. Most recent data is shown.

Mammogram Screening

Women in the United States get breast cancer more than any other type of cancer except for skin cancer. Furthermore, breast cancer is second only to lung cancer as the cause of cancer death among women.[24] Screening for breast cancer includes breast self-examination, clinical breast examinations, and mammography. A mammogram is an x-ray of the breast used to find tumors that may be too small to feel. The American Cancer Society recommends an annual mammogram for women over forty.[25] For breast cancer survivors older than 65, annual mammography surveillance is associated with a dramatically reduced risk of death from breast cancer, whether by recurrence or another primary tumor. The Healthy People 2020 goal was for 81% of females to have had mammogram in the past 2 years. In San Diego County, 81.9% of females aged 65 years and older have had a mammogram in the past 2 years.

Figure 41. Percent of Female Population That Had a Mammogram in the Past 2 Years by Age Group, San Diego County, 2012



Source: California Health Interview Survey, 2012; Accessed online at www.chis.ucla.edu.

CHAPTER

5

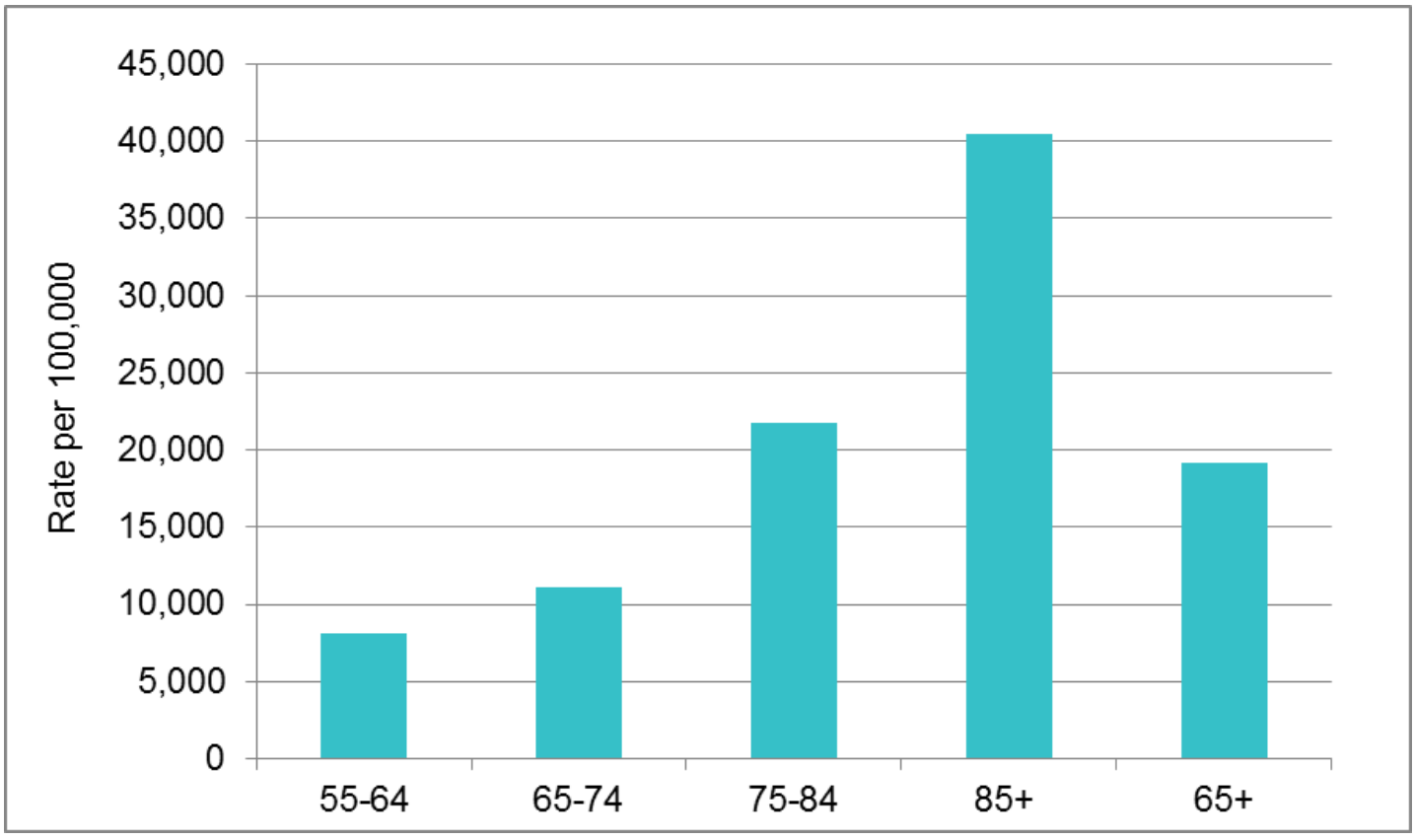
UTILIZATION OF SERVICES

CALLS TO 9-1-1

Seniors in San Diego County use the 9-1-1 system at higher rates than any other age group. The most common chief complaints include general medical, altered neurological state, respiratory distress, cardiac chest pain, and trauma to the extremities. Time is critical in life-threatening emergencies, so Aging & Independence Services offers the Vial of Life program to provide emergency medical personnel up-to-date medical information. The Vial of Life is a magnetic container that attaches to a refrigerator, containing potentially lifesaving medical information and emergency contacts for individuals living in the home. Emergency medical personnel are trained to look for the Vial of Life when responding to an emergency, thus assuring an accurate and rapid response.

In 2012, 71,655 calls were made to 9-1-1 for seniors aged 65 years and older needing prehospital (ambulance) care in San Diego County, at a rate of 19,131.7 per 100,000 population. In other words, one out of every five seniors in San Diego County called for an ambulance. This increased with increasing age group, to two out of five seniors aged 85+ years. These calls include individuals who were transferred to an emergency department and those who were not.

Figure 42. Rate of Prehospital 9-1-1 Calls for All Causes, San Diego County, 2012

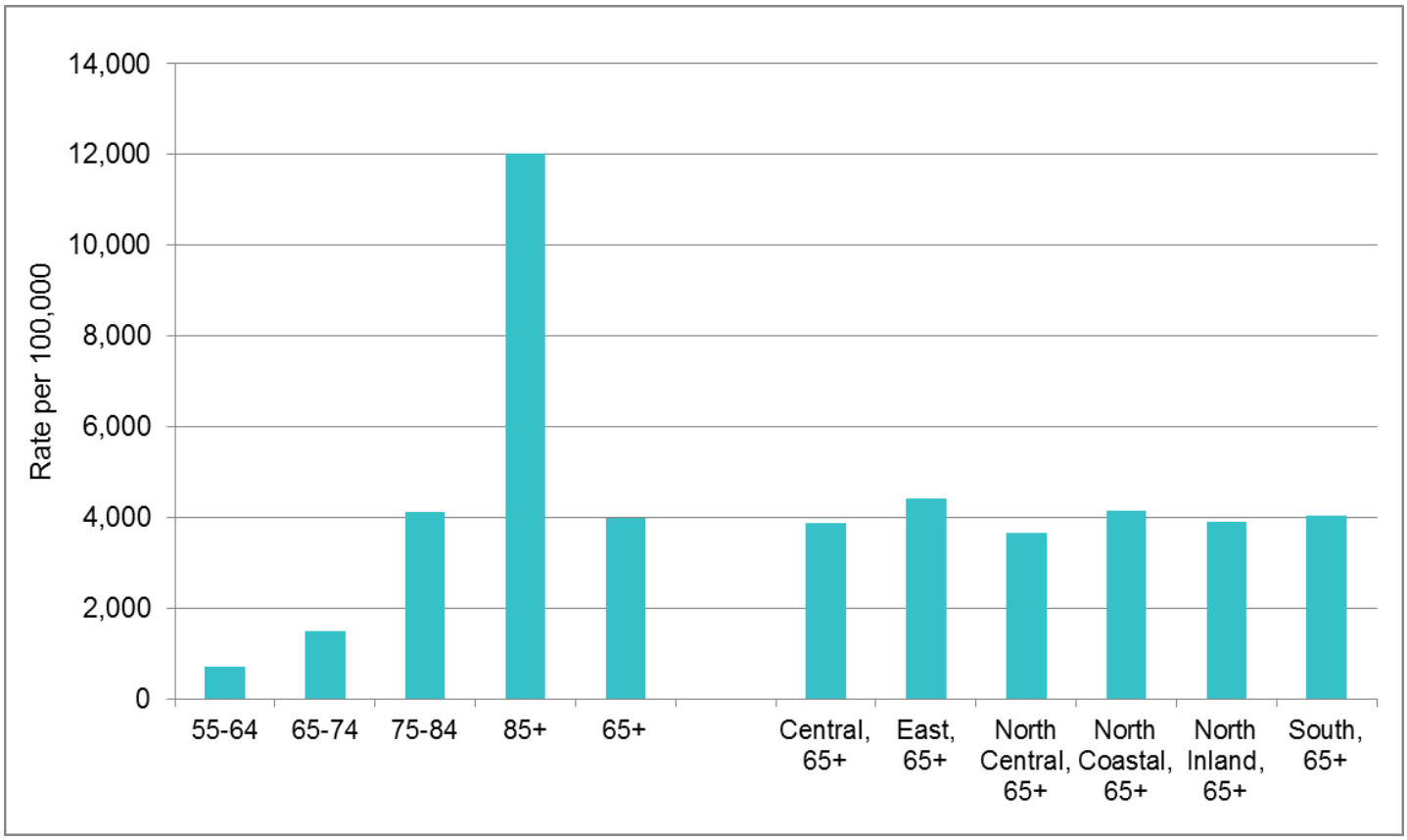


Source: County of San Diego, Health & Human Services Agency, Emergency Medical Services, Prehospital MICN database, 2012. SANDAG population estimates, 2012.

DEATH

In 2012, 14,929 seniors aged 65+ died of all causes (3,986.0 per 100,000). The death rate increased with increasing age group to 12,033.7 per 100,000 for the 85+ year old age group, and was higher in East Region compared to the other HHSA regions.

Figure 43. Death Rate for All Causes, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Leading Causes of Death

The leading causes of death for adults aged 55 and older are displayed below.

Figure 44. Leading Causes of Death by Number of Deaths Due to Disease, San Diego County, 2012

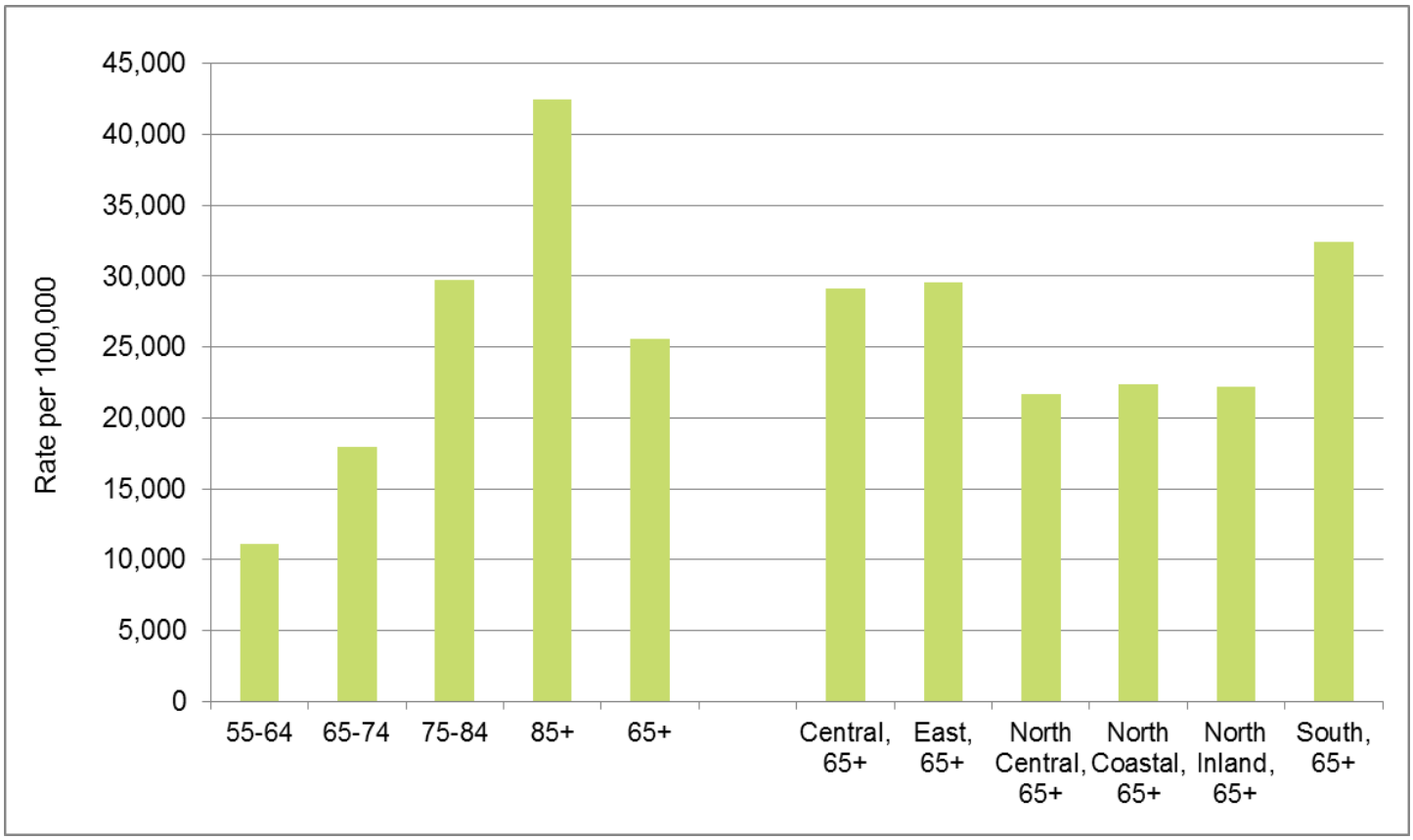
Rank	Age Group of Victim			
	55-64 Years	65-74 Years	75-84 Years	85+ Years
1	Cancer 895	Cancer 1,129	Cancer 1,394	Diseases of the Heart 2,127
2	Diseases of the Heart 461	Diseases of the Heart 573	Diseases of the Heart 1,154	Cancer 956
3	Unintentional Injuries 160	Chronic Lower Respiratory Diseases 199	Chronic Lower Respiratory Diseases 347	Alzheimer's Disease 835
4	Chronic Liver Disease & Cirrhosis 112	Diabetes 122	Alzheimer's Disease 279	Stroke 491
5	Diabetes 109	Stroke 116	Stroke 249	Chronic Lower Respiratory Diseases 376
6	Stroke 93	Unintentional Injuries 84	Diabetes 182	Hypertension & Hypertensive Renal Disease 194
7	Chronic Lower Respiratory Diseases 83	Chronic Liver Disease & Cirrhosis 60	Parkinson's Disease 116	Diabetes 184
8	Suicide 76	Alzheimer's Disease 43	Unintentional Injuries 105	Influenza and Pneumonia 172
9	Viral Hepatitis 54	Hypertension & Hypertensive Renal Disease 32	Hypertension & Hypertensive Renal Disease 70	Unintentional Injuries 148
10	Influenza and Pneumonia 30	Suicide 30	Influenza and Pneumonia 65	Parkinson's Disease 122
All Other Causes	243	355	624	1,213

Source: Death Statistical Master Files (CDPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

HOSPITALIZATION

In 2012 there were 95,679 hospitalizations of seniors aged 65 years and older for any cause (25,546.1 per 100,000), whether scheduled or unscheduled through the emergency department. The hospitalization rate increased with increasing age group and was highest among residents of the South Region of San Diego County.

Figure 45. Rate of Hospitalization for All Causes, San Diego County, 2012

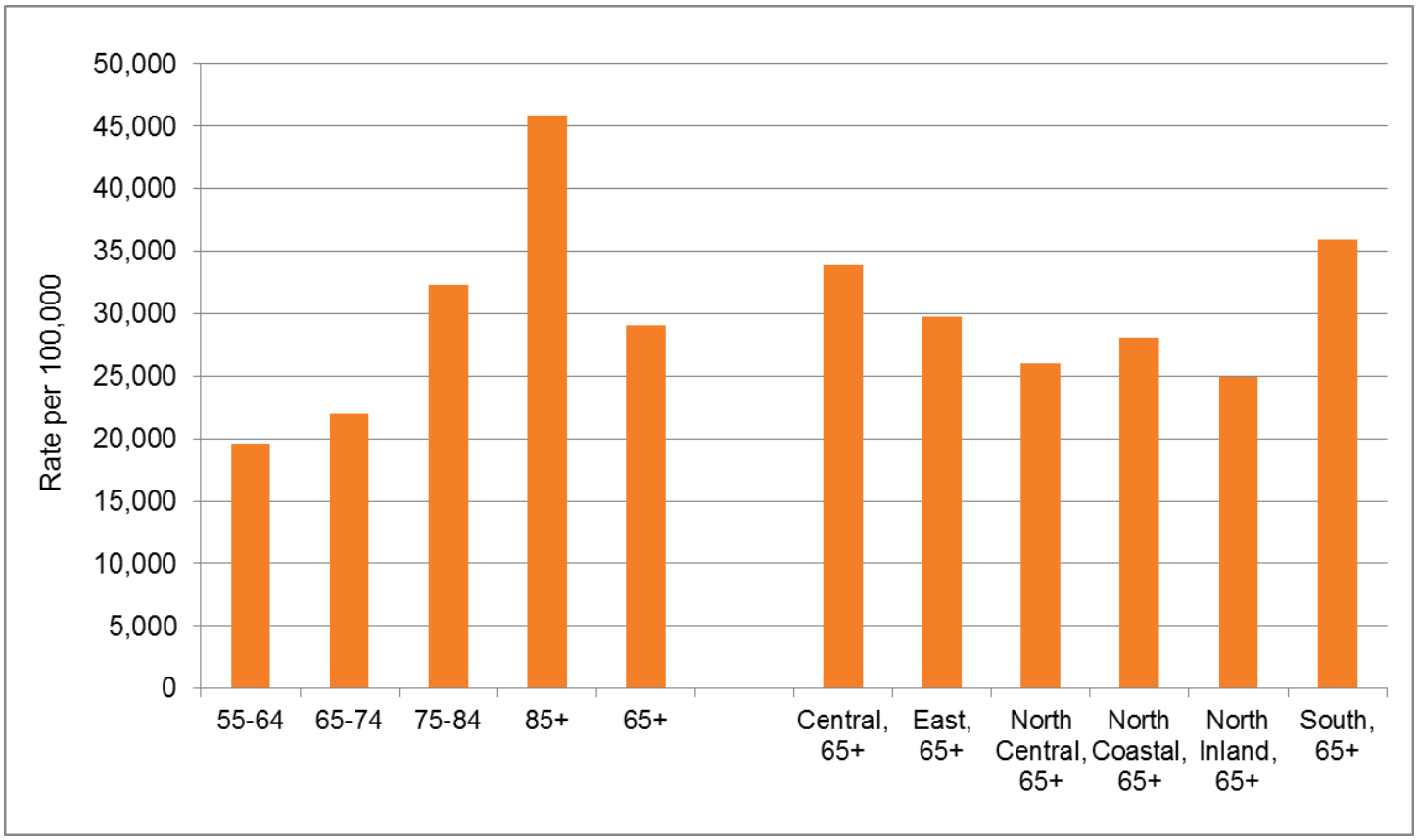


Source: Patient Discharge Data, (CA OSHPD), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Emergency Department (ED) Utilization

Patients treated in EDs constitute an important component of the medical care system. They suffer injury and illness serious enough to require emergency care, but not serious enough to require inpatient hospitalization. In 2012 there were 108,745 visits by seniors aged 65 years and older that were treated and discharged from a San Diego County ED (29,034.7 per 100,000), or one out of every three senior residents of San Diego County. The rate of ED discharge increased with increasing age group and was highest among residents of the Central and South Regions of the county.

Figure 46. Rate of Emergency Department Discharge for All Causes, San Diego County, 2012



Source: County of San Diego, Health & Human Services Agency, Emergency Medical Services, Emergency Department Database; SANDAG, Current Population Estimates, 2012.

CHAPTER

6

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

Alzheimer's Disease and Other Dementias

Alzheimer's disease is the most common form of dementia, but all dementias are characterized by a decline in thinking skills, memory loss, and reduced ability to perform everyday activities.[26] People suffering from dementia need access to similar types of resources, such as caregivers and health care professionals trained in the treatment of dementia. Thus, "ADOD" is used to refer to Alzheimer's disease and other dementias.

ADOD affects individuals in different ways. However, there are 10 early signs and symptoms, as described by the Alzheimer's Association, that are typical of the disease. These include memory loss that disrupts daily life, challenges in planning or solving problems, difficulty completing familiar tasks, confusion with time or place, trouble understanding visual images and spatial relationships, new problems with words in speaking or writing, misplacing things, decreased or poor judgment, withdrawal from work or social activities, and changes in mood and personality.[27] These are not meant to replace a consultation with a doctor, but rather serve as a tool to help identify potential symptoms. Individuals should see a doctor if they notice any of these signs.

Some risk factors for Alzheimer's disease and other dementias (ADOD), such as age and genetics, cannot be controlled or prevented. However, several studies have suggested that it may be possible to delay or prevent the onset of ADOD by practicing brain health strategies.[28] Many of the recommendations for maintaining physical health can be used for brain health, such as eating a balanced diet, managing chronic conditions, and being physically active.

Additionally, many individuals with ADOD rely on the help of unpaid caregivers. In 2012, nearly 137,000 caregivers provided unpaid care for the 60,000 people living with ADOD in San Diego County. These caregivers provided nearly 156 million hours of unpaid care, valued at $1.94 billion dollars. The work required of caregivers, including the physical tasks, organization, and required planning can lead to increased emotional stress, depression, financial hardships, and poor health.[27] In 2013, the health care costs to San Diego County caregivers due to the physical and emotional impact of caregiving were approximately $75.4 million dollars. For information on resources for those living with ADOD and their caregivers, contact the County of San Diego Aging & Independence Services at 800-510-2020 or the San Diego/Imperial Chapter of the Alzheimer's Association.

Additional Resources

- ❑ Alzheimer's Association: http://www.alz.org/
- ❑ Aging & Independence Services: http://www.sandiegocounty.gov/hhsa/programs/ais/

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

The Alzheimer's Project

In May 2014, the County of San Diego Board of Supervisors voted to launch the Alzheimer's Project to address the devastating effects of the disease on affected individuals, their families and the region's health care system. The Alzheimer's Project will bring together the region's caregivers, researchers, clinicians, advocacy groups and leadership to inventory and improve caregivers resources and provide support for local efforts to find a cure. The Alzheimer's Project includes six major components:

- Cure - enhance the awareness, partnerships and funding for Alzheimer's disease research.
- Care - develop a countywide plan to improve the network of services for those with ADOD and their caregivers.
- Clinical - address improving medical care for patients with ADOD.
- Education/Awareness - develop a multi-faceted education and public awareness campaign.
- Legislation - support legislation that increases funding for Alzheimer's disease research and provides resources for caregivers, family members and those directly affected by the disease.
- Funding - identify and pursue opportunities for additional resources to support the Alzheimer's Project.

The Alzheimer's Project supports the *Live Well San Diego* vision, which encourages residents to live healthy, safe, and thriving lives. The initiative is a comprehensive, long term plan to advance the health and well-being of all San Diegans through a collective effort that involves residents, community, faith-based organizations, business, schools, law enforcement, local city and tribal jurisdictions, and the County of San Diego.

The Alzheimer's Project will inventory and improve resources for San Diegans living with ADOD and their caregivers in order to enhance their ability to live healthy, safe, and thriving lives. Specifically, improving coordination and communication related to ADOD care and raising awareness for early diagnosis will improve the health of San Diegans with ADOD as well as the health of their caregivers. An inventory of resources and facilities with designated ADOD programs as well as education on environmental modifications will ensure the safety of those living with the disease. Lastly, improving the entire network of services enhances the quality of life for San Diegans living with ADOD and their caregivers, allowing them to thrive through all stages of the disease.

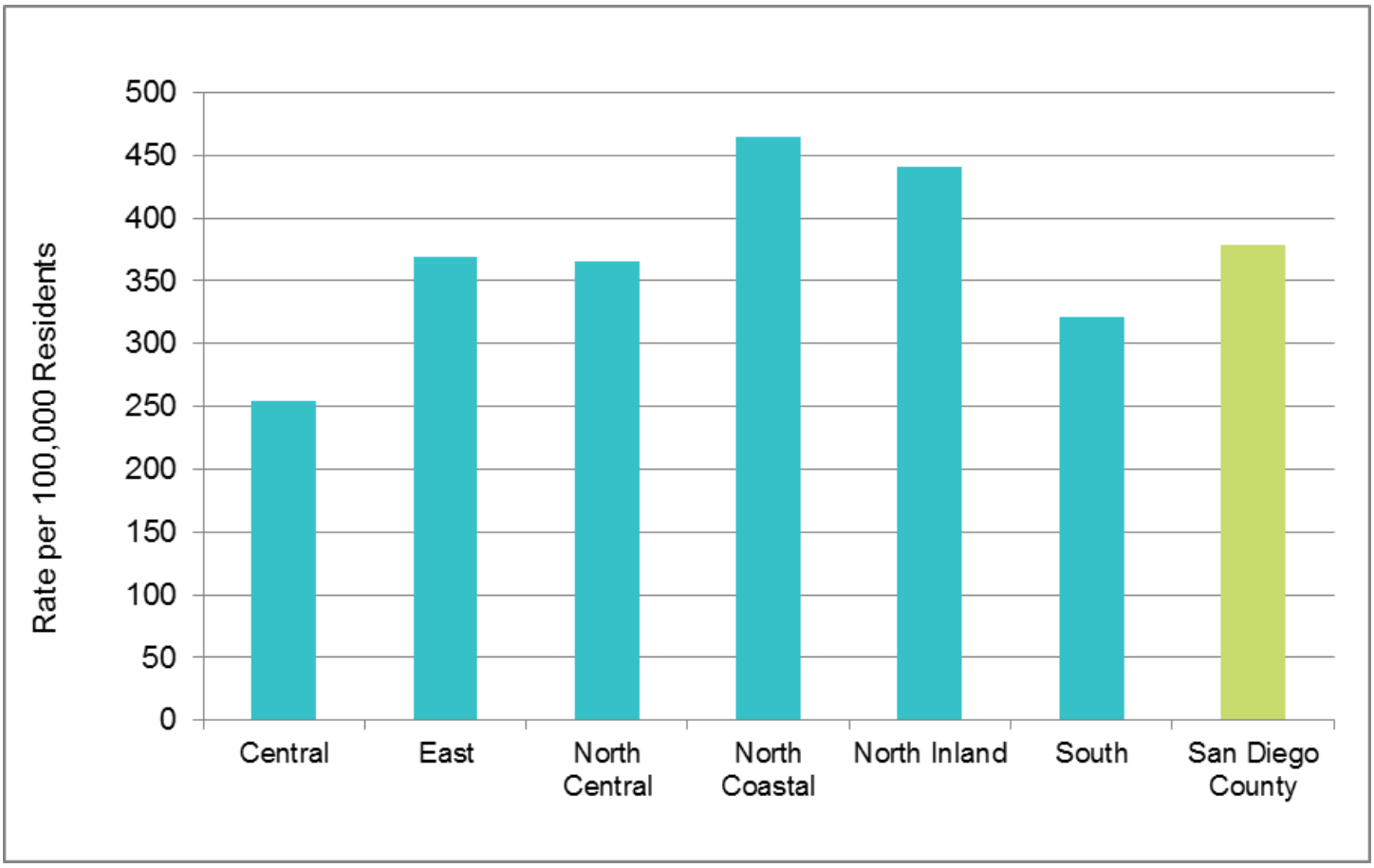
For more information on the *Live Well San Diego* initiative, visit http://LiveWellSD.org.

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

Alzheimer's Disease and Other Dementias in San Diego County

Alzheimer's disease is the sixth leading cause of death in the U.S., fifth leading cause of death in California, and the third leading cause of death in San Diego County.[27,29] In 2012, there were 1,420 deaths due to Alzheimer's disease and other dementias (379.1 per 100,000) in San Diego County among seniors aged 65 years and older. Among the San Diego County HHSA Regions, North Coastal had the highest ADOD death rate (464.4 per 100,000), followed by North Inland (440.6 per 100,000).

Figure 47. Alzheimer's Disease and Other Dementias Death Rates by Health and Human Services Agency Regions and San Diego County, 65 Years and Older, San Diego County, 2012



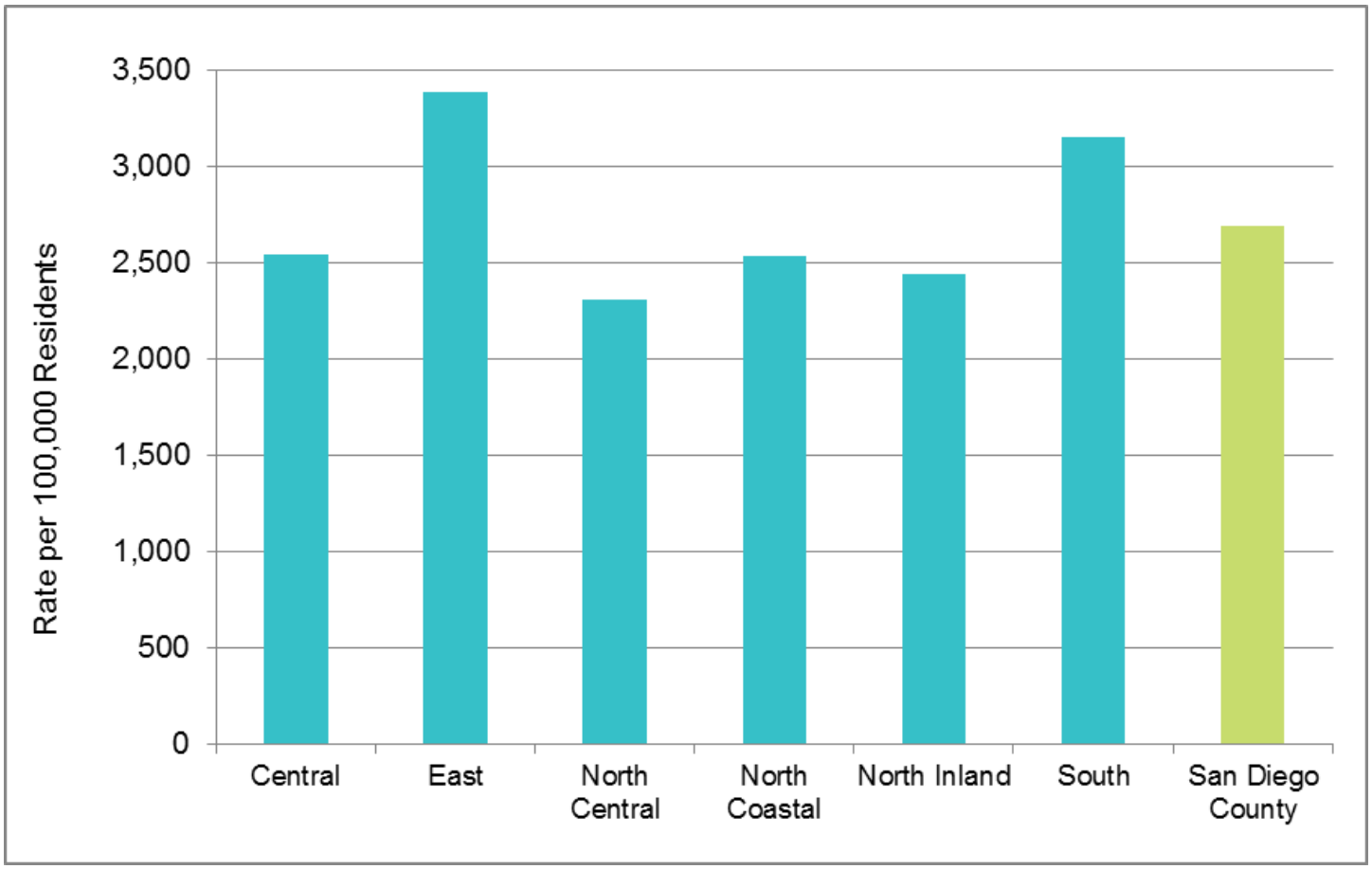
Source: Death Statistical Master Files (CDPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

In 2012, more than 19,000 San Diegans age 55 years and older were discharged from the emergency department (ED) or hospital with ADOD. The discharge could result from a visit to the ED or hospital due to ADOD or for another reason but ADOD was also noted. Of all the San Diegans discharged from the ED or hospital with a mention of ADOD, 20.9% lived in East Region and 18.6% lived in North Inland Region.

The rate of San Diego County residents discharged with any mention of ADOD was 2,696.4 per 100,000 residents age 55 years and older in 2012. East Region had the highest rate, with 3,386.1 residents age 55 years and older discharged from the ED or hospital with any mention of ADOD per 100,000 residents.

Figure 48. Rate of Residents Discharged from the Emergency Department or Hospital with Any Mention of Alzheimer's Disease and Other Dementias by Health and Human Services Agency Regions and San Diego County, 55 Years and Older, San Diego County, 2012



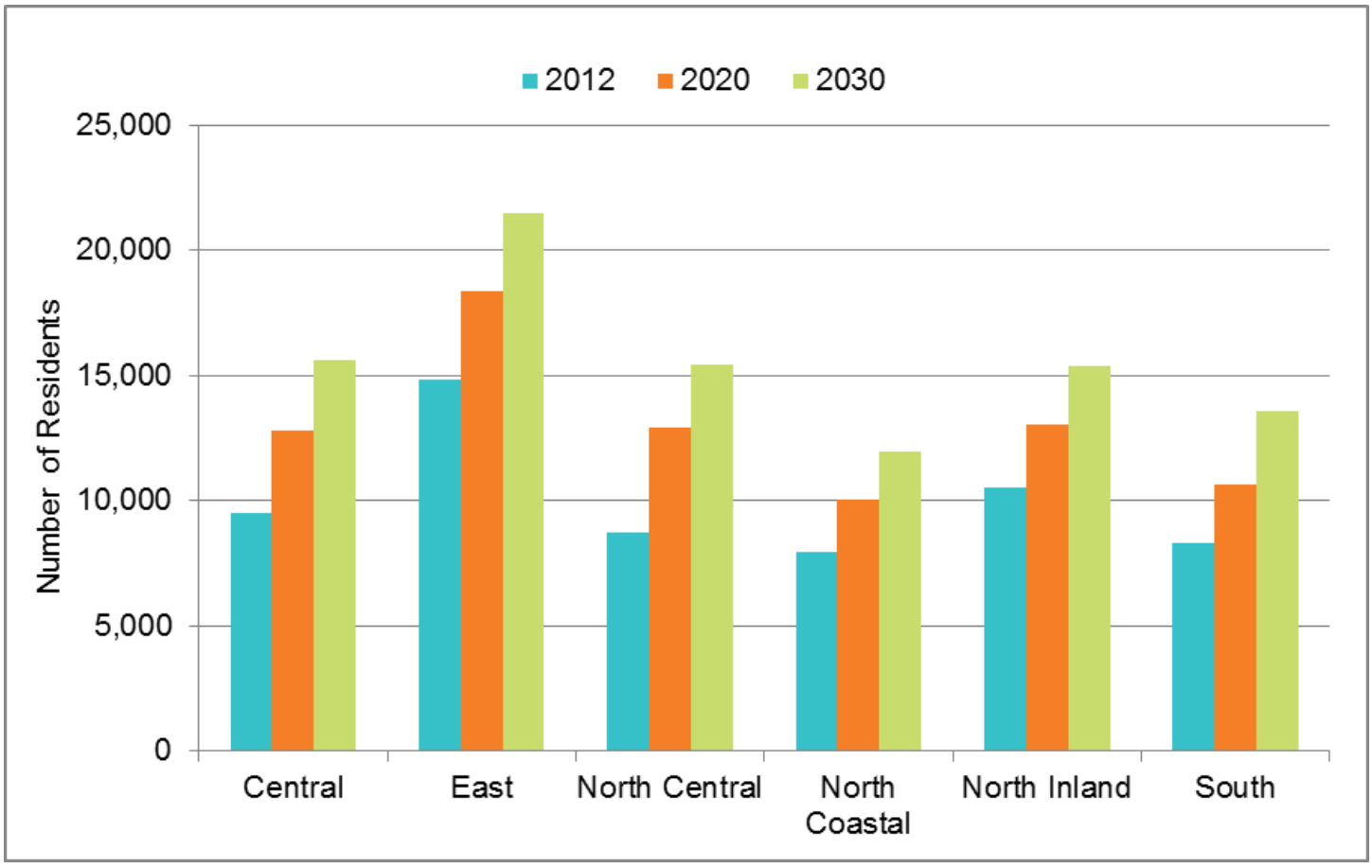
Source: Source: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, Alzheimer's Disease and Other Dementias Database, 2012.

ALZHEIMER'S DISEASE AND OTHER DEMENTIAS

In 2012, an estimated 60,000 San Diegans age 55 years and older were living with ADOD, accounting for 8.3% of the 55 years and older population. In other words, one in twelve San Diegans age 55 years and older had ADOD that year. One quarter of these residents were living in East Region and 17.6% were living in North Inland Region.

Countywide, the number of San Diegans age 55 years and older living with ADOD is expected to increase by 55.9% between 2012 and 2030, an increase from 60,000 to nearly 94,000 residents living with ADOD by 2030. The region with the largest estimated increase in residents living with ADOD is North Central, with an increase of 76.8% from 2012 to 2030. However, it is projected that 23.0% of all San Diegans age 55 years and older living with ADOD will live in East Region in 2030.

Figure 49. Estimate of the Number of Residents with Alzheimer's Disease and Other Dementias by Health and Human Services Agency Regions, 55 Years and Older, San Diego County, 2012-2030



Source: County of San Diego, Health and Human Services Agency, Public Health Services, Community Health Statistics, Alzheimer's Disease and Other Dementias Database, 2012.

CHAPTER

7

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

Cancer (Malignant Neoplasms)

Cancer is the uncontrolled growth of abnormal cells in the body and can develop in almost any organ or tissue, such as lung, colon, breast, skin, bone, or nerve tissue.[30] The most common cancers in men in the United States are lung, prostate, and colorectal cancer, and the most common cancers in women are lung, breast, and colorectal cancer. Treatment plans may include surgery, radiation, and/or chemotherapy.[31]

Major risk factors for cancer include age, race, and sex as well as lifestyle and environmental factors such as tobacco use, diet, exposure to ultraviolet radiation from the sun, and exposure to carcinogens in the workplace or in the environment. Family history and being infected with certain viruses, such as the human papillomavirus (HPV), increases the risk of some types of cancer.[32]

Cancer prevention tips include not using tobacco products, choosing a balanced, low-fat diet rich in fruits, vegetables and whole grains, regular exercise, maintaining a healthy weight, sleeping at least 6 to 8 hours per night, avoiding known carcinogens, eliminating and reducing stress, and avoiding sun and/or using sunscreen. Some risk factors, such as inherited conditions, are unavoidable. It is important for seniors to be aware of these factors and discuss them with their doctors during regular checkups so that if cancer develops it is found and treated early.[33]

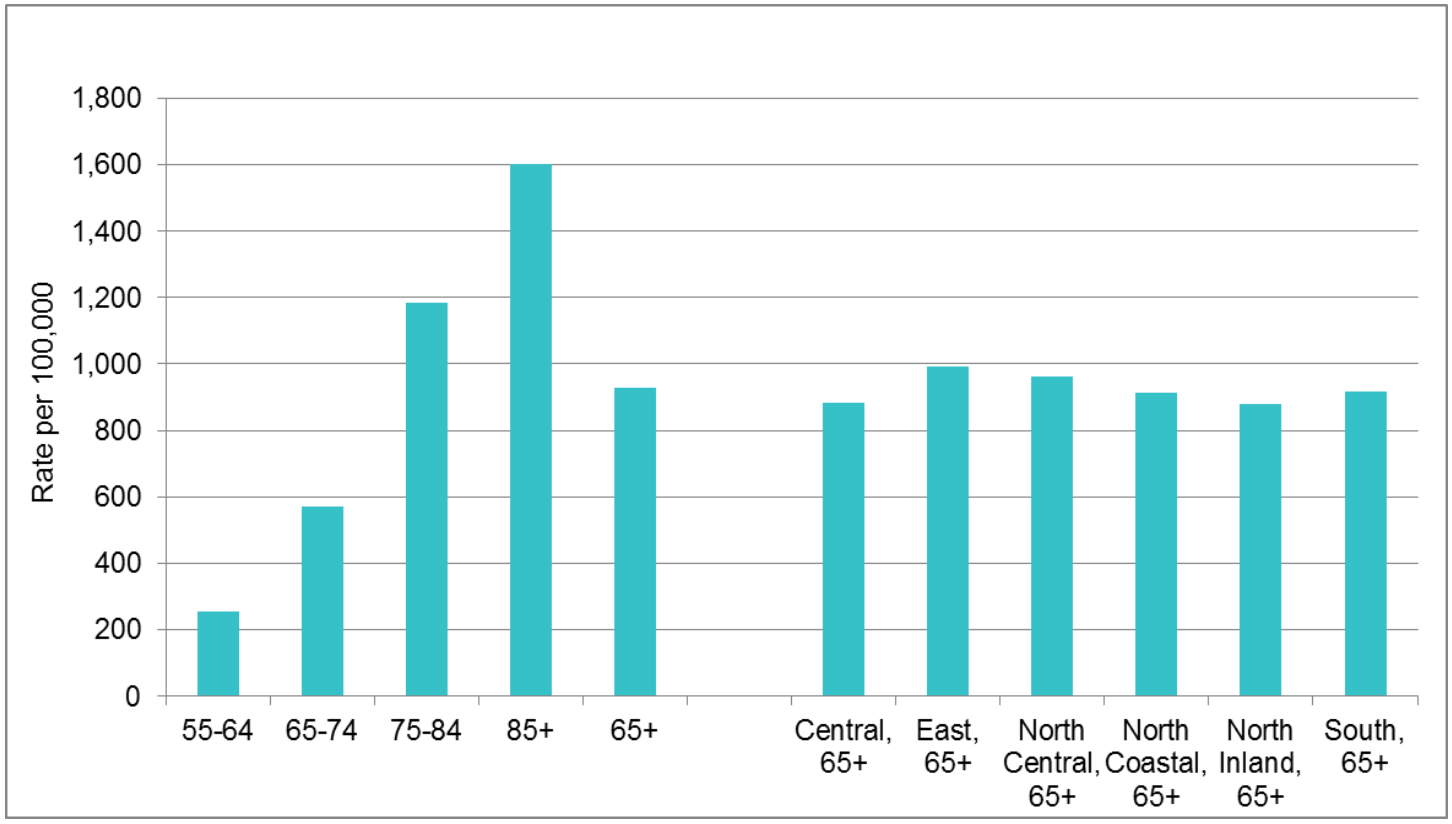
Additional Resources

- ❑ MedlinePlus: http://www.nlm.nih.gov/medlineplus/cancer.html
- ❑ National Cancer Institute: http://www.cancer.gov/cancertopics
- ❑ American Cancer Society: http://www.cancer.org/docroot/home/index.asp
- ❑ CDC Cancer Prevention and Control: http://www.cdc.gov/CANCER/
- ❑ Free help to quit smoking: 1 -800-NOBUTTS (662-8887)

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

In 2012, there were 3,479 deaths due to cancer among individuals aged 65 years and older in San Diego County (928.9 per 100,000). Death rates were significantly higher for 85+ year-olds than younger age groups. Among the HHSA Regions, cancer death rates were highest in the East and North Central Regions.

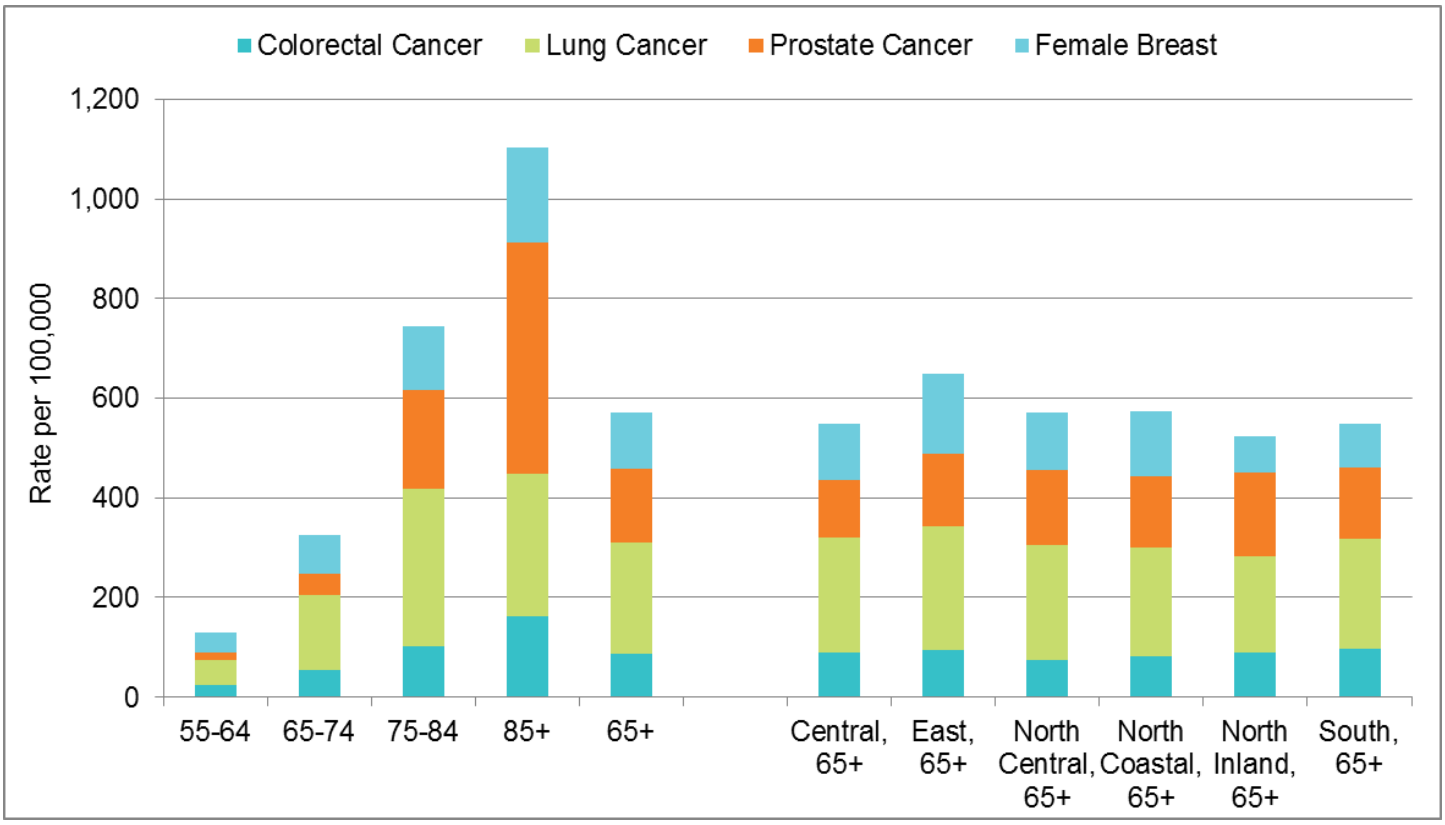
Figure 50. All Cancer Death Rates, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

For seniors aged 65 years and older, lung cancer death rates were the highest compared to other cancer death rates, whereas prostate cancer death rates were the highest cancer death rates in the 85 years and older age group. Furthermore, prostate cancer and lung cancer death rates were generally the highest cancer death rates among the HHSA Regions.

Figure 51. Cancer Deaths by Type San Diego County, 2012



Source: Death Statistical Master Files (CDPH), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

Coronary Heart Disease

Coronary heart disease is a narrowing of the small blood vessels that supply blood and oxygen to the heart. Coronary heart disease is usually caused by atherosclerosis, which occurs when fatty material and plaque builds up on the walls of the arteries, causing them to narrow. As the coronary arteries narrow, blood flow to the heart can slow or stop, causing chest pain, shortness of breath, and other symptoms of a heart attack.[34]

Major risk factors for coronary heart disease include increasing age, male gender, family history, and being an African American. Some modifiable risk factors include smoking, high blood cholesterol, high blood pressure, physical inactivity, obesity and overweight, diabetes, stress, and too much alcohol.[35]

Individuals with any of the risk factors for coronary heart disease should make an appointment with their doctor to discuss prevention and possible treatment options. Prevention tips include avoiding or reducing stress, not smoking, eating well-balanced meals that are low in fat and cholesterol, eating several daily servings of fruits and vegetables, getting regular exercise, and keeping blood pressure, blood sugar, and cholesterol under control.[36]

Additional Resources

- ❑ American Heart Association: http://www.americanheart.org
- ❑ National Heart, Lung and Blood Institute: http://www.nhlbi.nih.gov/
- ❑ MedlinePlus: http://www.nlm.nih.gov/medlineplus/ency/article/007115.htm
- ❑ CDC fact sheet: http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_heart_disease.htm
- ❑ Free help to quit smoking: 1 -800-NOBUTTS (662-8887)

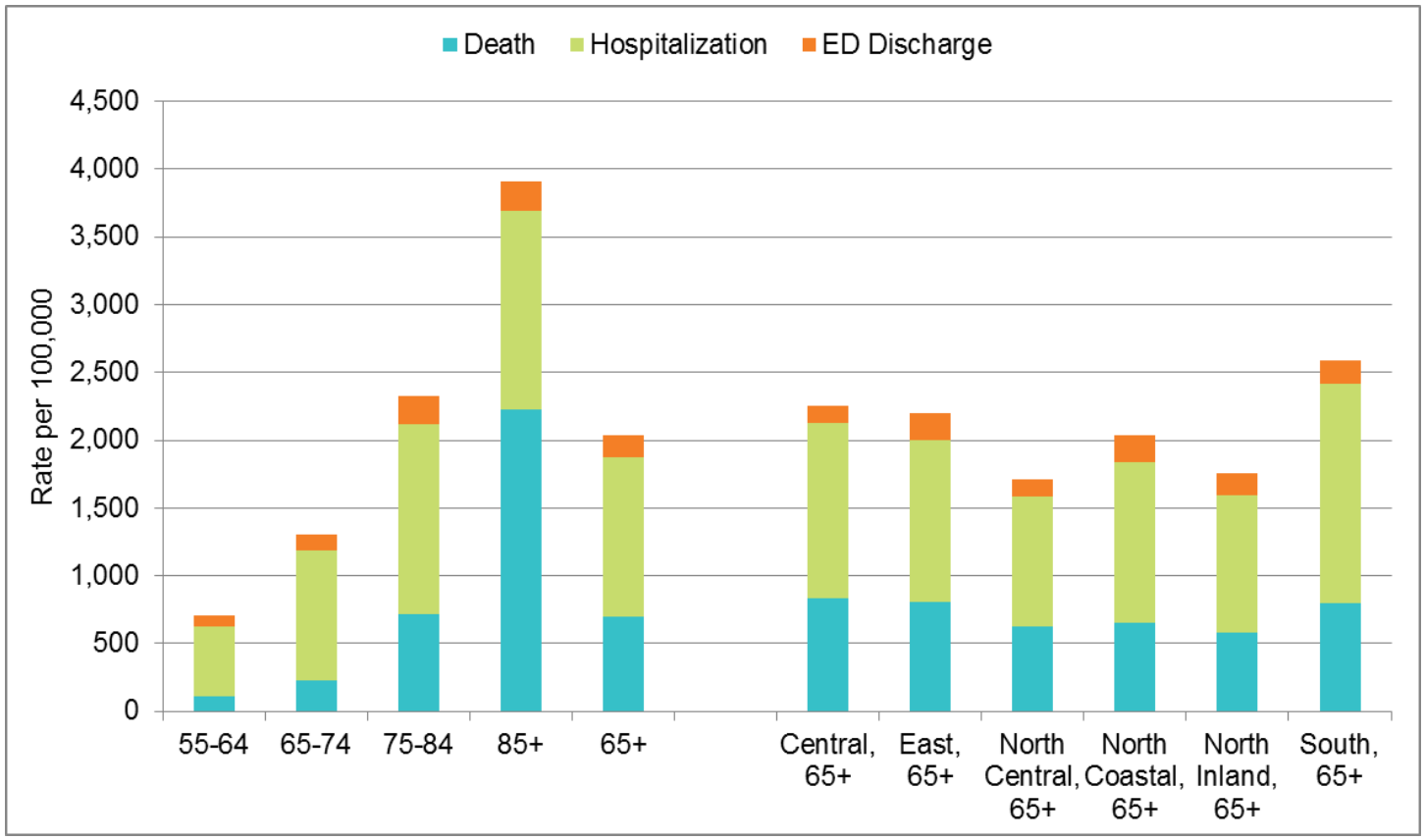
Coronary Heart Disease in San Diego County

According to the California Health Interview Survey (CHIS), 20.1% of San Diego County residents aged 65 years and older have been told by a doctor that they have any kind of heart disease, compared to 21.4% of California residents. The following data show the rates of medical encounter and death due to coronary heart disease in San Diego County.

In 2012, there were 2,622 deaths due to coronary heart disease among individuals aged 65 years and older in San Diego County (700.1 per 100,000). Death rates due to CHD were highest among seniors aged 85 years and older, compared to any other age group (2,225.7 per 100,000). In fact, death rates were more than three times higher for 85+ year-olds compared to 75 to 84 year-olds and nearly ten times higher compared to 65-74 year olds. Coronary heart disease death rates were highest in the Central Region of San Diego County.

There were an additional 4,412 hospitalizations (1,178.0 per 100,000) and 610 emergency department discharges (162.9 per 100,000) of seniors for coronary heart disease. The rates were highest among patients aged 75 to 84 years and 85+ years. The rate of hospitalization for CHD was highest among senior residents of the South Region, whereas the emergency discharge rate for CHD was highest among seniors in the North Coastal Region.

Figure 52. Overall Burden of Coronary Heart Disease, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology &

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

Diabetes Mellitus

Diabetes is a disease in which the body does not produce or properly use insulin. Insulin is a hormone that is needed to convert sugar, starches and other foods into energy needed for daily life.[37] There are two major types of diabetes that impact seniors. Type I diabetes has an early onset; those affected must take insulin for life. This type accounts for 5-10% of diagnosed diabetics and is not preventable. Type II diabetes is preventable, yet accounts for 90-95% of all cases of diabetes. Type II occurs primarily in adults,[38] but is being seen more in children and adolescents as the obesity epidemic increases.

Before people develop type II diabetes, they usually develop pre-diabetes. Pre-diabetes raises the risk of developing type II, but progression can be stopped with weight loss and increased physical activity.[38] Risk factors for type II diabetes include age over 45 years, family history, non-White race, poor diet, overweight or obese, physical inactivity, high blood pressure, and poor cholesterol levels. Prevention of type II diabetes includes controlling blood sugar, following a low-fat, low calorie diet, regular exercise, not smoking, maintaining healthy cholesterol and blood pressure levels, maintaining oral health, and making regular doctor appointments.

Additional Resources

- ❑ National Diabetes Program and Diabetes Self-Management Program through Aging & Independence Services: www.HealthierLivingSd.org
- ❑ American Diabetes Association: 1-800-DIABETES (342-2383), www.diabetes.org
- ❑ National Institute of Diabetes, Digestive & Kidney Disease: http://diabetes.niddk.nih.gov/
- ❑ CDC Diabetes & Me: http://www.cdc.gov/diabetes/
- ❑ American Diabetes Association, SD Branch: 619-234-9897
- ❑ Scripps Whittier Institute for Diabetes, San Diego www.whittier.org
- ❑ Free help to quit smoking: 1-800-NOBUTTS (662-8887)

Diabetes in San Diego County

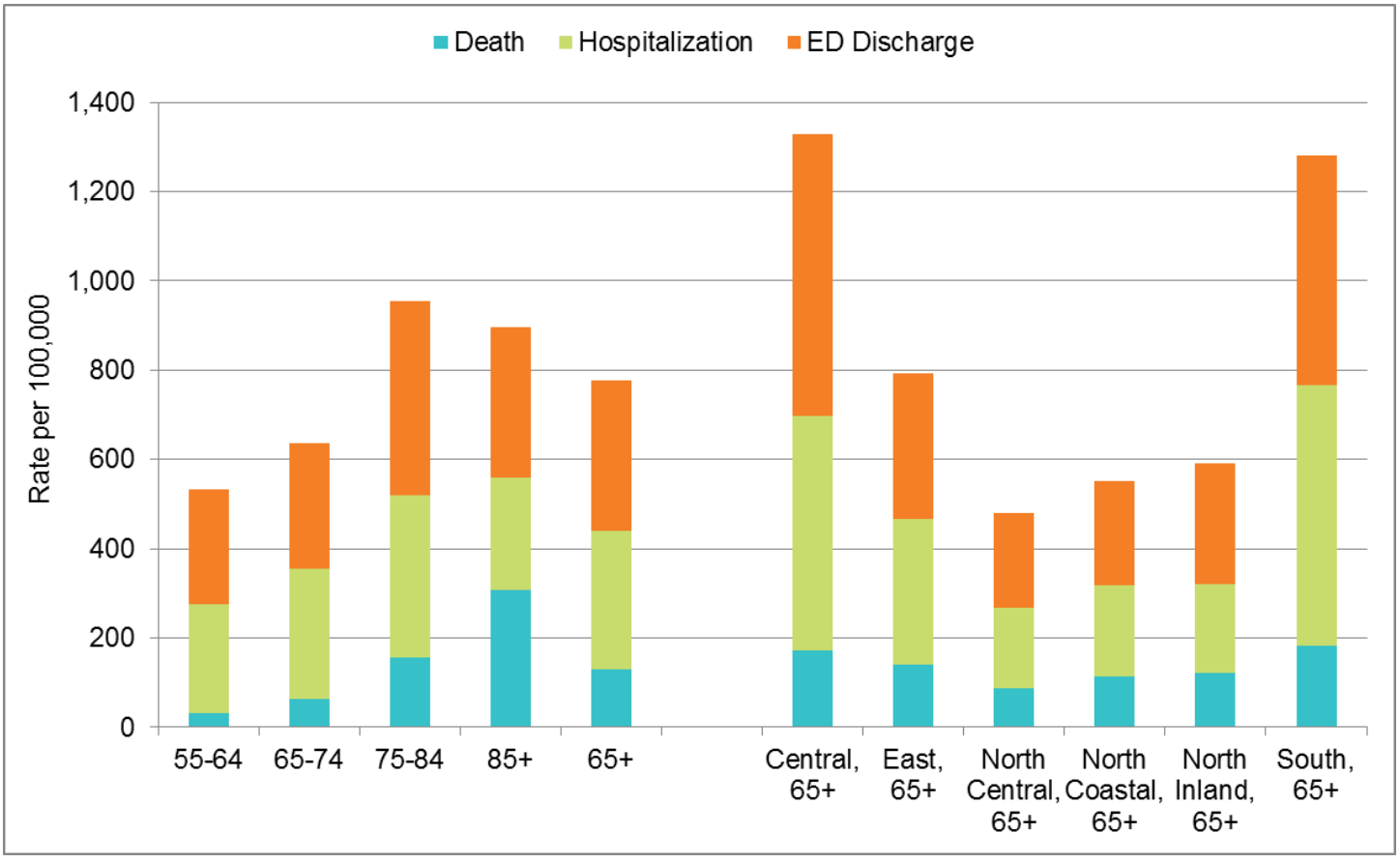
According to CHIS, in 2012 16.0% of San Diego County residents aged 65 years and older have been told by a doctor that they have diabetes or sugar, compared to 19.2% of California residents. Of those San Diego County seniors who have diabetes, 5.2% have type I. The following data show the rates of medical encounter and death due to diabetes in San Diego County.

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

In 2012, there were 488 seniors who died with an underlying cause of diabetes (130.3 per 100,000). The diabetes death rates increased sharply with age. The diabetes death rate among seniors ages 85 years and older was nearly 10 times greater than that of seniors in the 55-64 year old age group. Seniors living in the Central and South Regions of San Diego County died at higher rates due to diabetes than seniors living in other Regions.

In addition, there were 1,155 seniors hospitalized with a principal diagnosis of diabetes (308.4 per 100,000), with the highest rate experienced among 75 to 84 year-olds. Central and South Region residents had significantly higher rates of diabetes hospitalization than any other Region in the county. An additional 1,270 seniors were treated and discharged from a San Diego County emergency department with a principal diagnosis of diabetes (339.1 per 100,000). Similar to the diabetes hospitalization rate, the diabetes ED discharge rate was highest among the 75-84 year old age group. Seniors living in the Central and South Regions of San Diego County had the highest rates of diabetes ED discharge.

Figure 53. Overall Burden of Diabetes, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Stroke (Cerebrovascular Disease)

Stroke is a type of cardiovascular disease that affects the arteries leading to and within the brain. A stroke occurs when the blood flow carrying oxygen and nutrients to the brain stops. When this happens, part of the brain cannot get the needed oxygen and begins to die. There are two types of stroke. An ischemic stroke, the most common type, is caused by a blood clot that blocks or plugs a blood vessel in the brain. A hemorrhagic stroke is caused by a blood vessel that bursts and bleeds into the brain. Transient ischemic attacks, or "mini-strokes" occur when there is a brief interruption in the blood supply to the brain.[39]

Major risk factors for stroke include older age, family history, African American race, male gender (incidence of stroke), female gender (death due to stroke), heart disease, diabetes and prior stroke or heart attack. Some modifiable risk factors include high blood pressure, high blood cholesterol, smoking, poor diet, the use of oral contraceptives, physical inactivity, and obesity. Prevention of stroke includes controlling blood pressure, quitting smoking, treating heart disease and diabetes, and maintaining a healthy weight.[40]

Additional Resources

- ❑ MedlinePlus: http://www.nlm.nih.gov/medlineplus/stroke.html
- ❑ American Stroke Association: www.strokeassociation.org
- ❑ National Stroke Association: www.stroke.org
- ❑ National Institute of Neurological Disorders and Stroke: http://www.ninds.nih.gov/disorders/stroke/preventing_stroke.htm
- ❑ CDC Division for Heart Disease and Stroke Prevention: http://www.cdc.gov/DHDSP/
- ❑ Free help to quit smoking: 1 -800-NOBUTTS (662-8887)

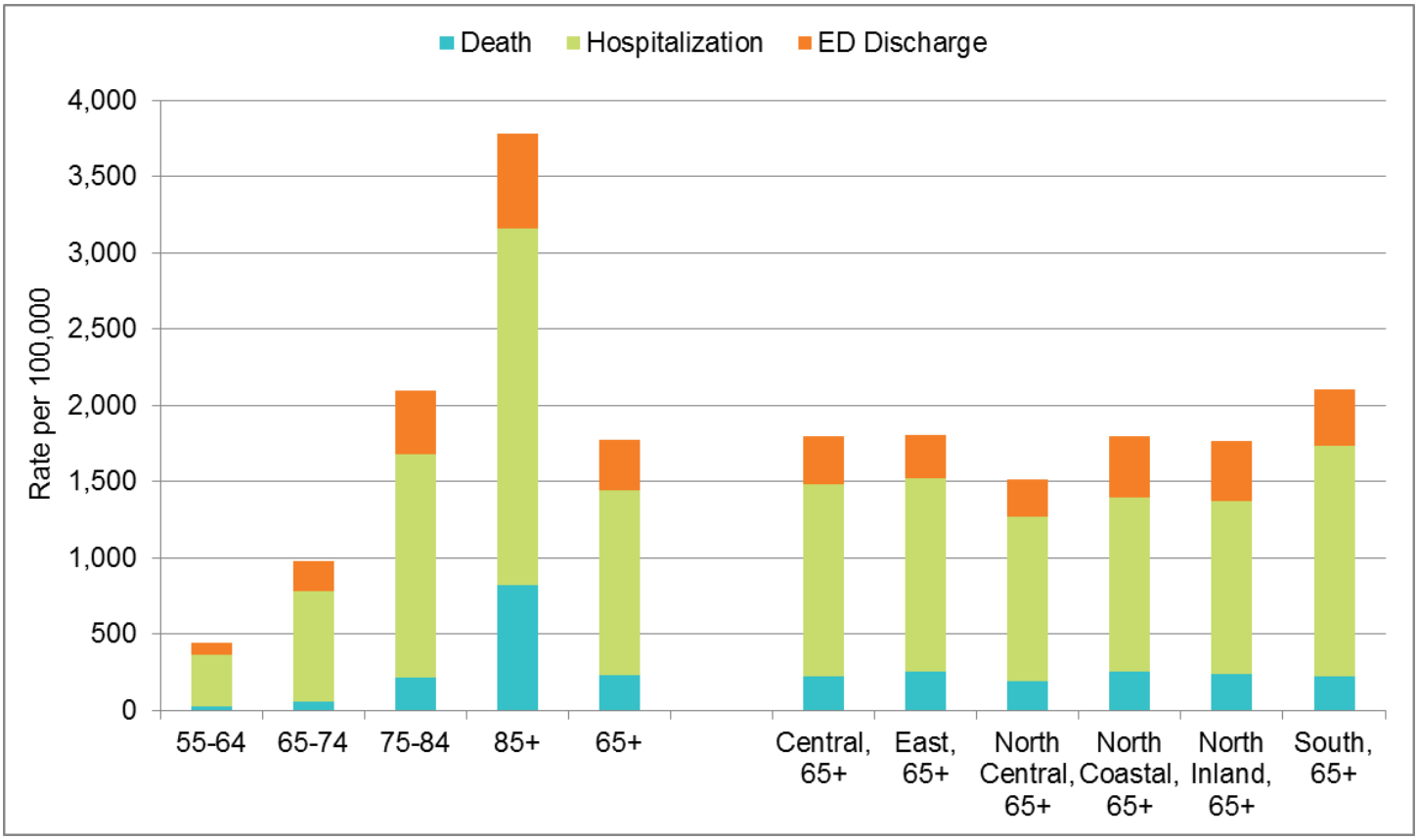
Stroke in San Diego County

According to CHIS, in 2012 6.5% of San Diego County residents aged 65 years and older have been told by a doctor that they have had a stroke, compared to 8.5% of California residents. The following data show the rates of medical encounter and death due to stroke in San Diego County.

In 2012, there were 856 seniors who died due to a stroke (228.6 per 100,000). The death rates increased sharply with age. Death rates due to stroke did not seem to greatly vary among the HHSA Regions.

That year, there were an additional 4,544 hospitalizations (1,213.2 per 100,000) and 1,244 emergency department discharges (332.1 per 100,00) for seniors aged 65 years and older with a principal diagnosis of stroke. Both hospitalization and ED discharge rates were significantly higher for 85+ year-olds than other age groups. Seniors living in the South Region of San Diego County had the highest rate of stroke hospitalization, whereas seniors in the North Coastal and North Inland Regions had the highest rate of stroke ED discharge.

Figure 54. Overall Burden of Stroke, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

Asthma

Asthma is a common chronic lung disease that causes inflammation and constriction of the airways (bronchial tubes). When the muscles of the bronchial walls tighten, extra mucus is produced that blocks airways. For people with asthma, the inside walls of their airways are very sensitive, and may react strongly to irritants such as smoke, dust or allergens.[41] This reaction causes wheezing, chest tightness, shortness of breath, coughing and trouble breathing.

Asthma typically develops as a child. Risk factors include family history, frequent childhood respiratory infections, exposure to secondhand smoke, residence in an urban area, occupational triggers, allergies, low birth weight and being overweight. Asthma cannot be cured, but adults with the disease can prevent life-threatening attacks by taking control of treatment through medication and consistent management of the disease, identifying and avoiding triggers, monitoring breathing, and treating attacks early.

Additional Resources

- ❑ American Lung Association: http://www.lungusa.org
- ❑ Medline Plus: http://www.nlm.nih.gov/medlineplus/asthma.html
- ❑ CDC Asthma Program: http://www.cdc.gov/asthma/faqs.htm
- ❑ Asthma and Allergy Foundation of America, 1-800-7-ASTHMA: www.aafa.org
- ❑ San Diego Regional Asthma Coalition, (619) 297-3901: www.sdrac.org
- ❑ Free help to quit smoking: 1-800-NOBUTTS (662-8887)

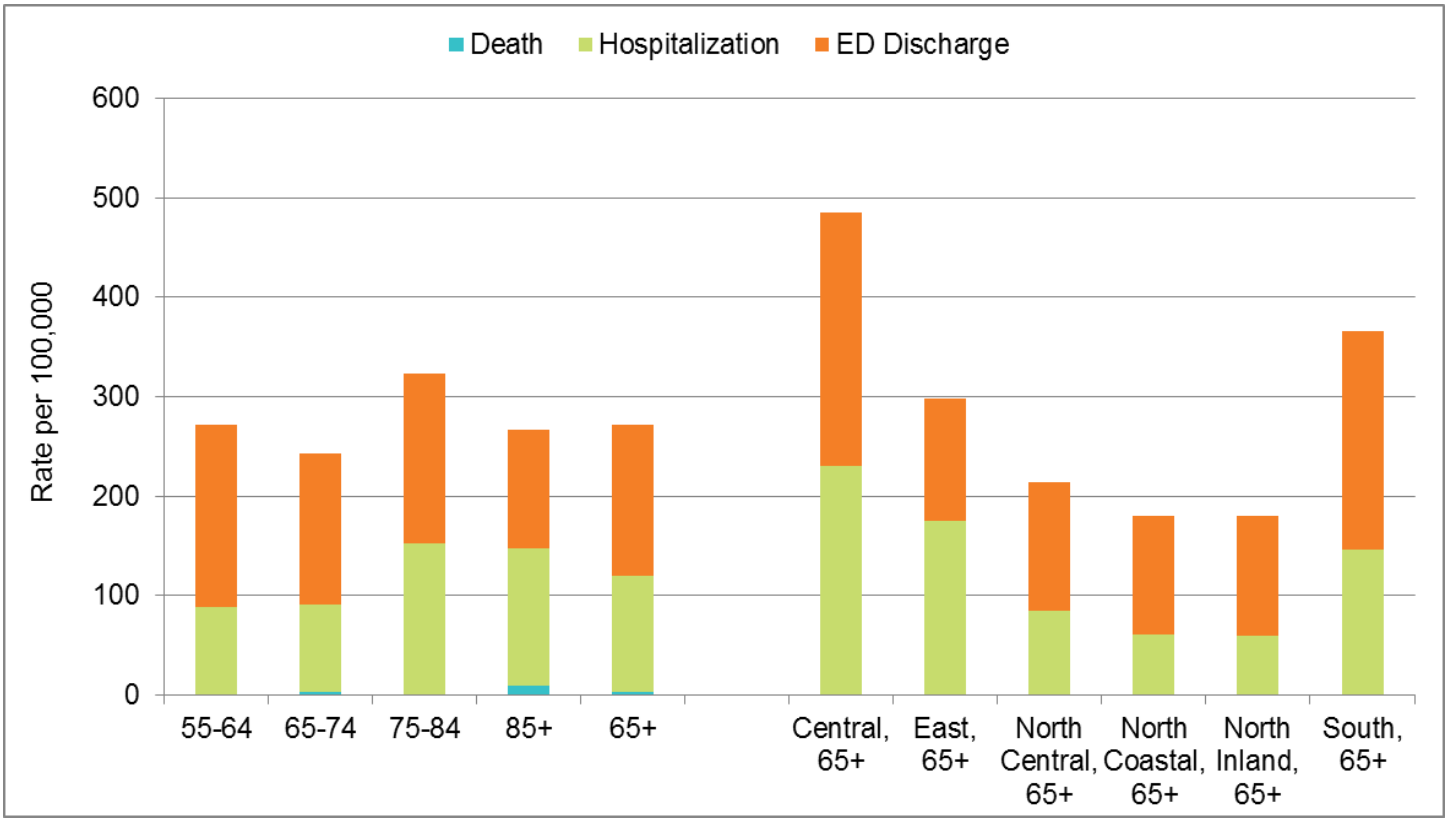
Asthma in San Diego County

According to CHIS, in 2012, 10.2% of San Diego County residents aged 65 years and older have been told by a doctor that they have asthma, compared to 12.0% of California residents. Of those San Diego County seniors who have asthma, during the 12 months prior to the survey, 8.2% had to visit a hospital emergency room or urgent care clinic because of their asthma, compared to 8.5% of California seniors. The following data show the rates of medical encounter and death due to asthma in San Diego County.

In 2012, there were 14 seniors who died with an underlying cause of asthma (3.7 per 100,000). However, there were significantly higher rates of hospitalization and ED discharge due to asthma. That year, 436 seniors were hospitalized with a principal diagnosis of asthma (116.4 per 100,000). Rates were similar between the 55-64 and 65-74 year old age groups and between the 75-84 and 85+ year old age groups. Seniors living in the Central and South Regions of San Diego County had the highest rates of asthma hospitalization.

In addition, 570 seniors were treated and discharged from a San Diego County emergency department for asthma (152.2 per 100,000). The rate was highest for 55-64 year olds and generally decreased with increasing age. Similar to asthma hospitalization rates, asthma ED discharge rates were highest among the Central and South Regions of the county.

Figure 55. Overall Burden of Asthma, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.
*Rates not calculated on fewer than five events.

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

Chronic Obstructive Pulmonary Diseases (COPD)

Chronic Obstructive Pulmonary Disease, or COPD, is a leading cause of death, illness and disability and refers to a group of diseases including bronchitis and emphysema that block airflow and cause breathing related problems. COPD gets worse over time, and can cause coughing that produces large amounts of mucus, wheezing, shortness of breath, and chest tightness, making it hard to breathe. With COPD, less air flows in and out of the airways because either the airways and sacs become less elastic, the walls between air sacs are destroyed, the airway walls become thick and inflamed, or the airways make more mucus than usual.[42]

Cigarette smoking, including second-hand smoke, is the leading risk factor for COPD. Other risk factors include asthma, long-term exposure to air pollutants or chemical fumes, family history, and frequent respiratory infections. Prevention of COPD includes avoiding tobacco smoke and air pollutants and controlling respiratory infections.

Additional Resources

- ❑ American Lung Association: http://www.lungusa.org
- ❑ Medline Plus: COPD http://www.nlm.nih.gov/medlineplus/copdchronicobstructivepulmonarydisease.html
- ❑ CDC COPD: http://www.cdc.gov/copd/
- ❑ National Heart Lung and Blood Institute, Lung Diseases Information: http://www.nhlbi.nih.gov/health/public/lung/index.htm#copd
- ❑ Free help to quit smoking: 1-800-NOBUTTS (662-8887)

COPD in San Diego County

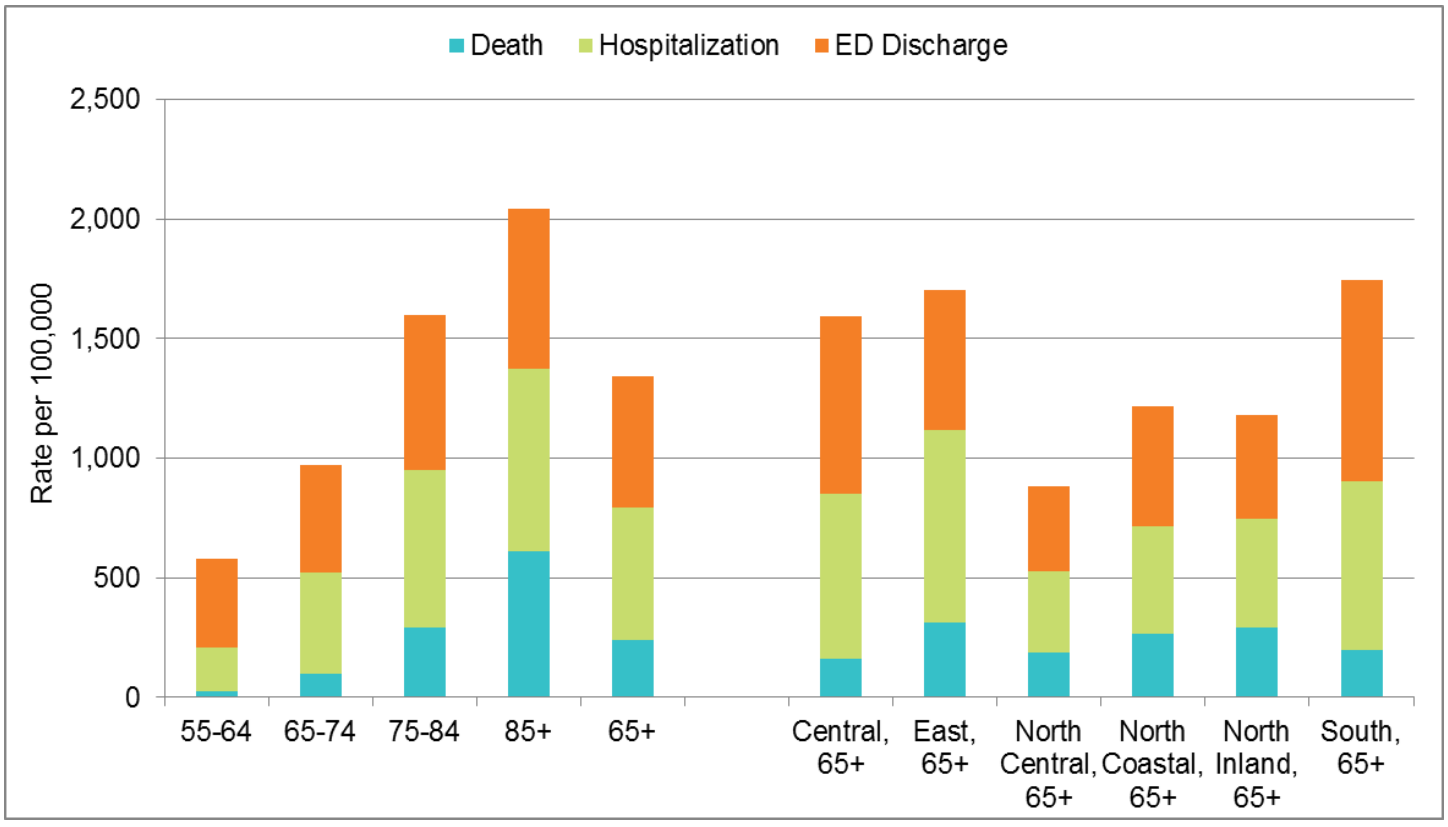
The following data show the rates of medical encounter and death due to COPD in San Diego County.

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

In 2012, there were 902 seniors who died due to COPD (240.8 per 100,000). The death rate increased significantly with increasing age group, and was highest for seniors living in the East, North Inland, and North Coastal Regions of San Diego County.

Additionally, 2,061 seniors were hospitalized (550.3 per 100,000) and 2,057 were treated and discharged from an emergency department for COPD (549.2 per 100,000). Both hospitalization and ED discharge rates were highest among 85+ year olds. Seniors living in the Central, East, and South Regions of the county had the highest rates of hospitalization and ED discharge due to COPD compared to other regions in the county.

Figure 56. Overall Burden of COPD, Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

NON-COMMUNICABLE (CHRONIC) DISEASE INDICATORS

Arthritis

Arthritis is the most common cause of disability in the United States. The word “arthritis” means joint inflammation, and is used to describe more than 100 rheumatic diseases and conditions that affect the joints, tissues surrounding the joint and other connective tissue. Common forms of arthritis include fibromyalgia, general arthritis, gout, osteoarthritis, rheumatoid arthritis and lupus.[43] Common symptoms include pain, aching, stiffness, and swelling in or around the joints.

Arthritis affects people of all ages and racial/ethnic groups, but is more common among women and older adults. Osteoarthritis is the most common form of arthritis among older adults, and is even more common among those who are overweight or have an injured joint.[44] More than half of adults with diabetes or heart disease also have arthritis. Reduction of symptoms and improvements to the quality of life for people suffering from arthritis can be achieved through self-management education programs, increased physical activity, weight control, and early diagnosis and treatment.

Additional Resources

- Arthritis Foundation: http://www.arthritis.org/
- Medline Plus: Arthritis http://www.nlm.nih.gov/medlineplus/arthritis.html
- CDC Arthritis Program: http://www.cdc.gov/arthritis/
- National Institute of Arthritis and Musculoskeletal and Skin Diseases: http://www.niams.nih.gov/health_info/Arthritis/default.asp

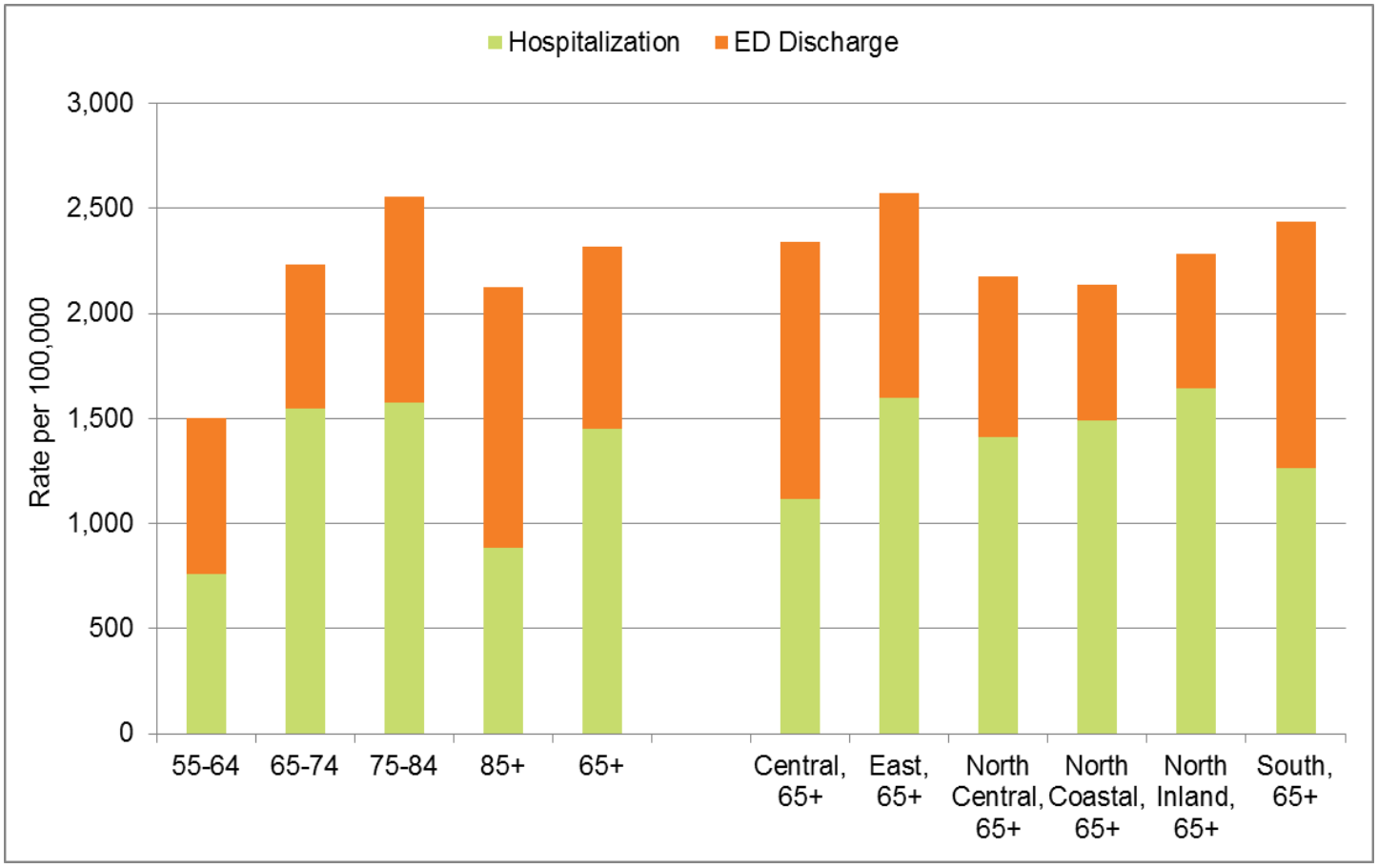
Arthritis in San Diego County

According to CHIS, in 2012, 46.3% of San Diego County residents aged 65 years and older have been told by a doctor that they have arthritis, compared to 50.5% of California residents. Of those San Diego County seniors who have arthritis, 70.1% feel that their activities are limited by their arthritis, compared to 72.5% of California seniors. The following data show the rates of medical encounter due to arthritis in San Diego County.

In 2012, there were 5,429 seniors hospitalized for arthritis (1,449.5 per 100,000). The rate was highest among 75 to 84 year-olds, and seniors living in the East and North Inland Regions of San Diego County had the highest rate of arthritis hospitalization.

In addition, 3,242 seniors were treated and discharged from a San Diego County emergency department due to arthritis (865.6 per 100,000). The rate was higher for 85+ year-olds compared to other age groups. Compared to other HHSA Regions, Central and South Region had higher rates of ED discharge due to arthritis.

Figure 57. Overall Burden of Arthritis, San Diego County, 2012



Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

CHAPTER

8

MENTAL AND BEHAVIORAL HEALTH INDICATORS

MENTAL AND BEHAVIORAL HEALTH INDICATORS

Mental and Behavioral Health

Mental and behavioral health is an important factor that contributes to the disease burden of the elderly. An estimated 20% of older adults aged 55 years and older experience some type of mental health concern.[13] The most common conditions include anxiety and mood disorders such as depression. The risk of depression increases for the elderly when other illnesses are present, and when the ability to function normally becomes limited.[45] Loneliness may also set in as the social circle that has been developed over a lifetime diminishes or changes, as friends and family members die or become ill. These physical and social changes often lead to depression, making it even more difficult to get out and make new social contacts or to be active. This in turn can lead to diminished health.

Older persons with depression rarely seek treatment for the illness, which leads to the increased risk of suicide. However, depression and other mental illnesses can be treated with appropriate medical care and medication, if necessary. Also, programs are offered throughout San Diego County to encourage social interaction and promote wellness among seniors. A directory of these programs and services can be found at http://sandiego.networkofcare.org/aging/

Additional Resources

- ❑ San Diego County, Behavioral Health Services: http://www.sandiegocounty.gov/hhsa/programs/bhs/
- ❑ Medline Plus, Depression – elderly: http://www.nlm.nih.gov/medlineplus/ency/article/001521.htm
- ❑ National Institute of Mental Health: http://www.nimh.nih.gov/health/topics/older-adults-and-mental-health/index.shtml
- ❑ SAMHSA: http://www.oas.samhsa.gov/aging/chap1.htm

Behavioral Health in San Diego County

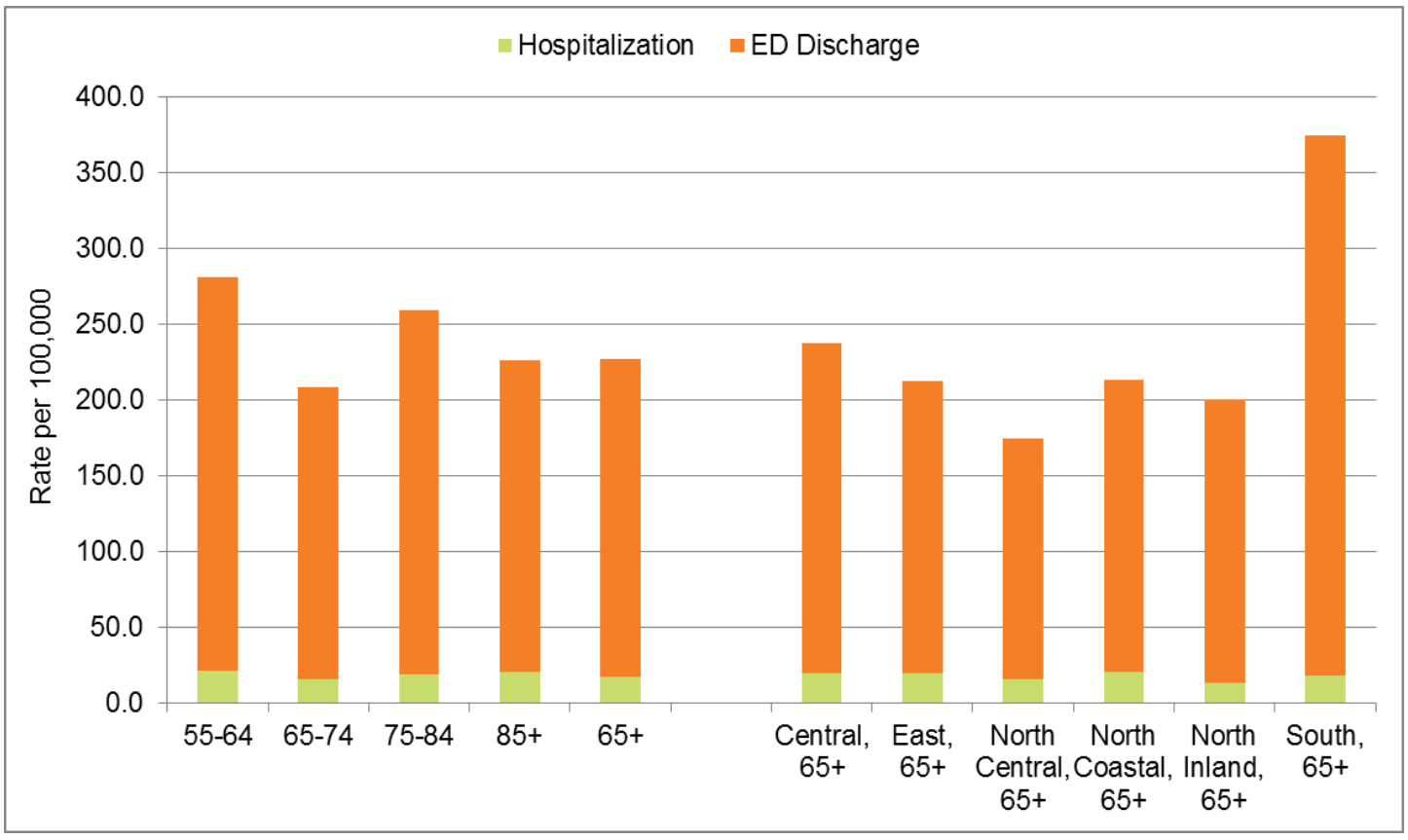
In San Diego County, 8.0% of adults aged 65 years and older needed help for an emotional, mental health, or alcohol/drug problem in 2012. Of those, 65.5% saw their primary care physician or another professional for their problems. The following data show the rates of medical encounter due to various behavioral health indictors among seniors in San Diego County.

Anxiety Disorder-Related

In 2012, 65 seniors were admitted to a hospital for an anxiety disorder-related condition (17.4 per 100,000). The hospitalization rate for an anxiety-disorder related condition was highest among seniors between the ages of 55-64 years old. North Inland Region had the lowest rate of anxiety disorder-related hospitalization whereas North Coastal Region had the highest rate.

A greater number of seniors (N=786) were treated and discharged from an emergency department due to an anxiety disorder-related condition (209.9 per 100,000). Seniors in the 55-64 year old and 75-84 year old age groups had the highest rates of anxiety disorder-related hospitalization. Compared to other HHSA Regions, South Region was disproportionately affected by anxiety disorder-related ED discharge among its seniors. In fact, South Region's rate was 1.7 times higher than the overall county rate for anxiety disorder-related ED discharge for seniors.

Figure 58. Overall Burden of Anxiety Disorder-Related Indicators, San Diego County, 2012



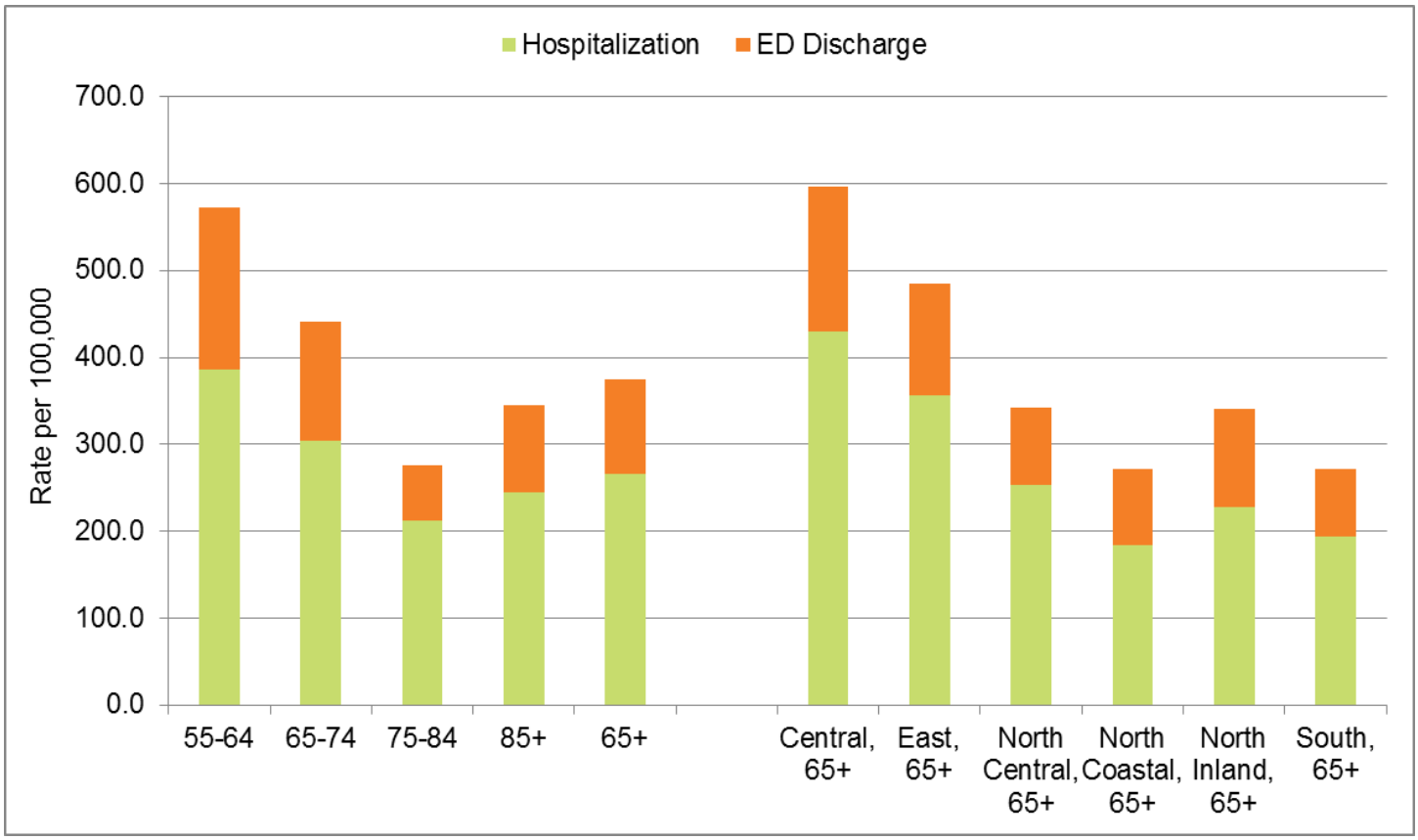
Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Mood Disorder

In 2012, 997 seniors were hospitalized due to a mood disorder (266.2 per 100,000). Compared to other older age groups, the mood disorder hospitalization rate was highest among seniors aged 55-64 years old (385.7 per 100,000). In fact, seniors in the 55-64 year old age group had a mood disorder hospitalization rate 1.5 times higher than those aged 65 years and older.

A smaller number of seniors (N=404) were treated and discharged from an emergency department for a mood disorder (107.9 per 100,000). Similar to the hospitalization rate, the ED discharge rate for mood disorder was highest among seniors aged 55-64 years old. Central Region had the highest rates of hospitalization and ED discharge due to a mood disorder.

Figure 59. Overall Burden of Mood Disorder Indicators, San Diego County, 2012



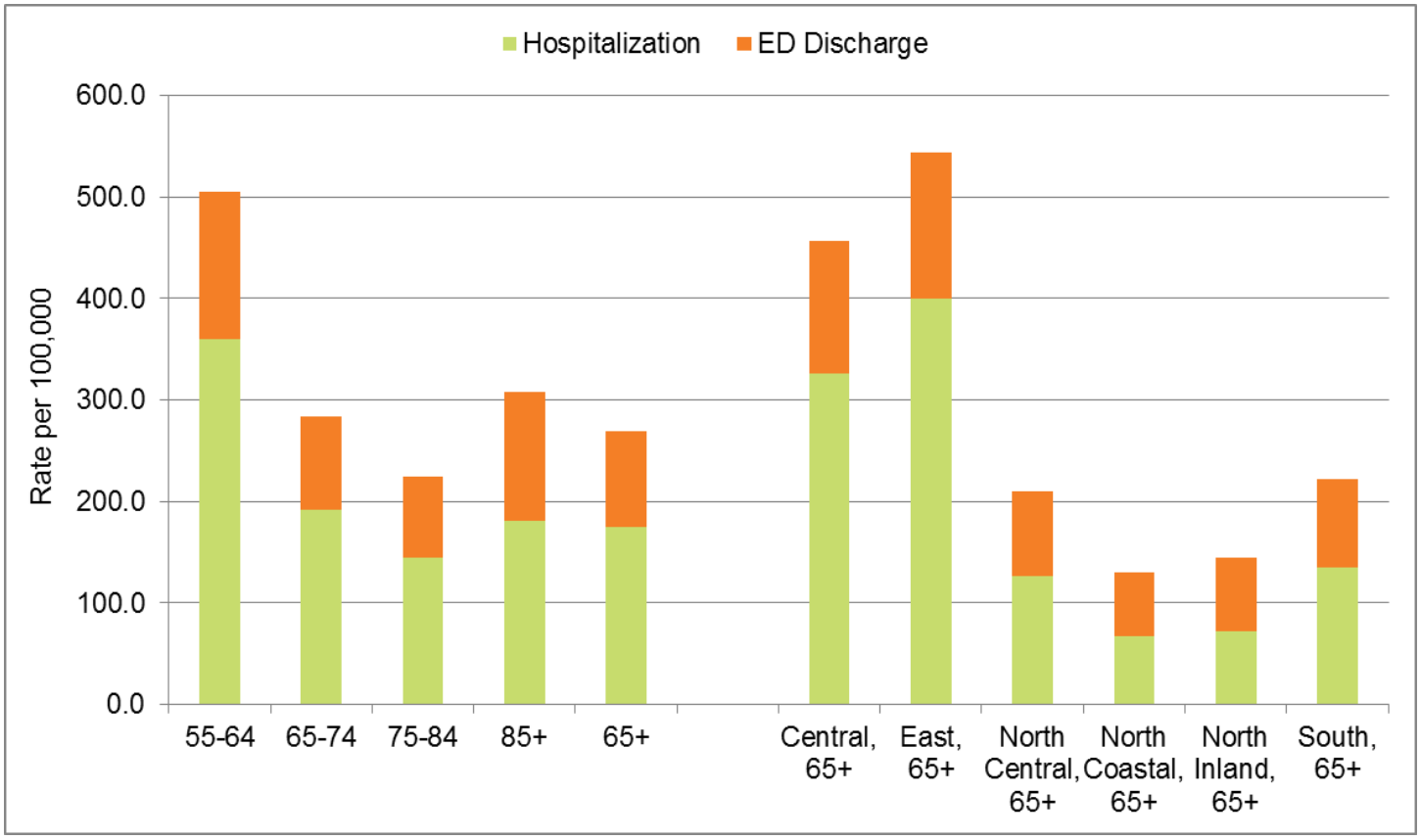
Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Schizophrenia and Other Psychotic Disorders

In 2012, 655 seniors aged 65 years and older were admitted to a hospital (174.9 per 100,000) and 352 seniors were treated and discharged from an emergency department (94.0 per 100,000) for schizophrenia or other psychotic disorders.

Among older age groups, seniors between the ages of 55-64 years old had the highest hospitalization and ED discharge rates for schizophrenia or other psychotic disorders. For seniors aged 65 years and older, the Central and East Regions of the county had the highest hospitalization and ED discharge rates due to schizophrenia or other psychotic disorders.

Figure 60. Overall Burden of Schizophrenia and Other Psychotic Disorders, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

MENTAL AND BEHAVIORAL HEALTH INDICATORS

Self-Inflicted Injury/Suicide

In the United States, suicide rates among older adults exceed those among younger age groups.[46] There is an average of one suicide among the elderly in the U.S. every 90 minutes.[47] In San Diego County, suicide is the leading cause of non-natural death among adults aged 55-64 years and the second leading cause of non-natural death among adults aged 75 years and older, making suicide a serious public health concern.[48]

More than 90% of people who commit suicide have a diagnosable and treatable psychiatric illness, such as major depression, alcohol or drug abuse, eating disorders, or personality disorders.[49] Older white males are at the highest risk for suicide.[49] Other risk factors include past history of attempted suicide, a precipitating event such as loss of a spouse or friend(s), talk such as "my family would be better off without me," suddenly putting affairs in order, buying a gun, deterioration in functioning, money worries, poor health, family conflict, and social isolation.[47] In addition, men make fewer attempts per completed suicide.[50]

If there is suspicion of depression or suicidal thoughts for a loved one, it is important to seek medical advice right away. Stress among the elderly can be managed by maintaining an active social life, living a healthy lifestyle, engaging in volunteer work, thinking positive, sharing feelings, and eliminating harmful behaviors such as smoking and drinking.

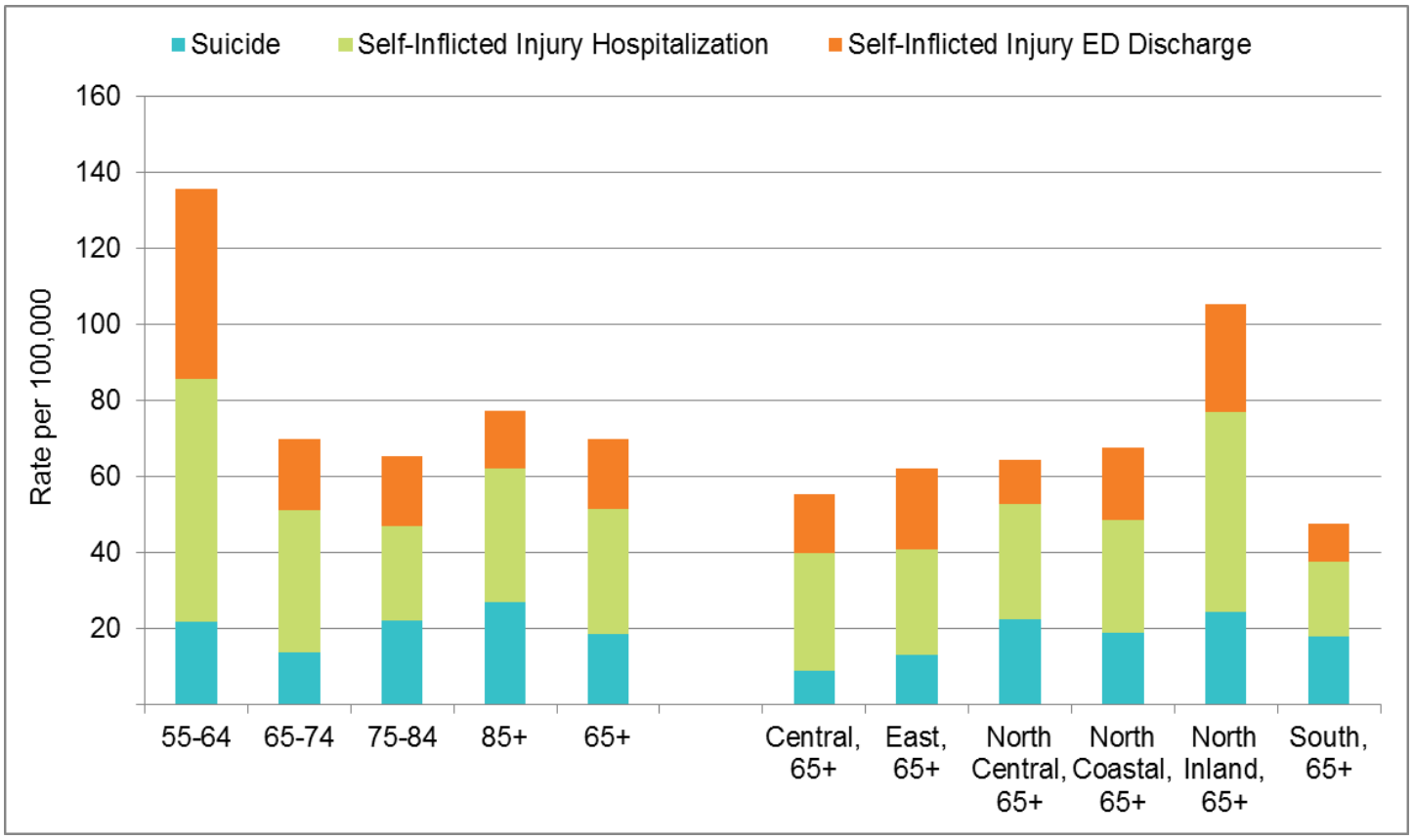
Additional Resources

- ❑ San Diego County 24-Hour Suicide Hotline: 1-800-479-3339
- ❑ USA Suicide Hotline: 1-800-SUICIDE
- ❑ American Association of Suicidology: www.suicidology.org
- ❑ Suicide Prevention Action Network USA: www.spanusa.org
- ❑ American Foundation for Suicide Prevention: www.afsp.org
- ❑ Yellow Ribbon Suicide Prevention Program, San Diego: www.yellowribbonsd.org

In 2012, there were 69 seniors aged 65 years and older who died with an underlying cause of death of suicide (18.4 per 100,000). Among older age groups, the suicide rate was highest among individuals aged 85 years and older (26.8 per 100,000). Seniors living in the North Central and North Inland regions of the county experienced the highest suicide rates.

In addition, 124 seniors were hospitalized (33.1 per 100,000) and 68 seniors were treated and discharged from an emergency department (18.2 per 100,000) due to self-inflicted injury. In contrast to self-inflicted injury resulting in death (suicides), self-inflicted injury hospitalization and ED discharge rates were highest among 55-64 year olds, with 63.8 per 100,000 and 50.0 per 100,000, respectively. Compared to other HHSA Regions, North Inland Region had the highest hospitalization and ED discharge rates due to self-inflicted injury (52.7 per 100,000 and 28.3 per 100,000, respectively).

Figure 61. Overall Burden of Self-Inflicted Injury/Suicide, San Diego County, 2012



Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

MENTAL AND BEHAVIORAL HEALTH INDICATORS

Alcohol and Substance Use

Alcohol and substance abuse is a health concern for all age groups, but can affect seniors differently. Drinking or abusing substances at an older age can complicate treatment for other medical conditions, reduce the ability to function, increase the risk of injuries (e.g., falls), cause negative interactions with prescription medications, and worsen existing health conditions (e.g., osteoporosis).[51]

Seniors with alcohol or substance abuse issues often do not seek professional help. Furthermore, these conditions may be overlooked by providers who may mistake the symptoms for dementia, depression, or other problems common among seniors. However, many resources exist to help individuals, including seniors, who may be experiencing an alcohol or substance abuse related condition.

Although alcohol affects everyone differently, the National Institute on Alcohol Abuse and Alcoholism recommends that people 65 years and older should consume no more than 7 drinks per week and no more than three drinks on any one day.[52] If taking medications, a consultation with a medical provider is necessary to determine if alcohol may be consumed at all.

Additional Resources

- ❑ San Diego County, Behavioral Health Services: http://www.sandiegocounty.gov/hhsa/programs/bhs/
- ❑ SAMHSA: http://www.oas.samhsa.gov/aging/chap1.htm
- ❑ National Institute on Alcohol Abuse and Alcoholism: http://www.niaaa.nih.gov/
- ❑ National Council on Alcoholism and Drug Dependence: https://ncadd.org/learn-about-alcohol/seniors-vets-and-women/196-alcohol-and-senior

Alcohol and Substance Use in San Diego County

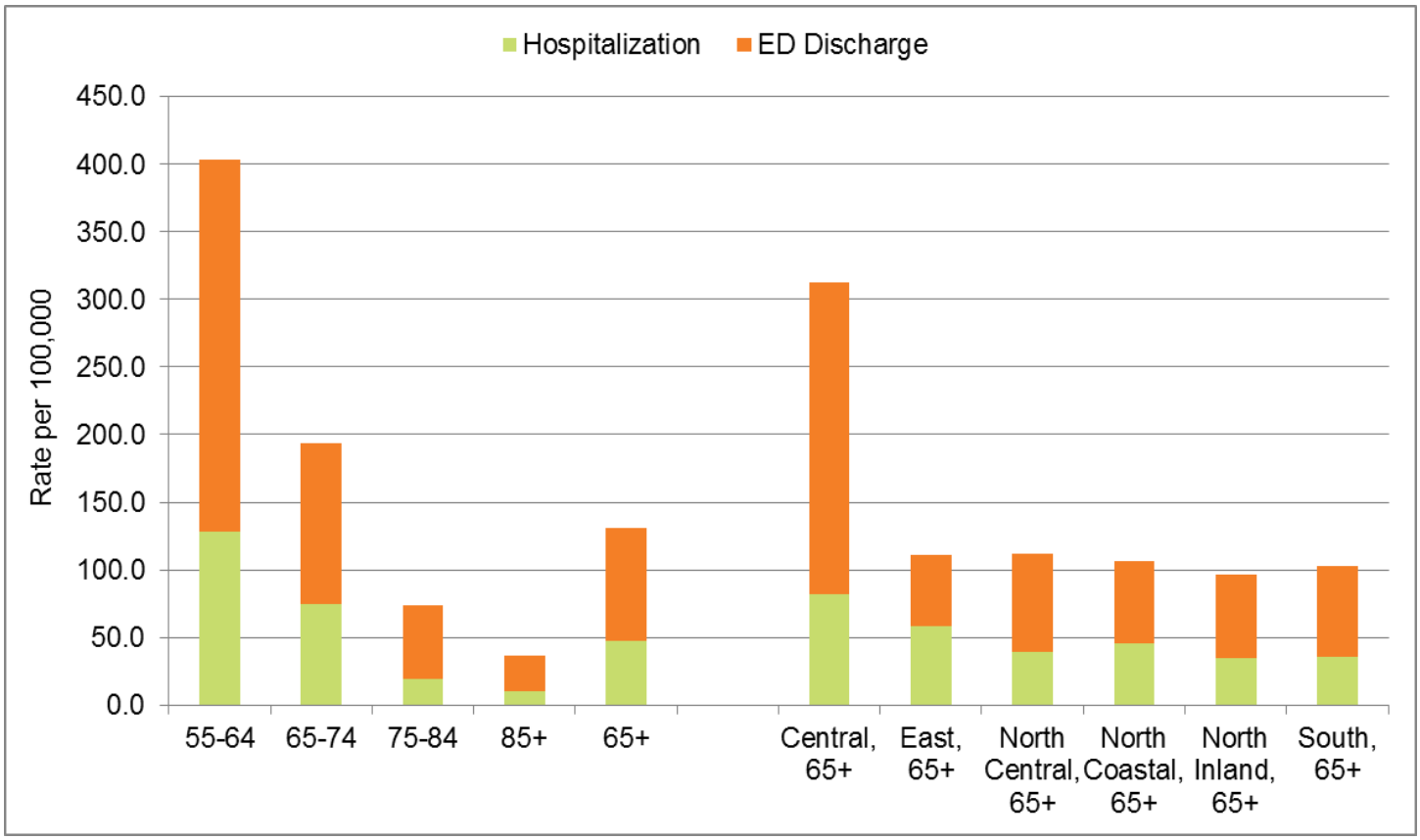
The following data show the rates of medical encounter due to acute alcohol and substance related disorders among seniors in San Diego County.

Acute Alcohol-Related Disorder

In 2012, there were 177 seniors aged 65 years and older hospitalized due to an acute alcohol-related disorder (47.3 per 100,000). The hospitalization rate was highest among younger seniors in the 55-64 year old age group (128.7 per 100,00) and steadily decreased by age to 10.1 per 100,000 for the 85+ year old age group.

A greater number of seniors (N=313) were treated and discharged from an emergency department due to an acute alcohol-related disorder (83.6 per 100,000). Similar to the hospitalization rate, the ED discharge rate for an acute alcohol-related disorder was highest among the 55-64 year old age group (274.8 per 100,000) compared to other older age groups. Among the HHSA Regions, the Central Region had the highest ED discharge and hospitalization rates due to acute alcohol-related disorder.

Figure 62. Overall Burden of Acute Alcohol-Related Disorder, San Diego County, 2012



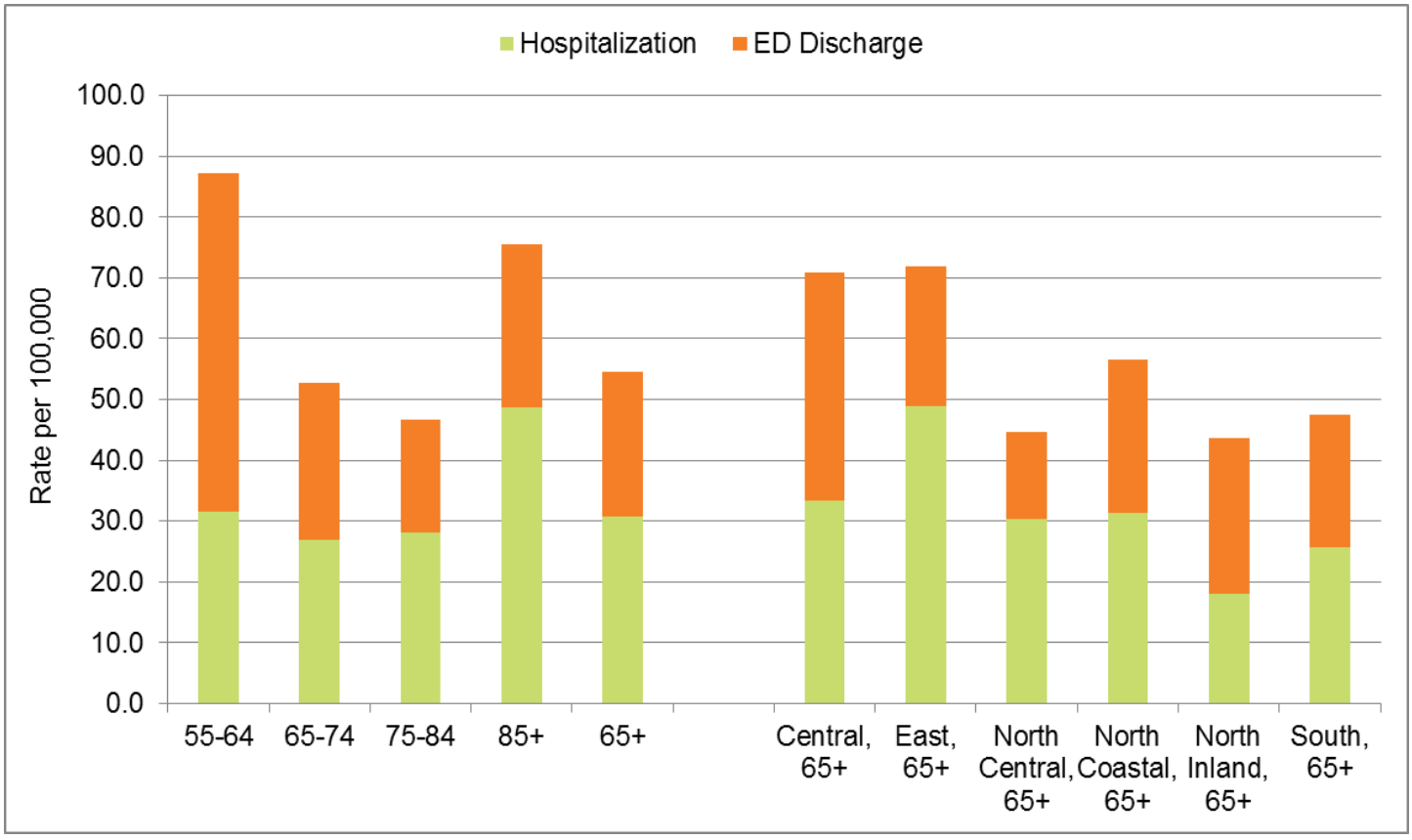
Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Acute Substance-Related Disorder

In 2012, 115 seniors aged 65 years and older were admitted to hospital due to an acute substance-related disorder (30.7 per 100,000). A smaller number of seniors (N=89) were treated and discharged from the emergency department for an acute substance-related disorder (23.8 per 100,000).

The hospitalization rate was highest among seniors aged 85 years and older, whereas the ED discharge rate was higher among younger seniors within the 55-64 year old age group. The acute substance-related disorder hospitalization rate was highest among senior residents of the East Region whereas the ED discharge rate was highest among Central Region senior residents.

Figure 63. Overall Burden of Acute Substance-Related Disorder, San Diego County, 2012



Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

CHAPTER

9

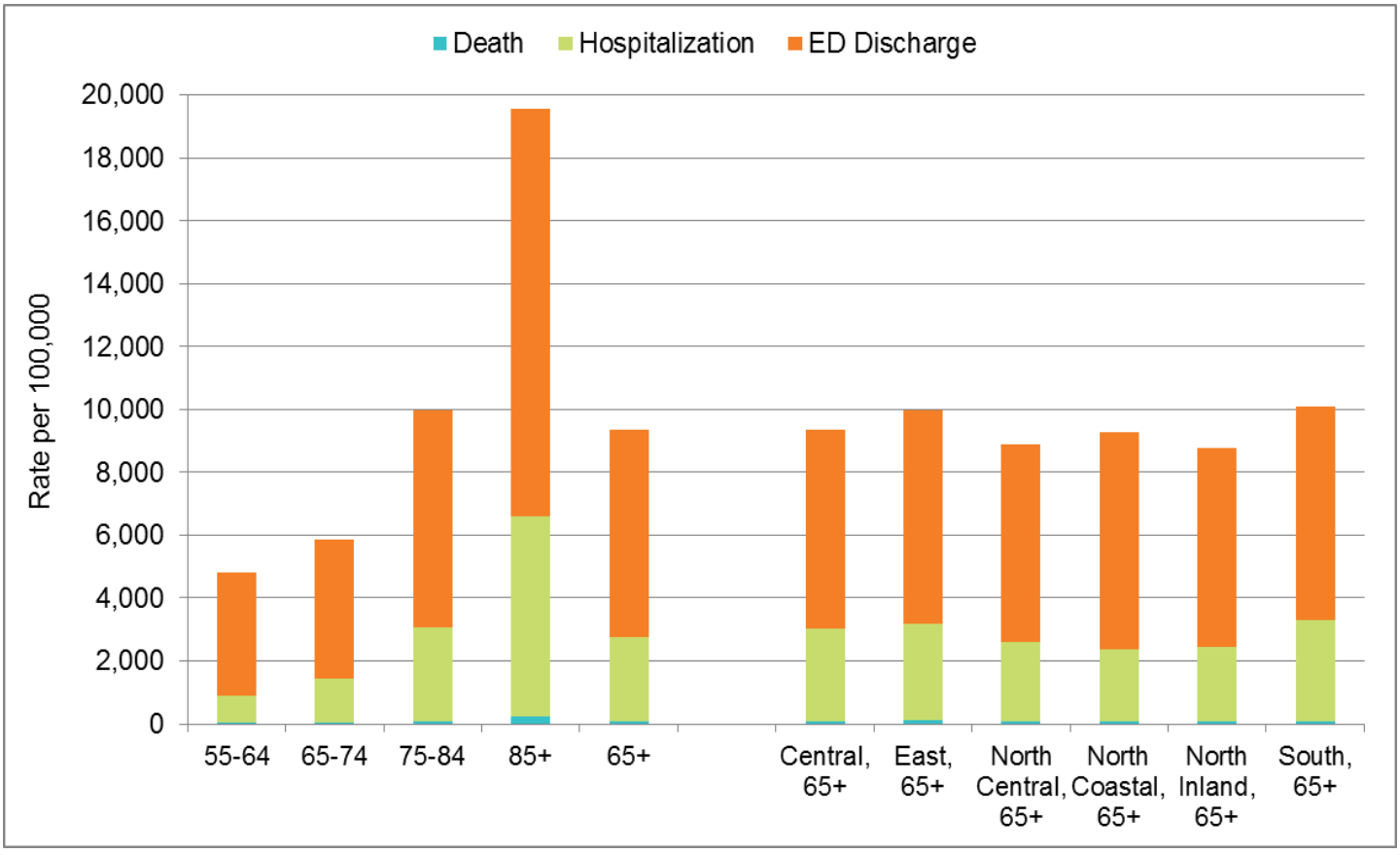
INJURY INDICATORS

UNINTENTIONAL INJURY

Unintentional (accidental) injuries are among the leading causes of death for seniors, most of which are preventable. Unintentional injuries include motor vehicle occupant crashes, falls, burns, cuts, poisonings, and other injuries. In 2012, there were 337 seniors that died due to an unintentional injury (90.0 per 100,000). The death rate increased with age to 248.0 per 100,000 for seniors aged 85+ years; nearly six times greater than 65 to 74 year-olds. The risk of death was higher for seniors living in the East and North Central Regions of San Diego County.

Additionally, 10,040 seniors were hospitalized for an unintentional injury (2,680.7 per 100,000) in 2012. The hospitalization rate increased with age to 6,335.3 per 100,000 for seniors aged 85+ years; 4.5 times greater than 65 to 74 year-olds. The risk of hospitalization was higher for seniors living in the East and South Regions of San Diego County. There were also 24,615 seniors aged 65 years and older discharged from an emergency department due to unintentional injury (6,572.1 per 100,00). ED discharge rates were similar among the HHSA Regions.

Figure 64. Overall Burden of Unintentional Injury, San Diego County, 2012



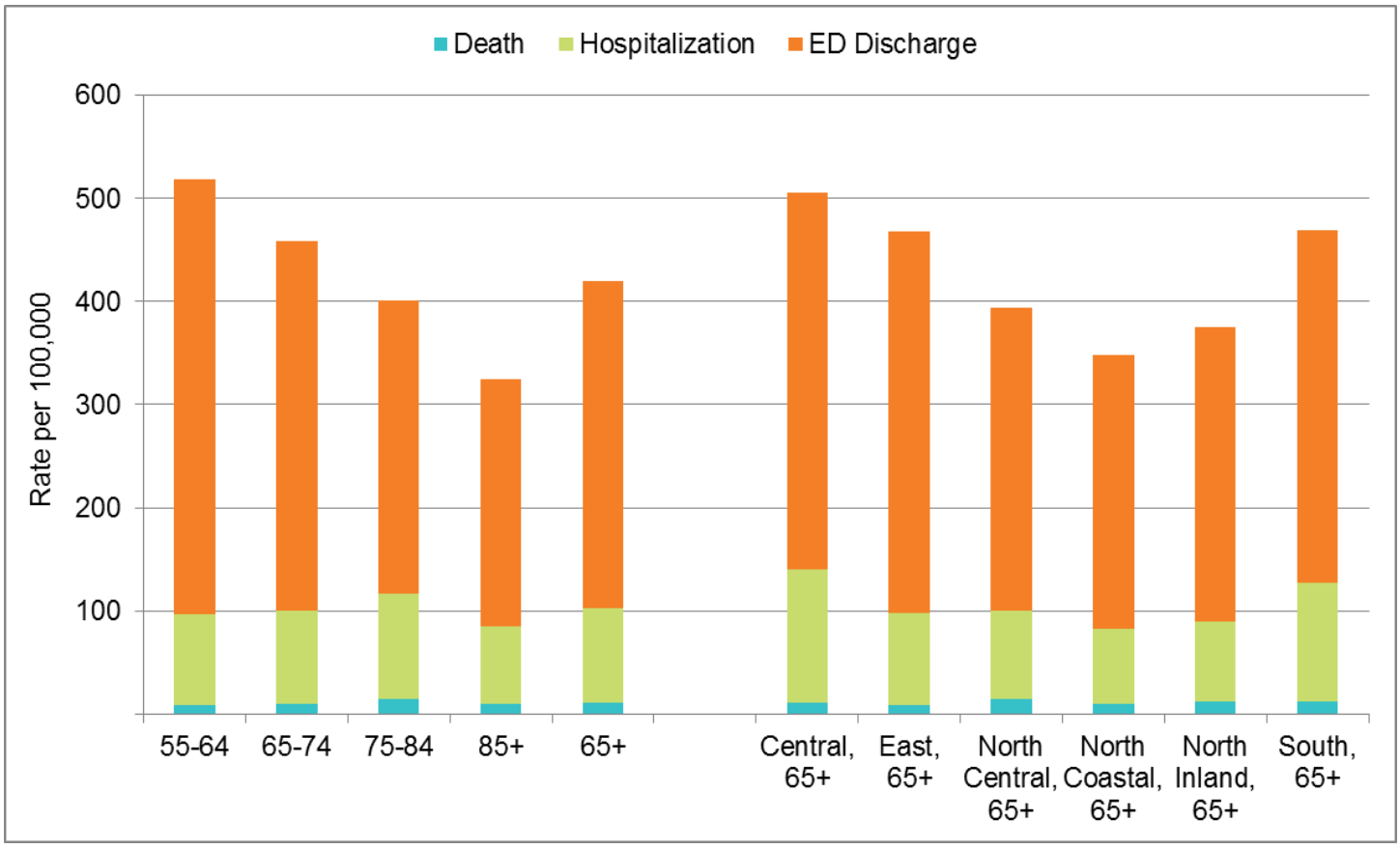
Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Motor Vehicle Injury

As adults age, their ability to navigate complex traffic situations, such as judging traffic distance and speed, detecting the direction of approaching traffic, and using pedestrian signals appropriately, decreases. In 2012, 42 seniors died due to motor vehicle injury (11.2 per 100,000), which included occupants, pedestrians, and cyclists. The death rate due to motor vehicles was highest among the 75-84 year old age group, and seniors living in the North Central Region had a higher death rate compared to other HHSA Regions.

There were an additional 344 hospitalizations (91.8 per 100,000) and 1,184 emergency department discharges (316.1 per 100,000) among seniors due to motor vehicle injury. The motor vehicle injury hospitalization rate was highest among the 75-84 year old age group, whereas the ED discharge rate was highest for 65 to 74 year olds. The Central, East, and South Regions of the county had the highest rates of hospitalization and ED discharge due to motor vehicle injury.

Figure 65. Overall Burden of Motor Vehicle Injury, San Diego County, 2012



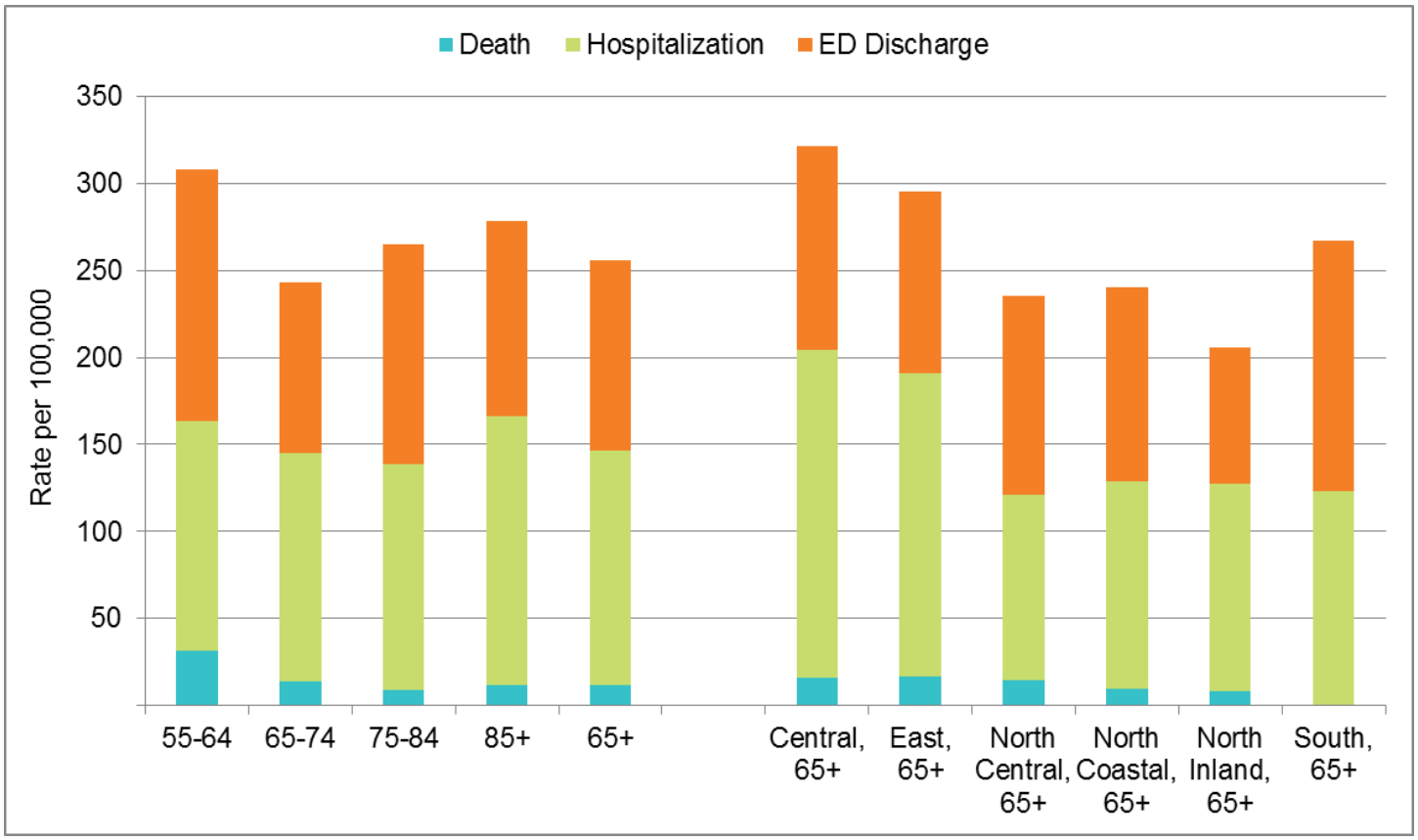
Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

OVERDOSE/POISONING

In 2012, there were 44 seniors that died with an underlying cause of death of overdose/poisoning (11.7 per 100,000). The death rate was highest among seniors aged 55-64, and for seniors ages 65 and over living in the Central and East Regions of San Diego County.

In addition, 504 seniors were hospitalized (134.6 per 100,00) and 409 seniors were treated and discharged from an emergency department (109.2 per 100,000) for overdose/poisoning. Seniors in the 85+ year old age group had the highest hospitalization rate for overdose/poisoning, whereas those in the 55-64 year old age group had the highest ED discharge rate. Seniors aged 65 years and older living in the Central Region of the county were more likely to be hospitalized due to overdose/poisoning, and those living in the South Region were more likely to be discharged from an emergency department compared to other regions of the county.

Figure 66. Overall Burden of Overdose/Poisoning, San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

Heat-Related Illness

During extremely hot weather, there is a risk of developing heat exhaustion and heat stroke, which can ultimately result in organ failure, brain damage or death. After a few days of high heat, the cumulative effect will impact vulnerable populations, especially the elderly. Seniors aged 65 years and older are more likely to suffer from heat stress than younger people because they do not adjust as well to sudden changes in temperature. Seniors are also more likely to have chronic medical conditions that upset the normal physical responses to heat, and more likely to take prescription medication that weaken the body's ability to regulate temperature.[53]

Heat stroke is the most serious heat-related illness, and occurs when the body can no longer control its temperature. Signs of heat stroke include extremely high temperature, hot dry skin with no sweating, rapid strong pulse, headache, dizziness, and nausea. Heat exhaustion is milder than heat stroke and develops after several days of exposure to high temperatures and inadequate replacement of liquids. Signs of heat exhaustion include heavy sweating, paleness, muscle cramps, fatigue, weakness, dizziness, headache, nausea, rapid weak pulse, fast and shallow breathing, and cool and moist skin.[53]

In order to prevent heat-related illness, it is advised to stay cool. During high temperatures, people should drink cool, nonalcoholic beverages, rest, take cool showers, wear lightweight clothing, avoid strenuous activity and remain indoors. The County of San Diego's Aging & Independence Services' (AIS) *Cool Zone program* also offers air-conditioned locations throughout the County for people to go to beat the heat. A list of Cool Zone sites and additional tips for staying cool are located at www.ais-sd.org. Click on "View All Services" and then scroll to "Cool Zones".

Heat-Related Illness in San Diego County

In 2012, among seniors aged 65 years and older, there were 21 prehospital (9-1-1) calls specified with a 'heat-related illness' provider impression. This is likely an underestimate of the number of 9-1-1 calls for seniors whose health was affected by the heat, given that a different provider impression (e.g. headache, weak/dizzy/sick/nausea) could have been noted.

INJURY INDICATORS

Unintentional Fall Injury

Falls are the leading cause of injury death among seniors and a major cause of disability.[54] Injuries sustained in a fall range from minor bruising to major trauma, including head injuries and hip fractures. Even falls that do not result in an immediate injury can have a negative effect on seniors, such as unnecessary restriction of activity and exercise due to fear of a fall. This reduction in activity not only increases the risk of another fall, but also causes a decrease in general physical and mental health and well-being.[55]

The risk of falls increases with age and is greater for women than for men. Other risk factors include lack of physical activity, lower limb weakness or trouble walking, impaired vision, medications, low vitamin D, osteoporosis, and environmental hazards. Tips for reducing older adults' risk of falling include:

- ❑ Discuss medical risk factors with a doctor, including osteoporosis, Vitamin D level, medications, difficulty with hearing or vision, and feeling faint, off-balance or dizzy. The doctor may recommend a specialist.
- ❑ Get vision checked once a year.
- ❑ Stay active to improve strength, flexibility, and balance. Walking, dancing, Tai Chi, and exercise classes are all good ways to improve health. A physical therapist can help older adults start an exercise program.
- ❑ A doctor or pharmacist should review medications to check for side effects and interactions that can cause dizziness or affect focus and coordination.
- ❑ Most falls occur in the home. To make the home safer: remove things such as loose rugs, electrical cords, and clutter; install strong grab bars and handrails; and maintain good lighting and nightlights. As we age, older adults need more light than before.

It is also important for seniors to maintain good health by eating a healthy diet, engaging in regular physical activity, getting regular medical check-ups, and frequently reviewing medications with their doctor or pharmacist.

Additional Resources

- ❑ San Diego County Fall Prevention Task Force: www.SanDiegoFallPrevention.org
- ❑ Fall Prevention Center of Excellence: www.stopfalls.org
- ❑ CDC Injury Center: http://www.cdc.gov/HomeandRecreationalSafety/Falls/index.html

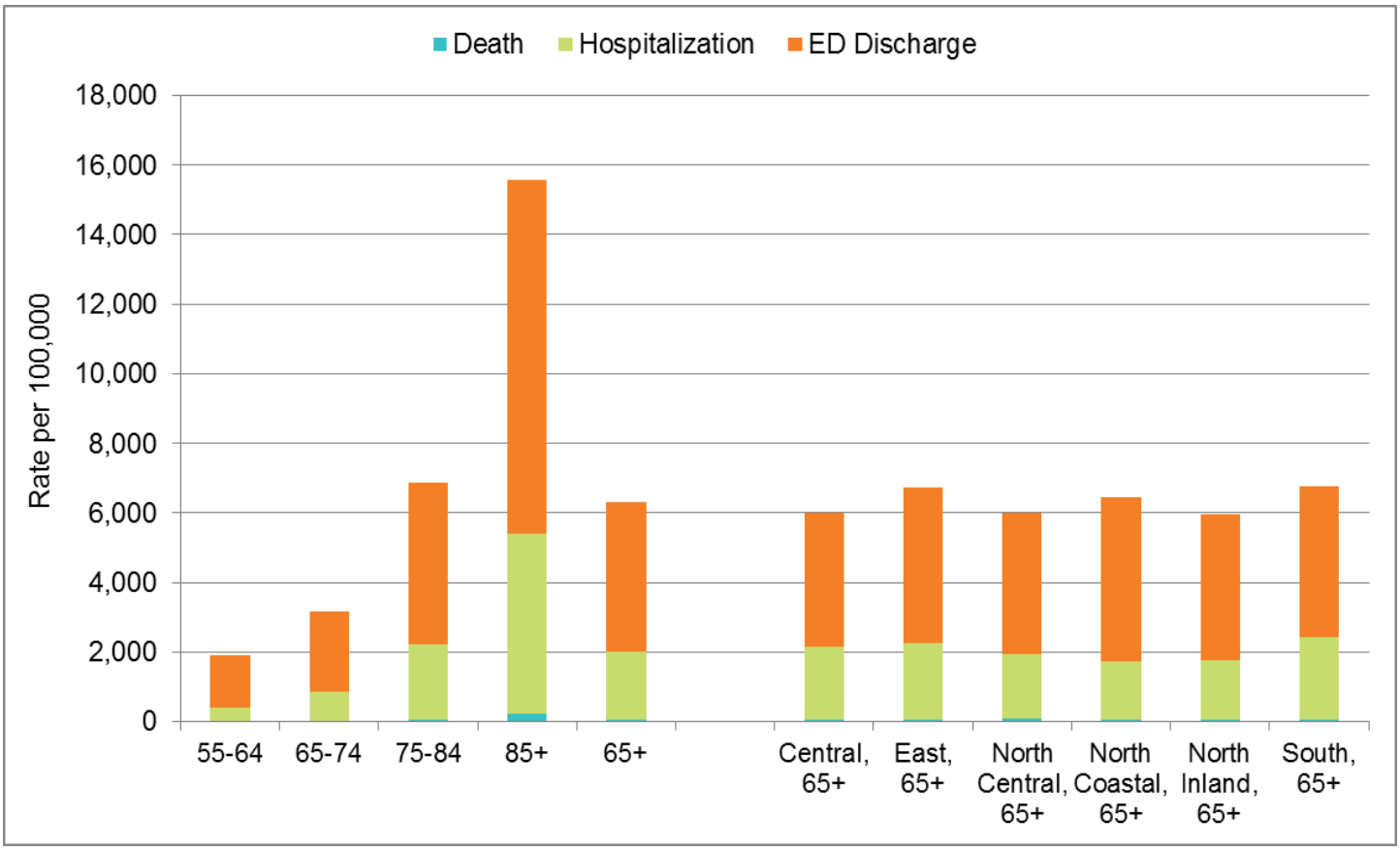
Senior Falls in San Diego County

In 2012, 45,000 seniors reported falling to the ground more than once in the past 12 months. Of those, 46% reported receiving medical care because of their fall and 42% reported talking to their health professional about how to avoid falls. The following data show the rates of medical encounter and death due to falls for seniors in San Diego County.

In 2012, there were 227 seniors who died with an underlying cause of unintentional fall injury (60.6 per 100,000). The death rate was nearly fifteen times higher for seniors aged 85+ years than for seniors aged 65 to 74 years. Seniors living in the North Central Region of the county had the highest rate of fall-related death.

That year, 7,303 seniors were also hospitalized for an unintentional fall injury (1,949.9 per 100,000). The rates increased dramatically with increasing age group, and seniors living in the South Region of San Diego County had the highest rate of fall hospitalization. Additionally, 16,076 seniors were treated and discharged from a San Diego County emergency department with a principal diagnosis of unintentional fall injury (4,292.3 per 100,000). The rate increased significantly with increasing age group to 10,185 per 100,000 among 85+ year-olds. Seniors living in the East and North Coastal Regions of San Diego County had the highest rates of ED discharge for unintentional fall injury.

Figure 67. Overall Burden of Unintentional Fall Injury, San Diego County, 2012

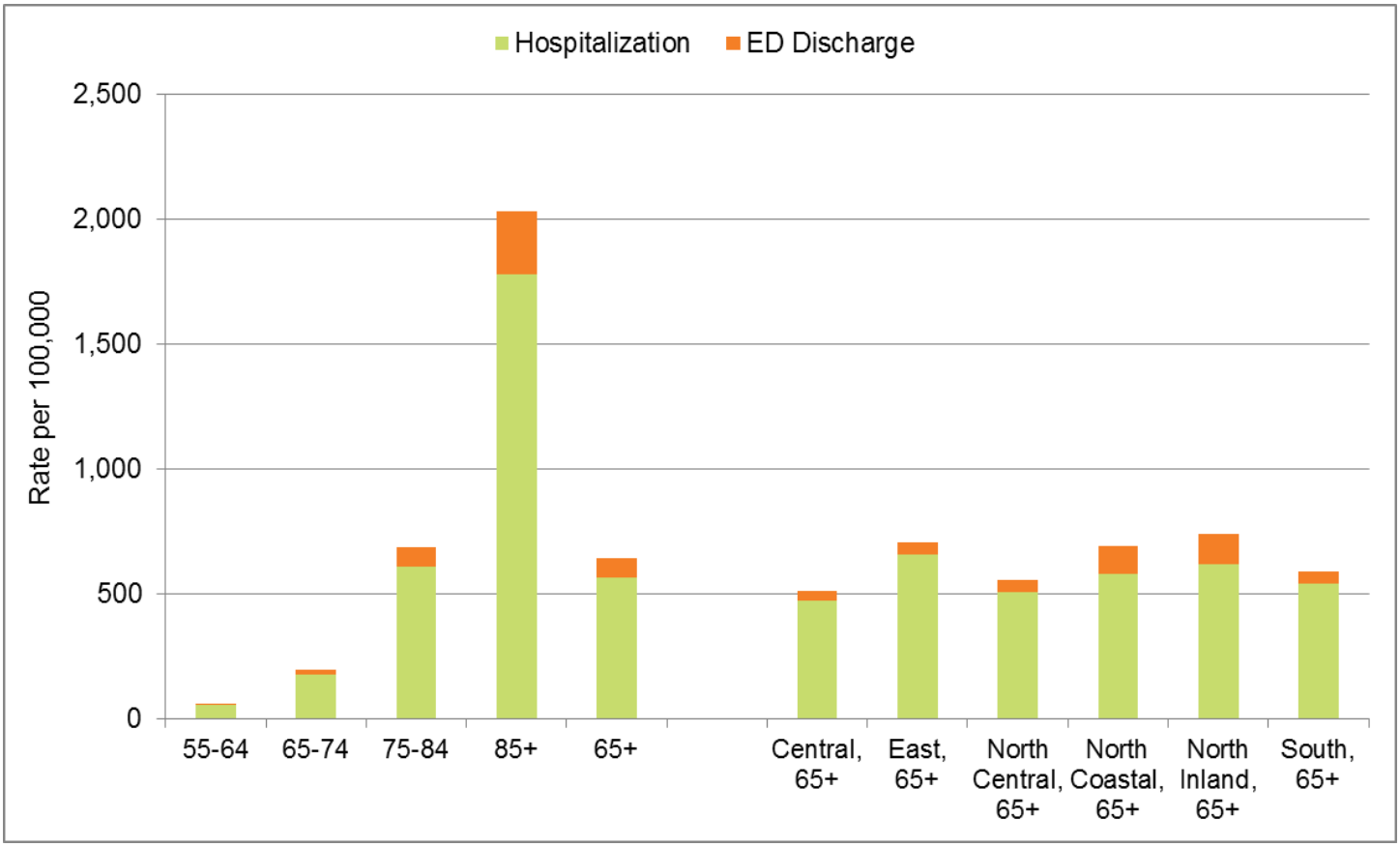


Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

HIP FRACTURE

Hip fracture is a potential complication for seniors who experience a fall injury. In 2012, there were 2,127 seniors hospitalized (567.9 per 100,000) and 279 seniors discharged from an emergency department due to a hip fracture (74.5 per 100,000). Both rates increased significantly with increasing age. The highest rate of hip fracture hospitalization occurred among seniors in the East Region of the county, whereas the North Inland Region had the highest ED discharge rate due to hip fracture.

Figure 68. Overall Burden of Hip Fracture, San Diego County, 2012



Source: Patient Discharge Database (OSHPD) and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.

INJURY INDICATORS

Elder Abuse

Elder abuse is any form of mistreatment that results in harm, risk of harm or loss to an older person,[56] and can include physical abuse, sexual abuse, domestic violence, psychological abuse, financial abuse, abandonment, or neglect. There are several possible warning signs that abuse might be occurring to an older or disabled adult. These signs include:[57]

- ❑ Injury inconsistent with the explanation;
- ❑ The elder adult has recently become confused or disoriented;
- ❑ The caregiver shows anger, indifference or aggressive behavior toward the person;
- ❑ Missing personal belongings, papers, credit cards;
- ❑ Hesitation from the elder to talk openly;
- ❑ Caregiver has a history of violence, mental illness, criminal behavior;
- ❑ Lack of necessities (food, water, medications, utilities); and
- ❑ Frequent checks made out to "cash" or another name added to bank accounts.

In San Diego County, Adult Protective Services (APS) investigates reports of elder and dependent adult abuse. Benefits of reporting abuse include:[57]

- ❑ The elder adult will be given options to keep him/her safe from harm;
- ❑ The APS worker can link the client to needed community resources;
- ❑ Unaware family members and friends can be alerted;
- ❑ The APS worker can help the caregiver handle stress;
- ❑ The abuse perpetrator can be prosecuted, lessening harm to others; and
- ❑ The reporter feels relief that a professional is assessing the situation.

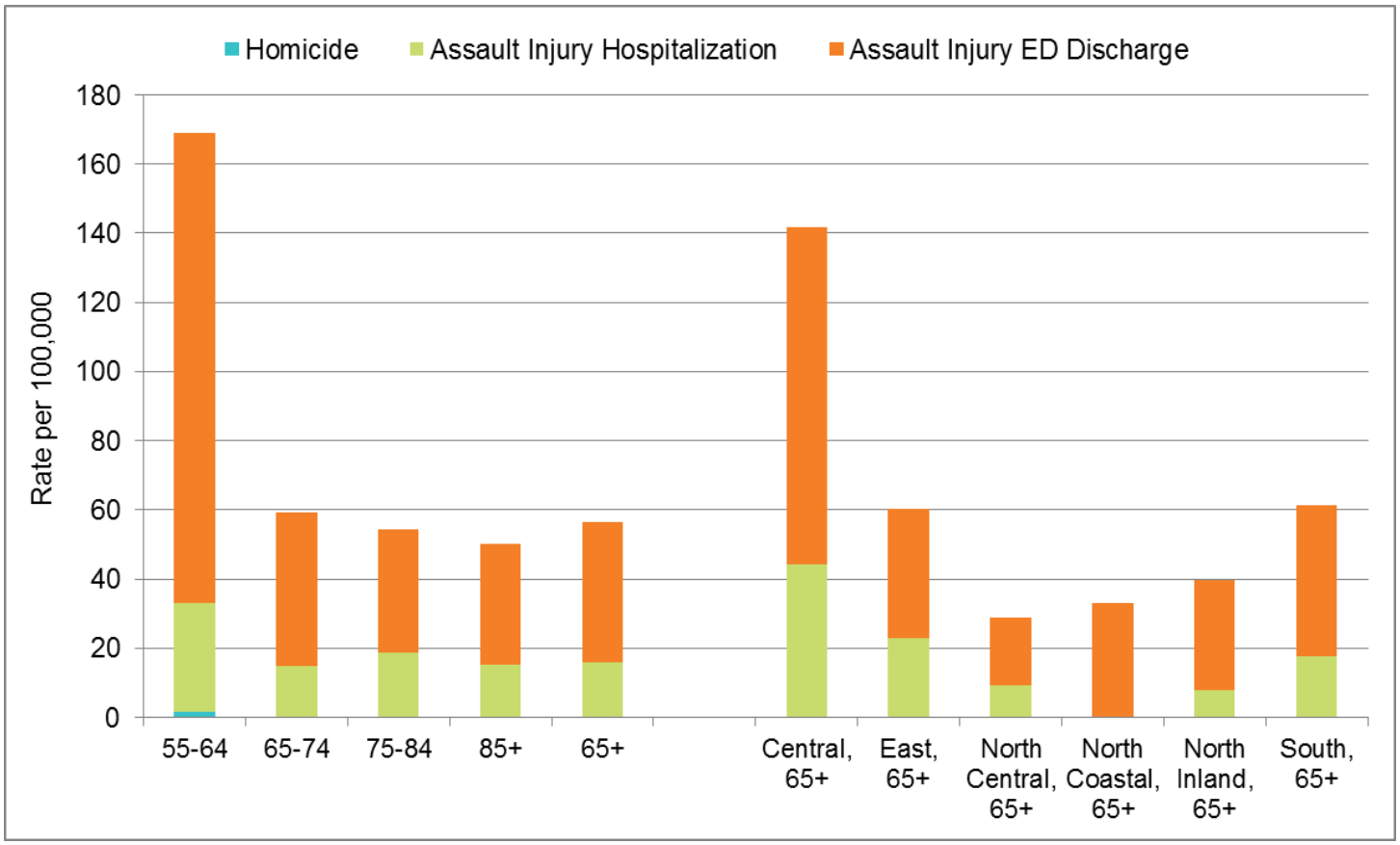
Additional Resources

- ❑ San Diego County Adult Protective Services: http://www.sdcounty.ca.gov/hhsa/programs/ais/adult_protective_services/index.html
- ❑ The Elder Abuse Prosecution Team: http://www.sdcda.org/helping/elder-abuse.html
- ❑ San Diego County Elder Abuse Hotline: (800) 510-2020

ASSAULT INJURY/HOMICIDE

Assaults against seniors treated and discharged from emergency departments or hospitals are typically underreported. In 2012, there were 60 seniors admitted to and discharged from a San Diego County hospital with an assault injury (16.0 per 100,000). In addition, 151 seniors were treated and discharged from a San Diego County emergency department with an assault injury (40.3 per 100,000). Both the hospitalization and ED discharge rates were highest for 55-64 year-olds. Compared to other HHSA Regions, Central Region had the highest rate of hospitalization and ED discharge due to assault injury. Less than five seniors aged 65 and over died as a result of an assault injury (homicide), however, there were six homicides among the 55-64 year old age group (1.7 per 100,000).

Figure 69. Overall Burden of Assault Injury, San Diego County, 2012

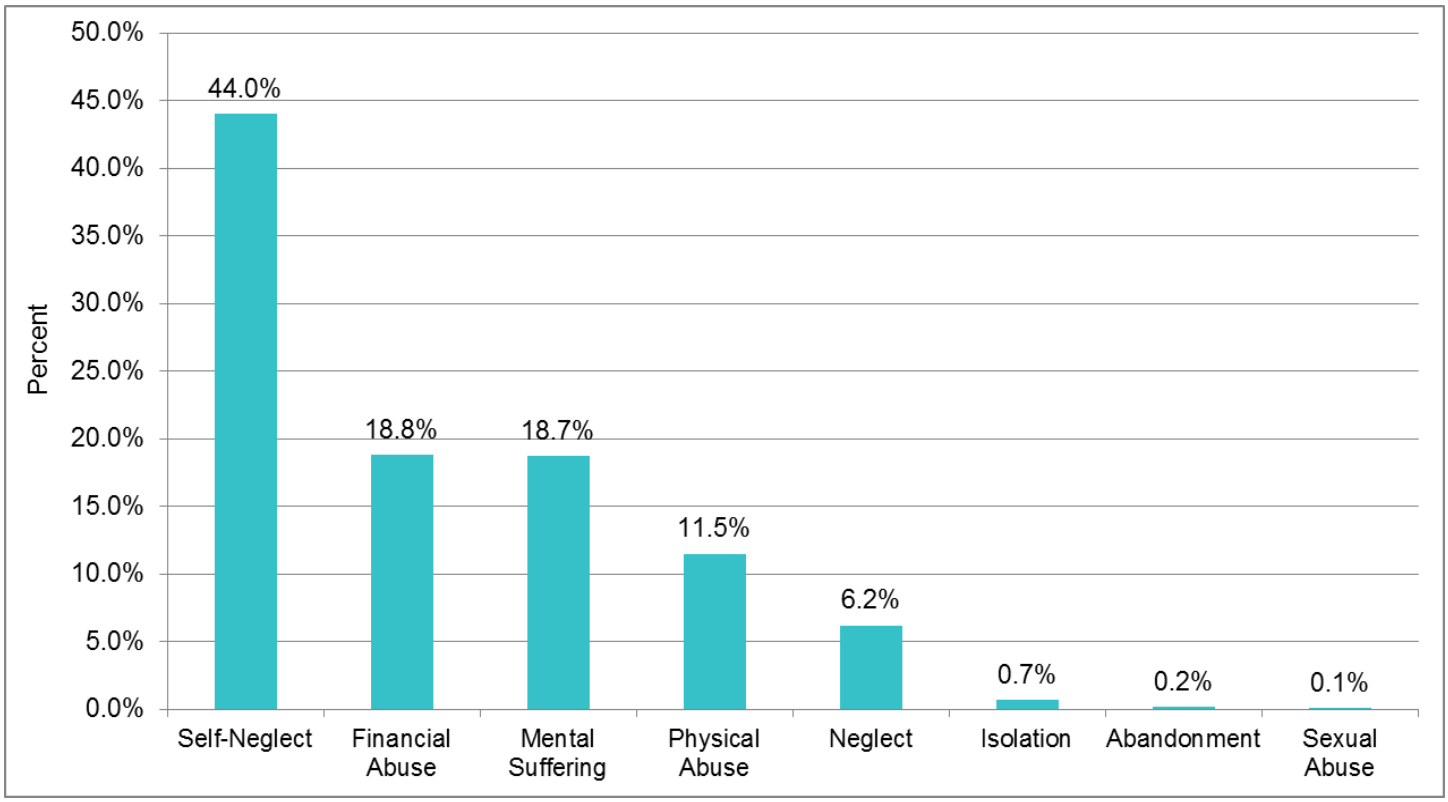


Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.
*Rates not calculated on fewer than five events.

Adult Protective Services (APS) Reports

Among the senior population, elder abuse, the intentional or neglectful acts by a caregiver or "trusted" individual that lead to, or may lead to, harm of a vulnerable elder, is of great concern. In fiscal year, 2013/2014, there were 6,131 investigations of abuse of seniors to Adult Protective Services. Of those investigations, 34.0% were determined to be confirmed cases of abuse. Of the confirmed cases, 11.5% involved allegations of physical abuse, 18.8% financial abuse, 44.0% self-neglect, 6.2% neglect and 18.7% mental suffering. A smaller percentage involved isolation (0.7%), abandonment (0.2%), or sexual abuse (0.1%).

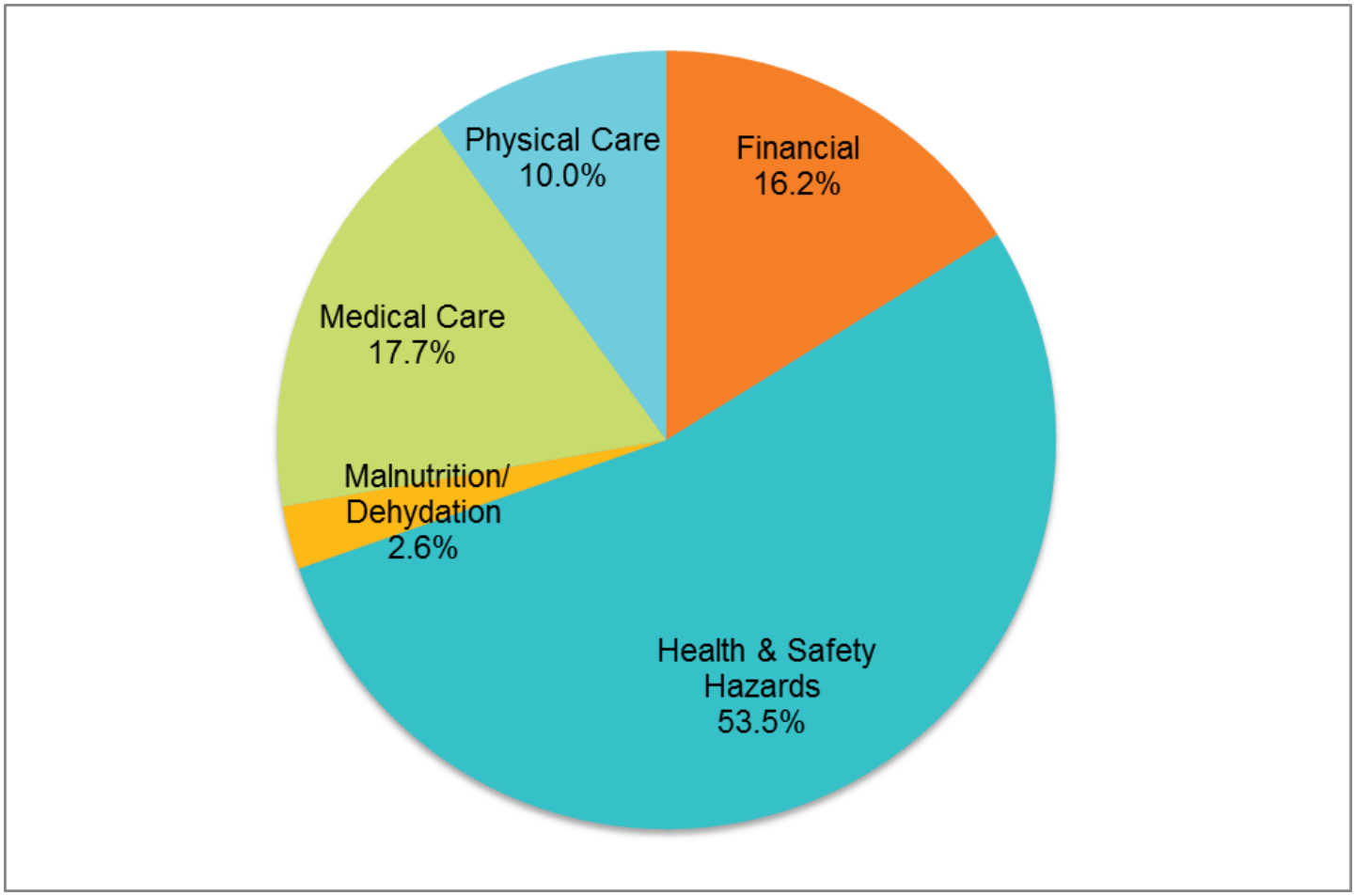
Figure 70. Confirmed APS Reports by Allegations Involved, Elder Adults, San Diego County, FY 2013/2014



Source: County of San Diego, Health and Human Services Agency, Aging & Independence Services, APS Data, FY 2013/2014.
*Note: Percentages not intended to add up to 100%. More than one allegation may be identified for each confirmed case.

During FY 2013/2014, 44% of all confirmed APS reports for elder adults involved self-neglect. The most frequent reports of self-neglect were for health and safety hazards, followed by medical care and financial conditions.

Figure 71. Confirmed APS Reports of Self-Neglect, Elder Adults, San Diego County, FY 2013/2014



Source: County of San Diego, Health and Human Services Agency, Aging & Independence Services, APS Data, FY 2013/2014.

CHAPTER

10

COMMUNICABLE DISEASE INDICATORS

Influenza (Flu) and Pneumonia

Influenza (flu) and pneumonia are a leading cause of death in the U.S. Influenza (flu) is a contagious respiratory illness that can result in mild to severe illness and sometimes death. Common signs and symptoms of the flu include fever or feeling feverish/chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue, and possibly vomiting and diarrhea (though it is more common in children than adults).[58] Pneumonia is a lung infection that can result from the flu, pneumococcal disease, and other conditions.[59] Symptoms are similar to the flu and include cough, fever, and difficulty breathing.[60]

Influenza (flu) and pneumonia affects people of all ages and racial/ethnic groups, but older adults 65 years and older, children younger than 5, pregnant women, and people with certain health conditions (i.e., asthma) are at an increased risk.[58] In the U.S., it is estimated that 90% of seasonal flu-related deaths and 50%-60% of seasonal flu-related hospitalizations occur in older adults 65 years and older.[61]

The best way to prevent the flu is to get a flu vaccine annually—the CDC recommends that everyone 6 months of age and older should get a flu vaccine every year. There are also several vaccines that prevent infection by bacteria or viruses that may cause pneumonia. These vaccines include pneumococcal, *Haemophilus influenza* type B (Hib), pertussis (whooping cough), varicella (chickenpox), measles, and influenza (flu).[58] Other practices to help prevent the flu and pneumonia include washing hands regularly, avoiding people who are sick, and disinfecting frequently touched surfaces.

Additional Resources

- ❑ CDC: Influenza (Flu): http://www.cdc.gov/flu/
- ❑ CDC: Pneumonia: http://www.cdc.gov/pneumonia/
- ❑ American Lung Association: Pneumonia: http://www.lung.org/lung-disease/pneumonia/

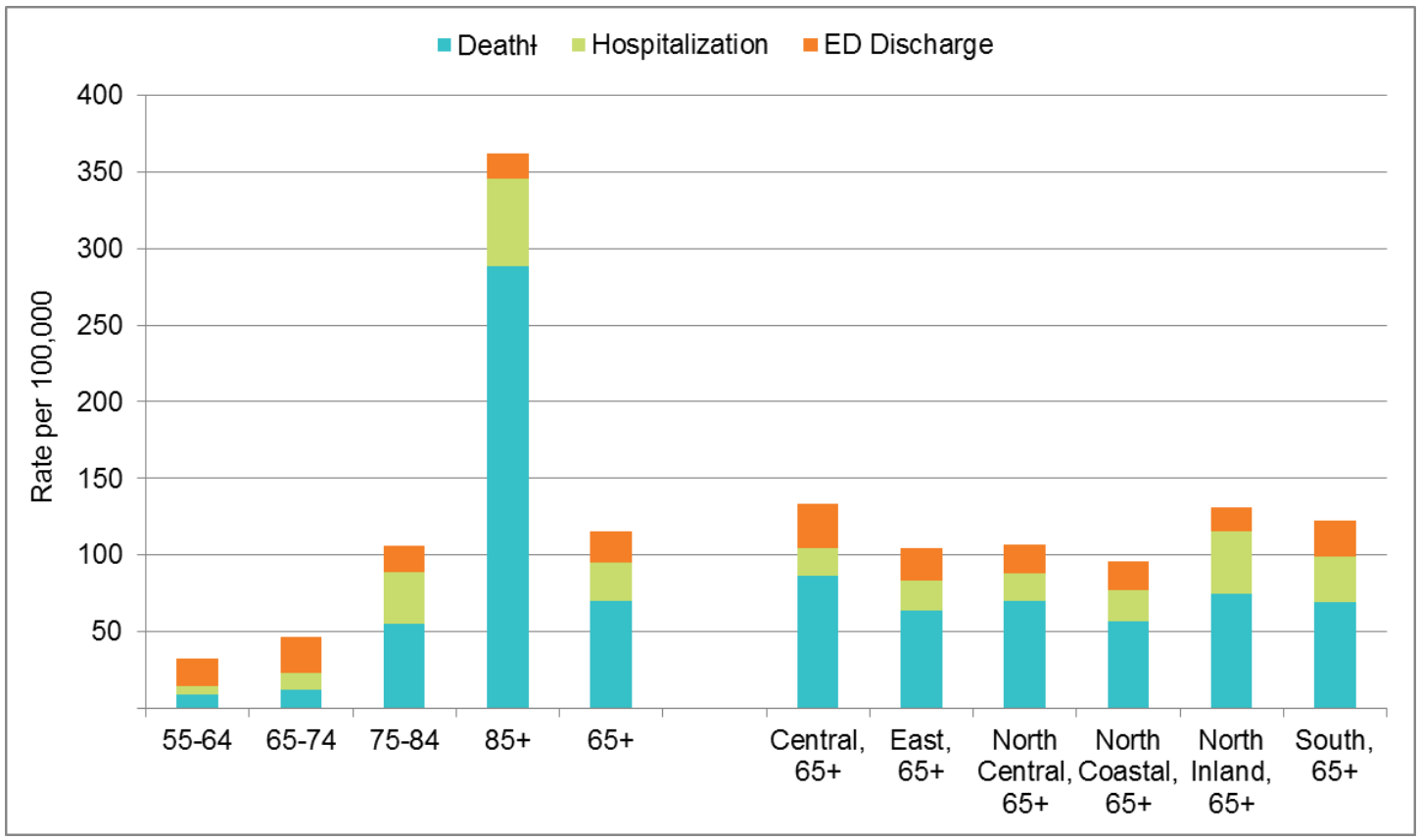
Influenza (Flu) and Pneumonia in San Diego County

According to CHIS, 66.7% of seniors aged 65 years and older received the flu vaccine in 2012. The following data show the rates of medical encounter due to flu and pneumonia in San Diego County.

In 2012, there were 261 deaths due to influenza (flu) and pneumonia among individuals aged 65 years and older in San Diego County (69.7 per 100,000). Death rates due to influenza (flu) and pneumonia were highest among seniors aged 85 years and older compared to any other age group (288.3 per 100,000). In fact, death rates were more than five times higher for 85+ year-olds compared to 75 to 84 year-olds and nearly twenty-four times higher compared to 65-74 year olds. Influenza (flu) and pneumonia death rates were highest in the Central Region of San Diego County.

There were an additional 94 hospitalizations (25.1 per 100,000) and 77 emergency department discharges (20.6 per 100,000) of seniors for influenza (flu). The hospitalization rate due to influenza (flu) was highest among those 85 years and older, whereas the ED discharge rate was highest among 65-74 year olds. North Inland Region had the highest influenza (flu) hospitalization rate and Central Region has the highest ED discharge rate.

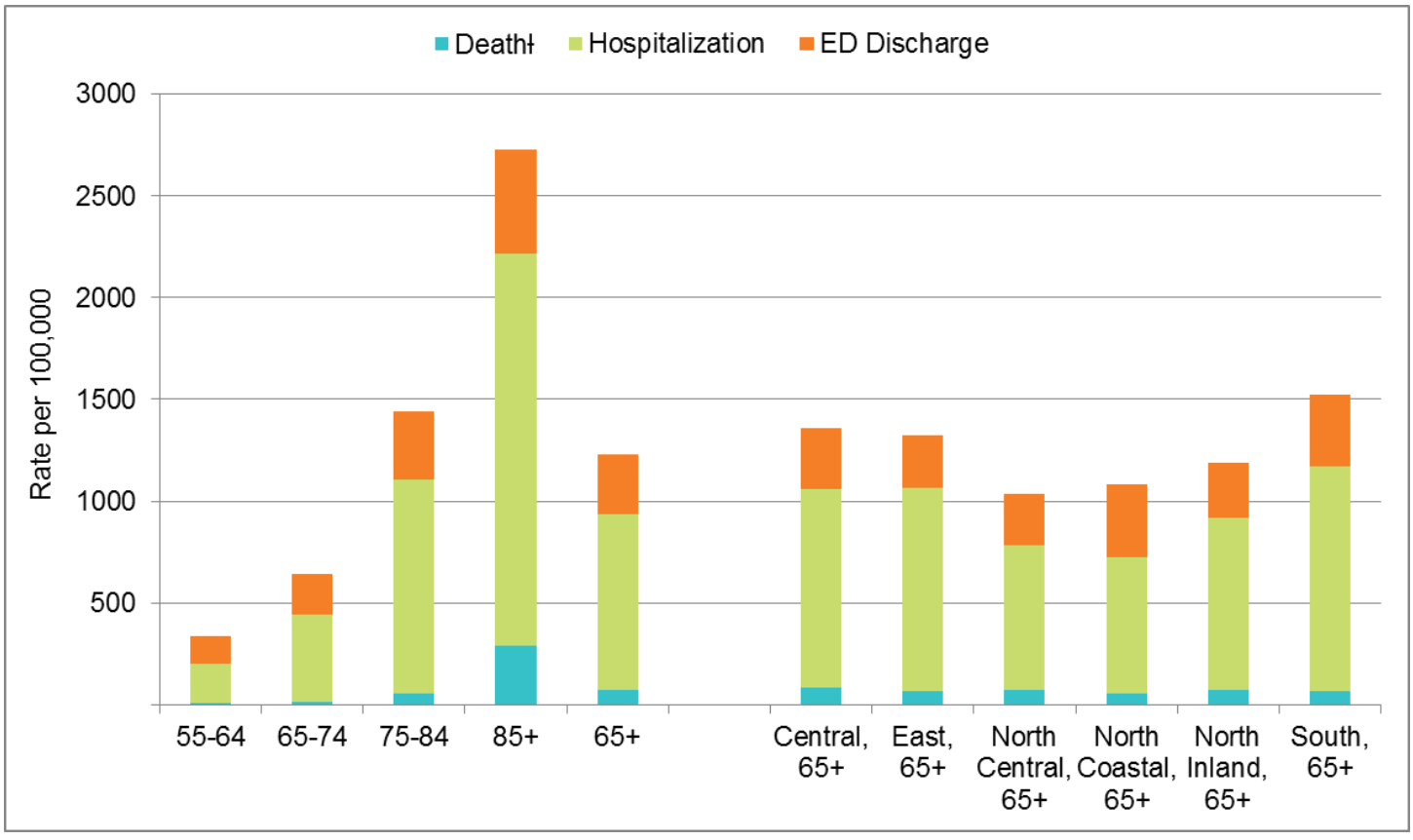
Figure 72. Overall Burden of Influenza (Flu), San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.
† Includes Flu and Pneumonia death.

Compared to influenza, there was an even greater number of hospitalizations and ED discharges due to pneumonia in 2012. Among seniors aged 65 years and older, there were 3,235 hospitalizations due to pneumonia (863.7 per 100,000) and 1,102 discharges from an emergency department (294.2 per 100,0000). Seniors aged 85 years and older had the highest rates of both hospitalization and ED discharge due to pneumonia. Compared to other HHSA Regions, South Region had the highest pneumonia hospitalization and ED discharge rates for seniors 65 years and older.

Figure 73. Overall Burden of Pneumonia San Diego County, 2012



Source: Death Statistical Master Files (CDPH), Patient Discharge Database (OSHPD), and Emergency Discharge Database (OSHPD); County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch; SANDAG, Current Population Estimates, 2012.
† Includes Flu and Pneumonia death.

HIV/AIDS Cases

Human immunodeficiency virus (HIV) is a virus that damages the immune system, and can lead to a much more serious disease called acquired immunodeficiency syndrome (AIDS). For several reasons, a growing number of older adults now have HIV/AIDS across the United States. Older adults are less likely than younger people to talk to their doctors about their sex lives or drug use and therefore less likely to get tested. Additionally, seniors typically know less about HIV/AIDS than younger people, and often mistake signs of HIV/AIDS for the normal aches and pains of aging.[62]

Prevention of HIV and AIDS includes abstaining from sex, unless in a monogamous relationship where HIV status is known, and use of a latex condom. HIV can also be transmitted through the injection of illicit drugs if the needle or syringe is contaminated with the blood of an HIV infected person, so not sharing needles can prevent the spread of HIV.[63]

For people having sex with multiple partners, frequent HIV tests can aid in early detection, allow for early treatment, and help stop the spread of the virus. While there is no cure for HIV/AIDS, improved treatments are helping people with the disease live longer and with a higher quality of life. However, many treatments have severe side effects, and most are expensive. Newer drugs are constantly being researched and created to help suppress side effects and to treat those who have developed resistance to existing drugs.[64]

Additional Resources

- ❑ MedlinePlus, AIDS – Seniors: http://www.nlm.nih.gov/medlineplus/aids.html#cat23
- ❑ National Institute on Aging: HIV, AIDS, and Older People: http://www.nia.nih.gov/HealthInformation/Publications/hiv-aids.htm
- ❑ US Government HIV/AIDS information: www.aids.gov

HIV/AIDS in San Diego County

The table below displays the number of older adults living with AIDS in San Diego County in 2012.

In 2012, there were 457 older adults aged 55 to 64 years and 92 adults aged 65 to 74 years known to be living with HIV or AIDS in San Diego County. The majority of cases were living in the Central and South Regions of the county.

Figure 74. Number of Seniors Living with HIV or AIDS, San Diego County, Diagnosed through 2012 and Reported through 2014

		Age Group				
		55-64	65-74	75-84	85+	65+
Region	Central	223	28	*	*	29
	East	35	9	*	*	10
	North Central	57	13	*	*	13
	North Coastal	43	14	*	*	16
	North Inland	30	7	*	*	7
	South	69	21	*	*	24
	Unknown	0	0	*	*	0
Total Cases		457	92	6	1	99

Source: County of San Diego, Health & Human Services Agency, HIV/AIDS Epidemiology Unit, HIV/AIDS Reporting System; SANDAG, Current Population Estimates, 2012.
*Data not reported by HHSA Region for fewer than five events.

Sexually Transmitted Diseases

There are more than 20 types of sexually transmitted diseases (STD),[65] most of which have few recognizable symptoms, so people seldom know they are infected until lasting damage has already occurred. Older adults often incorrectly assume they do not have to be concerned with becoming infected. Age does not protect against STDs, and sexually active seniors are equally at risk as younger people are for diseases such as chlamydia, gonorrhea, and syphilis.

STDs caused by bacteria, such as Chlamydia, gonorrhea, and syphilis, can be treated and often cured with antibiotics. STDs caused by viruses, such as HIV/AIDS, genital herpes, and hepatitis B, can be controlled but not cured. STDs can be prevented at any age by practicing "safe sex." Safe sex includes using a condom, knowing the STD and health status of partners, and having regular medical check-ups and testing.[66]

Additional Resources

- ❑ CDC – Sexually Transmitted Diseases: http://www.cdc.gov/STD/
- ❑ Medline Plus, Sexually Transmitted Diseases: http://www.nlm.nih.gov/medlineplus/sexuallytransmitteddiseases.html
- ❑ National Institute of Allergy and Infectious Diseases: http://www.niaid.nih.gov/topics/std/Pages/default.aspx

Sexually Transmitted Disease in San Diego County

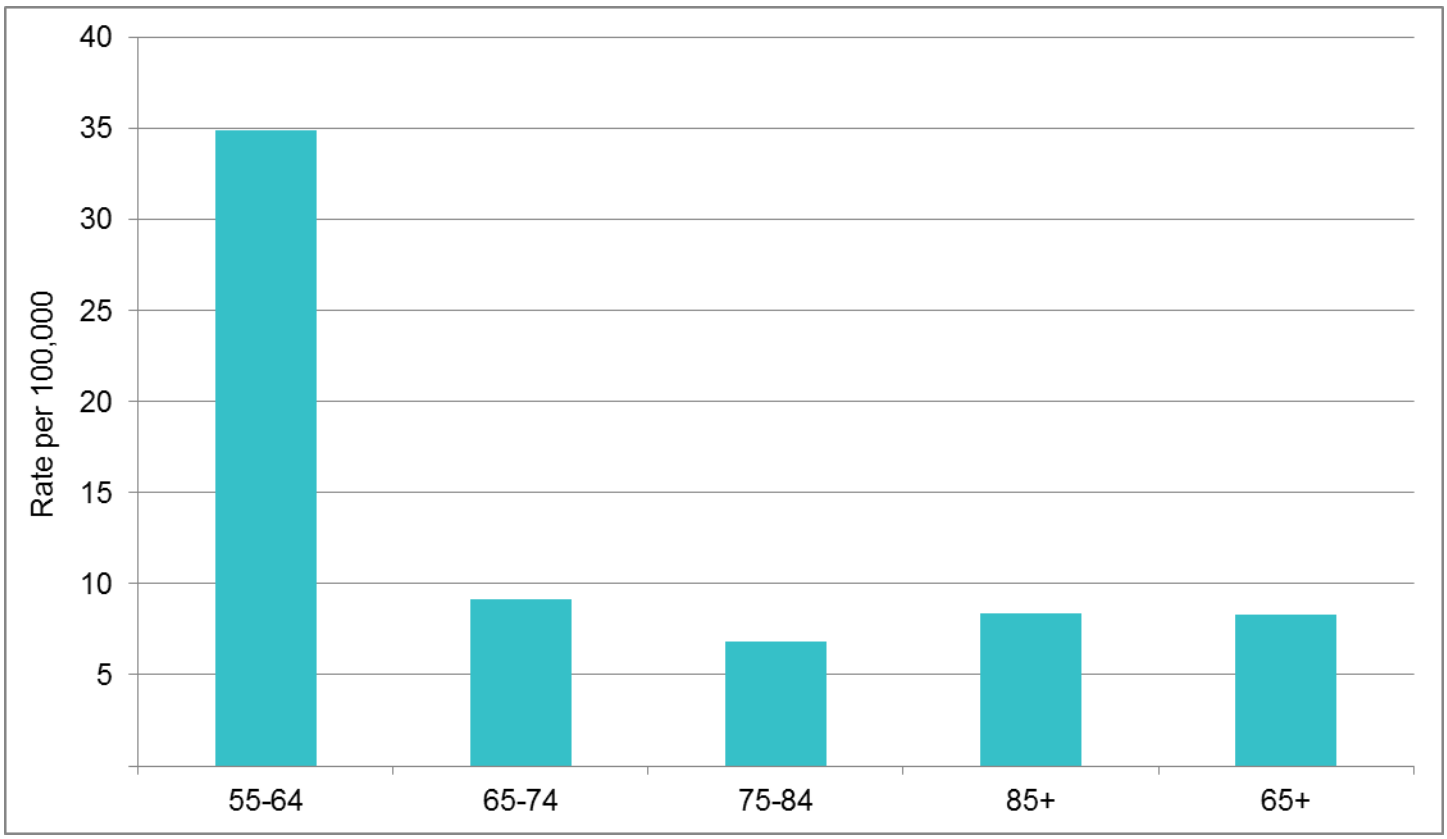
According to CHIS in 2007, only 5.2% of San Diego County adults aged 55 years and older said that they have been tested for a sexually transmitted disease, other than HIV, during the previous 12 months. The following data describes rates of STDs among seniors in San Diego County.

CHLAMYDIA

Chlamydia is the most frequently reported bacterial STD in the United States.[67] Chlamydia is described as a silent disease because the majority of infected women and a significant proportion of men have no symptoms. While the most serious consequences of Chlamydia, such as infertility, generally affect younger women, older adults should also be screened annually if they have a new sex partner or multiple sex partners.

In 2012, there were 31 new cases of Chlamydia reported among adults aged 65 years and older in San Diego County (8.3 per 100,00). Rates of new Chlamydia reports were highest among 55 to 64 year-olds compared to other older age groups.

Figure 75. Rates of New Cases of Chlamydia, San Diego County, 2012



Source: County of San Diego, Health & Human Services Agency, HIV, STD and Hepatitis Branch, Morbidity Database; SANDAG, Current Population Estimates, 2012.

GONORRHEA

Gonorrhea is a common STD that generally affects teenagers and young adults. However, sexually active older adults are also at risk of infection. Most adults have no symptoms of infection, and when symptoms do occur, they are often non-specific and mistaken for other conditions.[68]

In 2012, there were 5 seniors aged 65 years and older with new reports of Gonorrhea in San Diego County.

SYPHILIS

Syphilis is another STD caused by bacteria often called “the great imitator,” because so many signs and symptoms are impossible to differentiate from other common conditions.[69] In 2012, there were fewer than five seniors aged 65 years and older with new reports of syphilis in San Diego County.

TUBERCULOSIS

Tuberculosis (TB) is a bacterial disease that usually attacks the lungs. If not treated properly, TB can be fatal. TB is spread through the air when a person with active TB coughs or sneezes. However, not all who are infected with TB become sick. People with latent TB infection do not feel sick, have no symptoms and cannot spread TB to others, though some people with latent TB infection can eventually get TB disease.[70]

TB was once the leading cause of death in the United States. In the 1940's, scientists discovered the first medicines used to treat TB, and subsequently the disease began to decrease in the United States. By the 1970's and 1980's, TB control efforts were neglected and the number of TB cases increased. Since then, increased efforts have again reduced the number of TB cases, but it is still a public health problem.[70]

Older adults account for a disproportionate share of TB cases. A high number of cases in the elderly remain unrecognized. Research suggests that institutionalized elderly are at a greater risk for becoming infected with new TB infection and for the re-activation of latent TB.[70]

ADDITIONAL RESOURCES

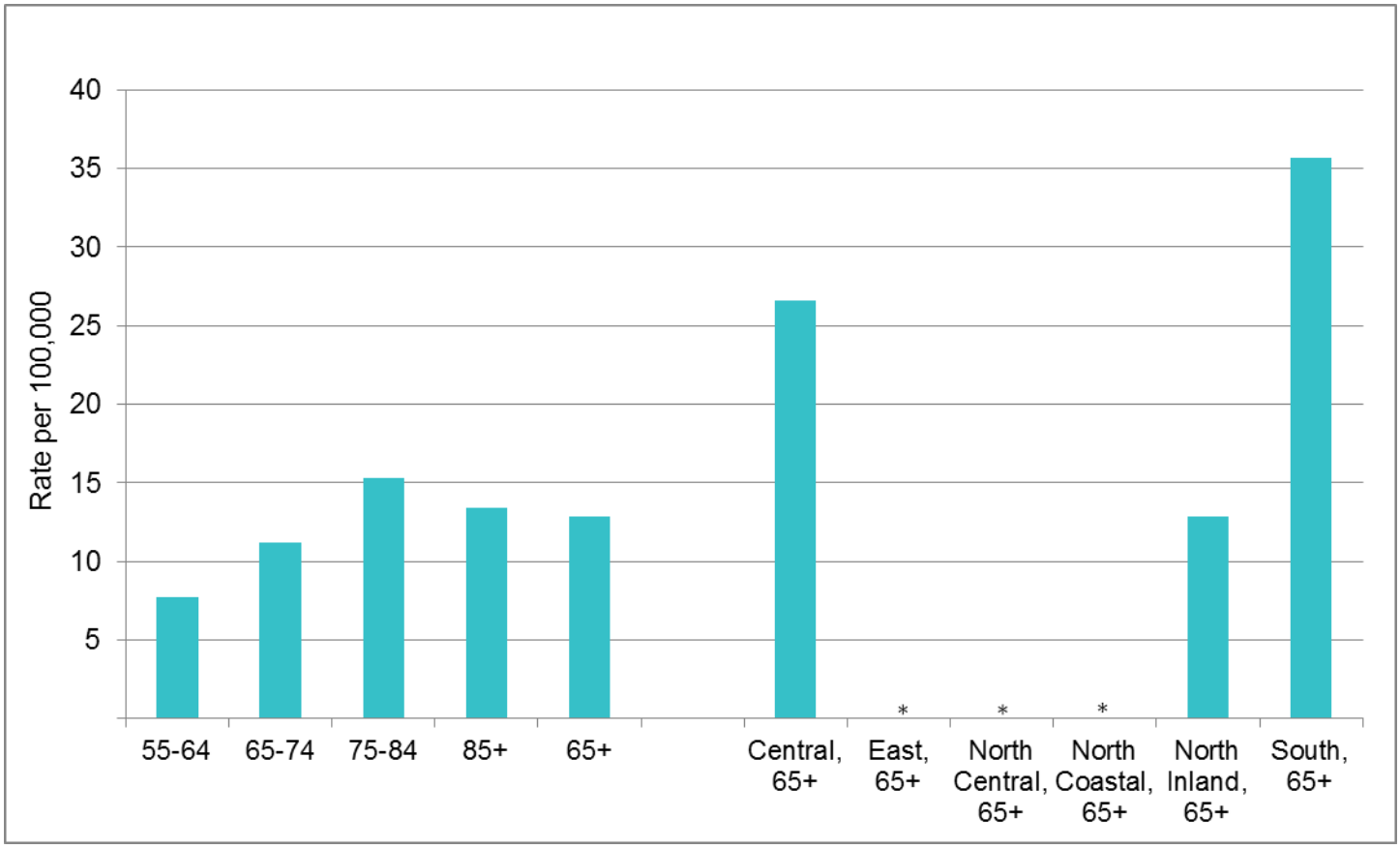
- CDC – Division of Tuberculosis Elimination: http://www.cdc.gov/tb/
- Medline Plus, Tuberculosis: http://www.nlm.nih.gov/medlineplus/tuberculosis.html
- San Diego County Tuberculosis Control Program: http://www.sdcounty.ca.gov/hhsa/programs/phs/tuberculosis_control_program/index.html

TUBERCULOSIS IN SAN DIEGO COUNTY

The following data describe rates of new active TB cases among seniors in San Diego County.

In 2012, there were 48 new active cases of tuberculosis (12.8 per 100,000) reported in San Diego County among seniors aged 65 years and older. Rates were highest among the 75-84 year old age group.

Figure 76. Rates of New Active Cases of Tuberculosis, San Diego County, 2012



Source: County of San Diego, Health & Human Services Agency, Tuberculosis Control Program, County TB Registry; SANDAG, Current Population Estimates, 2012.
*Rates not calculated on fewer than five events.

CHAPTER

11

AIS HEALTH SUPPORT PROGRAMS

Aging & Independence Services Health Support Programs

Aging & Independence Services (AIS), a federally designated Area Agency on Aging, provides a variety of services to older adults and persons with disabilities. Below is a snapshot of AIS programs that support health self-management, care coordination and improved health outcomes.

Care Transitions Interventions (CTI)

The human and financial cost of unnecessary hospital readmissions is astonishing. Addressing the issue of avoidable readmissions requires a community approach in which healthcare and community-based social service professionals partner to achieve better health outcomes. The Care Transitions Intervention (CTI), a four week evidence based program developed by Dr. Eric Coleman, supports patients with complex needs who are at high risk for readmissions to transition from hospital to home. Through one hospital and one home visit and a series of follow-up phone calls by a trained Transitions Coach whose primary role is "to coach, not do", patients with chronic health conditions develop improved capacity in the areas of medication management, personal health record keeping, knowledge of "Red Flags," and follow-up care with primary care providers and specialists.

Contact: Brenda Schmitthenner at 858-495-5853 or Brenda.Schmitthenner@sdcounty.ca.gov

Community-Based Care Transitions Program (CCTP)

AIS in partnership with Scripps Health, Sharp HealthCare, Palomar Health, and University of California San Diego (UCSD) Health System (13 hospitals) was awarded the largest Community-based Care Transitions Program (CCTP) in the country by the Centers for Medicare and Medicaid Services (CMS) to provide comprehensive, patient-centered, hospital and community-based care transition services to high-risk, fee-for-service (FFS) Medicare patients as they transition across care settings. Patients receive specialized care that includes support from transitional care nurses, licensed pharmacists, healthcare coaches and social workers. CCTP significantly reduces the 30-day all cause readmission rate for medically and socially complex patients and dramatically reduces healthcare costs.

Contact: Brenda Schmitthenner at 858-495-5853 or Brenda.Schmitthenner@sdcounty.ca.gov

AIS HEALTH SUPPORT PROGRAMS

Chronic Disease Self-Management (aka, "Healthier Living with Chronic Conditions")

Designed at Stanford University and for people with conditions such as arthritis, depression, heart disease, diabetes, COPD, or any chronic illness, this program has been proven to achieve positive health outcomes and reduced health care expenditures. The program consists of a workshop that meets 2 ½ hours per week for six weeks, led by two trained peer educators, who also have a chronic condition. It promotes patient activation by teaching behavior management and personal goal setting. Topics include diet, exercise, medication management, cognitive symptom management, problem solving, relaxation, communication with healthcare providers, and dealing with difficult emotions. These "Healthier Living" workshops are available at sites throughout the county in English, Spanish, Arabic, Somali, and Tagalog.

For schedule, visit: www.HealthierLivingSD.org or call 858-495-5500 Ext 3.

Diabetes Self-Management (aka, "Healthier Living with Diabetes")

Designed at Stanford University and for people with type 2 diabetes, this program has been proven
to achieve positive health outcomes and reduced health care expenditures. The program consists of a workshop in groups of 10 – 16 people that meet 2 ½ hours per week for six weeks, led by two trained peer educators, who also have diabetes. Topics include diet, exercise, medication management, blood glucose monitoring and management, foot care, complications of diabetes, problem solving, stress reduction, and communication with healthcare providers. The Healthier Living with Diabetes workshops are available at sites throughout the County. Available in English and Spanish.

For schedule, visit: www.HealthierLivingSD.org or call 858-495-5500 Ext 3.

National Diabetes Prevention Program (NDDP):

Government-led research found that the NDPP, led by the Centers for Disease Control and Prevention (CDC), can help people cut their risk of developing type 2 diabetes in half. The NDPP is a lifestyle change program, where a group of participants, led by a trained lifestyle coach, learns how to make changes to help prevent type 2 diabetes. The NDPP focuses on lifestyle changes such as losing a modest amount of weight, being more physically active, and managing stress. The group meets weekly for 16 "core sessions" and then meets monthly for the remainder of a year. The group setting provides a motivating and supportive environment with people who are facing similar challenges and trying to make the same changes.

For more information, call Kyra Reinhold at 858-495-5710.

AIS HEALTH SUPPORT PROGRAMS

Fall Prevention

Scientific evidence indicates that comprehensive fall prevention for older adults include management of medical risk factors, environmental safety, safe behaviors, and exercise that focuses on strength, flexibility and balance (such as our Feeling Fit program, and Tai Chi). Our website, www.SanDiegoFallPrevention.org offers a Toolkit and Resource Guide, including contact information for local organizations that address different facets of fall prevention, such as home modification, PT's, exercise classes, etc. The website also has a variety of educational videos, including English and Spanish videos for seniors, and a short video for clinicians.

Tai Chi: Moving For Better Balance

The TCMBB program is a modified version of the Yang style of Tai Chi that commonly is done using either 108, or, in the "short form," 24 different positions. TCMBB further simplifies the traditional style and has only 8 essential positions. This program was developed by Dr. Fuzhong Li at Oregon Research Institute (ORI) and was designed especially for older adults to reduce their risk of falls.

Older adults learn and practice the TCMBB form in a free group fitness class. Classes are ongoing and held for one hour, two times per week. Evidence suggests participating in TCMBB reduces falls and fear of falling; and increases functional balance and physical performance.

For schedule, visit: www.HealthierLivingSD.org or call 858-495-5500 Ext 3.

- **Stepping On -** This program is designed to reduce the risk of falling for people at moderate risk of falls. Throughout this program participants learn balance and strength exercises, vision's role in balance, how medication can contribute to falls, staying safe when out in the community, how to identify safe footwear, and how to check the home for safety.

  For information, call Kari Carmody at (858) 495-5998.

Feeling Fit Club

The Feeling Fit Club is a functional fitness exercise program offered via three different delivery methods throughout San Diego County: 1) on-site classes with trained instructors at various community sites, 2) a television program that is shown twice daily on three stations, and 3) a video/DVD program for home use. All moves and exercises are designed to be adapted to various physical abilities and can be performed from a seated or standing position. Program evaluation has shown improvement in participants' strength, flexibility, balance, and ability to perform activities of daily living. The exercises in the home based program are focused on more frail seniors who are home-bound. The television programs are shown twice per day, Monday through Friday at 8:00 a.m. and 1:00 p.m.

For schedule, visit: www.HealthierLivingSD.org or call 858-495-5500 Ext 3.

APPENDIX

A

DATA SOURCES

DATA SOURCES

Source Data

Adult Protective Services (APS): APS serves adults 65 and older and dependent adults 18 and older, who are harmed, or threatened with harm, to ensure their right to safety and dignity. APS investigates reports of elder and dependent abuse, including cases of neglect and abandonment, as well as physical, sexual and financial abuse.

American Community Survey (ACS): ACS is a new nationwide survey designed to provide communities a fresh look at how they are changing. It is intended to eliminate the need for the long form in the 2010 Census. The ACS collects information from U.S. households similar to what was collected on the Census 2000 long form, such as income, commute time to work, home value, veteran status, and other important data.

California Health Interview Survey (CHIS): CHIS is an important source of information on health and access to health care services. CHIS is a telephone survey of adults, adolescents, and children from all parts of the state. The survey is conducted every two years. CHIS is the largest state health survey and one of the largest health surveys in the United States. The survey provides state and county level information for health planning and comparison.

Emergency Department Discharge Data (ED Data): ED data is collected and maintained for most emergency hospitals in San Diego County. ED data elements include patient's home zip code, demographic information, source of payment, disposition, diagnoses and procedures performed for all patients treated and discharged from the ED. For most indicators, data is reported by principal diagnosis at the time of discharge for which the medical encounter occurred. In some cases, data is reported by principal or other (co-occurring) diagnosis at the time of discharge, and is indicated by using the term "any diagnosis."

HIV/AIDS Reporting System (HARS): HARS is used to report HIV and AIDS cases in San Diego County. HIV reporting began in July 2002 using a non-name based system. Effective on April 17, 2006, legislation was amended to require HIV cases to be reported by name.

Hospital Discharge Data (Hospitalization Data): Hospitalization data is collected and maintained for most inpatient facilities in San Diego County. Hospitalization data elements include patient's home zip code, demographic information, source of payment, disposition, diagnoses and procedures performed for all patients admitted to and discharged from the hospital for any condition. For most indicators, data is reported by principal diagnosis at the time of discharge for which the medical encounter occurred. In some cases, data is reported by principal or other (co-occurring) diagnosis at the time of discharge, and is indicated by using the term "any diagnosis."

Prehospital Data: The Prehospital Data System was formed to track all ambulance runs made by Advanced Life Support (ALS) Agencies and Basic Life Support (BLS) Agencies in San Diego County. Data is collected by the field Medics/EMTs and by medical control personnel (Mobile Intensive Care Nurses) at Base Hospitals.

DATA SOURCES

San Diego Association of Governments (SANDAG): SANDAG develops annual demographic estimates and long range forecasts in addition to maintaining census data files. Population estimates for the County of San Diego are used in rate calculations as defined by SANDAG. All rates are calculated per 100,000 residents. Rates are not calculated on fewer than five cases.

STD Morbidity Surveillance Data: Data is available for three STDs: Chlamydia, gonorrhea and syphilis (primary and secondary). Information on age, gender, race/ethnicity are available for all 3 diseases.

Tuberculosis Reporting: The Tuberculosis (TB) Control Program detects, controls and prevents the spread of TB. Data is available for new active cases of TB in San Diego County.

Vital Records Death Data: A death certificate is completed for every person who dies in San Diego County. Death data includes information such as underlying and contributing causes of death and basic demographic information by zip code. The death data used in this document only include underlying cause of death. That means that deaths are categorized only by the disease or injury that initiated the chain of events leading to death and not by the immediate cause or any other contributing causes. For example, a diabetic who died of heart disease resulting from complications of diabetes would only be included among diabetes-related deaths.

APPENDIX

B

HEALTH, DISEASE, AND INJURY DEFINITIONS

HEALTH, DISEASE, AND INJURY DEFINITIONS

Health Status

General Health Status – Respondents to a survey were asked: "In general, would you say your health is excellent, very good, good, fair or poor?" Responses were excellent, very good, good, fair or poor. *CHIS 2012*

Disability Status – Respondents were asked a series of questions about physical, emotional, and mental limitations. Those 65+ years were not asked about work limitations. Results were disabled and not disabled. *CHIS 2012*

Dental Health – Respondents were asked: "For how many months of the past 12 months did you have any kind of dental insurance that pays for some or all of your routine dental care?" Responses were the following: no dental insurance in past year, had dental insurance part of past year, had dental insurance all of past year. *CHIS 2007*

Usual Source of Care – This variable reveals whether or not respondents have a usual source of care. Variable was constructed by consolidating the multiple yes/no questions about usual source of care in the questionnaire items. *CHIS 2012*

Mental Distress – Respondents to a survey were asked: "Was there ever a time during the past 12 months when you felt that you might need to see a professional because of problems with your mental health emotions, or nerves, or use of alcohol or drugs?" Responses were needed help and did not need help. *CHIS 2012*

Pre-Diabetes – Respondents to a survey were asked: "Was there ever a time during the past 12 months when you felt that you might need to see a professional because of problems with your mental health emotions, or nerves, or use of alcohol or drugs?" Responses were needed help and did not need help. *CHIS 2012*

Health Behaviors

Overweight and Obese - This variable provides a four level descriptive of body mass index for adults. Survey respondents are asked for their height and weight. Body Mass Index (BMI) is calculated by dividing weight (in kilograms) by height squared (in meters), and is reported according to four levels: underweight, normal, overweight and obese. *CHIS 2012*

Physical Activity (Walked for Transportation, Fun, or Exercise) - This variable was constructed by combining the questionnaire items related to walking. Time frame is in the past 7 days. Results were displayed for the following levels: walked for transportation, fun, or exercise and did not walk for transportation, fun, or exercise. *CHIS 2009*

Diet - Respondents to a survey were asked: "in the past 7 days, how many times did you east fast food? Include fast food meals eaten at work (or school), at home, or at fast food restaurants, carryout, or drive through." Results were displayed at five levels: no times, one time, two times, three times, or four or more times. *CHIS 2012*

HEALTH, DISEASE, AND INJURY DEFINITIONS

Binge Drinking – Adults who responded to a survey who have ever had more than a few sips of alcohol were asked about binge drinking. Male binge drinking is five or more drinks on at least one occasion in the past year, female binge drinking is four or more drinks. Responses were displayed at two levels: engaged in binge drinking or did not engage in binge drinking. *CHIS 2012*

Smoking - Respondents were asked a series of smoking-related questions. Results were displayed for two levels: current smoker or not a current smoker. *CHIS 2012*

PREVENTION

Flu and Pneumonia Vaccinations – Respondents to a survey were asked: "During the past 12 months, have you had a flu shot?" Results were displayed for two levels: has had flu shot in past 12 months or has not had flu shot in past 12 months. *CHIS 2012*

Blood Pressure – Respondents to a survey were asked: "Has a doctor ever told you that you have high blood pressure?" Results were displayed for the following levels: has/had high blood pressure or doesn't have/never had high blood pressure. *CHIS 2012*

Colorectal Screening - Respondents to a survey were asked a series of questions on their cancer screening behaviors. Compliance is based on the American Cancer Society (ACS) recommendations and the U.S. Preventive Services Task Force (USPSTF) guidelines for the 50+ population. Results were displayed at the following levels: not compliant at the time of recommendation or compliant at the time of recommendation. *CHIS 2009*

Respondents to a survey were asked a series of questions on the colorectal cancer screening histories. *CHIS 2009*

Prostate Cancer Screening – Male respondents to a survey 40 years and older were asked a series of questions on prostate cancer screening. Results are displayed for the following levels to describe how recent prostate-specific antigen (PSA) testing last occurred: 1 year or less, more than 1 year ago, or never. *CHIS 2009*

Mammogram Screening - Respondents to a survey were asked: "Have you EVER had a mammogram?", if yes, asked "How long ago did you have your most recent mammogram?" Results were displayed for the following levels: 2 years or less, more than 2 years ago, or never had a mammogram. *CHIS 2012*

HEALTH, DISEASE, AND INJURY DEFINITIONS

Alzheimer's Disease and Other Dementias

Alzheimer's Disease and Other Dementias

- ICD-10 codes A81.00, F01.50, F01.51, F02.80, F02.81, F03.90, F04, F06.0, F06.8, G10, G20, G30.0, G30.1, G30.8, G30.9, G31.83, G31.01, G31.09, G31.1, G31.84, G81.01, G81.09, G91.2, G94, R41.81; *Death*
- ICD-9 codes 331.0, 046.11, 046.19, 331.82, 331.11, 331.19, 333.4, 331.83, 331.5, 332.0, 332.1, 290.40-90.43, 294.0, 294.10, 294.11, 331.2, 331.7, 290.0, 290.10-290.13, 290.20, 290.21, 290.3, 294.20, 294.21, 294.8, 797; *Hospital, ED*

Chronic Disease Indicators

Coronary Heart Disease: ischemic and hypertensive heart disease

- ICD-9 codes 402, 410-414, 429.2; *Hospital (principal diagnosis only)*
- ICD-9 Ecodes E800-E869, E880-E929; *ED (principal diagnosis only)*
- ICD-10 codes I11, I20-I25; *Death*

All Cancers: malignant neoplasms

- ICD-10 codes C00-C97; *Death*

Diabetes: Diabetes Mellitus, includes insulin-dependent and non insulin-dependent diabetes

- ICD-9 code 250; *Hospital, ED (principal diagnosis only)*
- ICD-10 codes E10-E14; *Death*

Stroke: cerebrovascular disease

- ICD-9 codes 430-438; *Hospital, ED (principal diagnosis only)*
- ICD-10 codes I60-I69; *Death*

Asthma

- ICD-9 code 493; *Hospital, ED (principal diagnosis only)*
- ICD-10 codes J45-J46; *Death*

Chronic Obstructive Pulmonary Disease (COPD): includes chronic bronchitis, emphysema and other chronic airway obstruction

- ICD-9 codes 490-492, 496; *Hospital, ED (principal diagnosis only)*
- ICD-10 codes J40-J44, J47; *Death*

Arthritis

- ICD-9 codes 95.6, 95.7, 98.5, 99.3, 136.1, 274, 277.2, 287.0, 344.6, 353.0, 354.0, 355.5, 357.1, 390, 391, 437.4, 443.0, 446, 447.6, 696.0, 710-716, 719.0, 719.2-719.9, 720-721, 725-727, 728.0-728.3, 728.6-728.9, 729.0-729.1, and 729.4; *Hospital, ED (principal diagnosis only)*

HEALTH, DISEASE, AND INJURY DEFINITIONS

Behavioral Health Indicators

Self-Inflicted Injury: injuries that are intentionally inflicted by self

- ❑ ICD-9 Ecodes E950-E959; *Hospital, ED*

Suicide: deaths that are intentionally inflicted by self

- ❑ ICD-10 codes U03, X60-X84,Y87.0; *Death*

Injury Indicators

Unintentional Injury: This generalized unintentional injury may overlap with specific indicators below, such as falls or pedestrian deaths.

- ❑ ICD-9 Ecodes E800-E869, E880-E929; *Hospital, ED*
- ❑ ICD-10 codes V01-X59, Y85-Y86; *Death*

Fall-Related: accidental falls

- ❑ ICD9 Ecodes E800-E886, E888; *Hospital, ED*
- ❑ ICD10 codes W00-W19; *Death*

Hip Fracture: from all causes

- ❑ ICD-9 code 820; *Hospital, ED (principal diagnosis only)*

Motor Vehicle Injury: Refers to unintentional deaths of anyone involved in a motor vehicle accident (collision or non-collision) on a public road, including occupants, pedestrians, and cyclists

- ❑ ICD-9 Ecodes E810-819; *Hospital, ED*
- ❑ ICD-10 codes V30-V39 (.4-.9), V40-V49 (.4-.9), V50-V59 (.4-.9), V60-V69 (.4-.9), V70-V79 (.4 -.9), V81.1, V82.1, V83-V86 (.0-.3), V20-V28 (.3-.9), V29 (.4-.9), V12-V14 (.3-.9), V19 (.4-.6), V02-V04 (.1, .9), V09.2, V80 (.3-.5), V87 (.0-.8), V89.2; *Death*

Assault Injury: injuries that are intentionally inflicted by another.

- ❑ ICD-9 Ecodes E960-E969; *Hospital, ED*

Homicide: deaths that are intentionally inflicted by another

- ❑ ICD-10 codes U01-U02, X85-Y09, Y87.1; *Death*

Heat-Related Illness:

- ❑ ICD-9 code 992 or Ecodes E900.0-.9; *ED (principal or other diagnoses/Ecodes)*

Overdose/poisoning:

- ❑ ICD-9 Ecodes E850-E869, E950-E952, E962, E972, E980-E982; *ED (principal diagnosis)*
- ❑ ICD-10 codes X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2,Y40-59, Y60-69, U01.6-U01.7; *Death*

HEALTH, DISEASE, AND INJURY DEFINITIONS

COMMUNICABLE DISEASE

Influenza (Flu)

- ❑ ICD-9 487-488; *Hospital, ED*
- ❑ ICD-10 codes J10-J11, J12-J18; *Death*

Pneumonia

- ❑ ICD-9 480-486, *Hospital, ED*
- ❑ ICD-10 codes J10-J11, J12-J18; *Death*

AIDS: new cases reported by providers to County Public Health Services, cases need not be investigated and confirmed, see the CDC clinical case definition. *HIV/AIDS Reporting System*

Chlamydia: new cases reported by providers to County Public Health Services, cases need not be investigated and confirmed, see the CDC clinical case definition. *STD Reporting*

Gonorrhea: new cases reported by providers to County Public Health Services, cases need not be investigated and confirmed, see the CDC clinical case definition. *STD Reporting*

Primary and Secondary Syphilis: new cases reported to and confirmed by County Public Health Services, see the CDC clinical case definition. *STD Reporting*

Tuberculosis (TB): new active cases reported to and confirmed by County Public Health Services, see the CDC clinical case definition. *TB Registry*

APPENDIX

C

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