



March 2022

# EXPLORING HEALTH DISPARITIES IN SAN DIEGO COUNTY BY GENDER

*A Report to Identify Opportunities to Achieve Health Equity*



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# Exploring Health Disparities in San Diego County by Gender

**County of San Diego  
Health and Human Services Agency  
Public Health Services**

*March 2022*

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# FOREWORD


Health equity is an important and timely topic. The COVID-19 pandemic has brought to light some of the health disparities that exist in San Diego County. Differences in health status and health outcomes exist between groups. These differences or disparities often result from social determinants of health, including social circumstances, environmental exposures, and behavioral factors, as well as access to adequate health care. Together, these factors impact the health and well-being of San Diegans differently. To achieve health equity, these disparities must be identified, and the root causes determined. It is only through understanding the unique challenges each group faces, that solutions can be identified and implemented. When all San Diegans have the opportunity and resources to achieve good health, then we will have health equity.

For over 20 years, the Public Health Services department, in the County of San Diego Health and Human Services Agency, has been tracking population health data by age, gender, geography, race/ethnicity, and, more recently, by socioeconomic status. This health disparities report series is an update to reports published in 2016 and has been expanded to include indicators of well-being in addition to disease burden. Please go to [www.SDHealthStatistics.com](http://www.SDHealthStatistics.com), to find the most recent health and well-being data available.

This *Exploring Health Disparities in San Diego County* report looks at health disparities through the lens of *gender*. It is important to acknowledge that at the time data were collected for this report, non-binary data was not routinely collected by hospital and healthcare systems. Efforts are being made at various levels to address this inequity in reporting and as soon as non-binary data becomes available, it will be incorporated in subsequent reports.

For this 2019 data, females had very different disease burden than males. Women had higher burdens of hypertensive disease, chronic obstructive pulmonary disease, and arthritis, while males had higher burdens of cancer, coronary heart disease, diabetes, and heart failure. Females had higher burdens of flu and pneumonia, while males had higher burdens of sexually transmitted diseases. Females were more likely to suffer falls, hip fractures, and non-fatal self-inflicted injury, while males had a higher burden of most types of injury. Females suffered a higher burden of mood disorders and anxiety, while males had a higher burden of alcohol and other substance use and schizophrenia and other psychotic disorders.

It is only through working together that these disparities can be understood and addressed. I welcome you to join us on this essential journey so that all San Diegans can Live Well.

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

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# Introduction

*Health equity is achieved when “every person has the opportunity to ‘attain his or her full health potential’ and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.”<sup>1</sup>*

## What is Health Equity?

Health equity is achieved when “every person has the opportunity to ‘attain his or her full health potential’ and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.”<sup>1</sup>

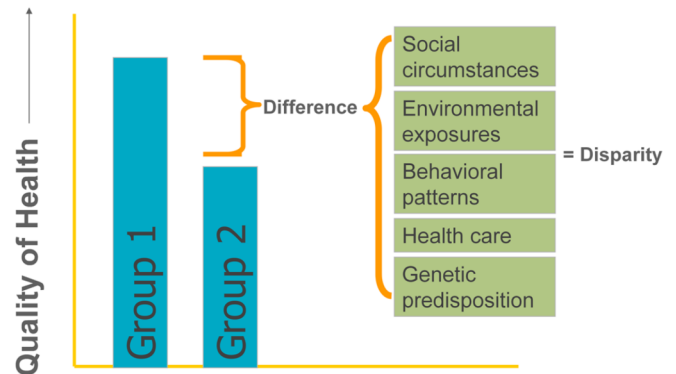
There are many factors that affect the ability to achieve health equity, including the circumstances in which people are born, grow, live, work, and age, as well as the systems in place to deal with illness, which are known as social determinants of health.<sup>2</sup> Social determinants of health can include income, education, employment status, transportation, housing, access to health care services, and exposure to pollution.<sup>3</sup> These, in turn, influence safety and adequacy of housing, air and water quality, crime rates, behavioral health, and access to preventive health care.<sup>4</sup>

Although most San Diego County residents strive to be healthy, differences in health status and health outcomes exist between groups. These differences often result in poorer health outcomes for some groups in the population. These differences are termed health disparities. The Centers for Disease Control and Prevention (CDC) define health disparities as “differences in the incidence and prevalence of health conditions and health status between groups.”<sup>5</sup> Many health disparities affect groups based on age, gender, place of residence, race and ethnicity, and socioeconomic status.

In addition to these factors, groups negatively affected by health disparities tend to have less

access to healthy food, education, safe neighborhoods, freedom from discrimination, and adequate housing that would further support positive health outcomes.<sup>5</sup> Health inequities are health disparities that may result from systematic or unequal distribution of positive resources.<sup>5</sup>

**Figure 1** Measuring Health Disparities



Adapted from Gomes and McGuire, 2001

The health of a community is not simply the presence or absence of disease; rather, it is an interaction of several factors. In order to describe health disparities in San Diego County, a variety of measures are used, considered together as lifestyle behaviors, socioeconomic status, healthcare access and utilization, and morbidity and mortality.

## Lifestyle Behaviors

Lifestyle behaviors are actions taken by individuals to attain or maintain good health and to prevent illness and injury. The risk of non-communicable (chronic) disease can be reduced by engaging in behaviors such as eating a healthy diet, getting regular physical activity, and avoiding tobacco use and alcohol or substance abuse. In a motor vehicle crash, injury can be avoided or lessened by wearing seatbelts while in a motor vehicle and wearing helmets while on a bicycle. Early prenatal care is an example of an action that can be taken to reduce or avoid poor maternal and child health outcomes. The risk of communicable disease can be greatly reduced by getting all recommended vaccinations throughout the lifetime. Lifestyle behaviors are often the result of socioeconomic status, as well as healthcare access and

utilization, and in turn, have an impact on morbidity and mortality.<sup>8</sup>

Much of the lifestyle behavior information compiled about San Diego County residents comes from local, state, and national health surveys. In this report, lifestyle behavior information was obtained from the 2011-2017 California Health Interview Survey (CHIS) and the 2014-2018 Behavioral Risk Factor Surveillance System (BRFSS).

## Socioeconomic Status

Socioeconomic status, including the circumstances in which one lives and works, greatly affects health. Low socioeconomic status is related to poor health outcomes and can be measured by median family or household income, percent of households living below the Federal Poverty Level, unemployment rates, availability of transportation, educational attainment, and linguistic barriers.<sup>6</sup> The association between these factors is cumulative and influences the health status of an individual over a lifetime.<sup>6</sup> For example, low educational attainment is associated with unemployment and low income, which are associated with poor housing and lack of transportation. Together, the indicators used to define socioeconomic status comprise many of the social determinants of health and directly affect healthcare access and utilization, morbidity and mortality rates, as well as personal lifestyle behaviors.

## Healthcare Access and Utilization

Healthcare service access and utilization are closely aligned with socioeconomic status and are major factors in individual and community health. The unemployment decrease in San Diego from 11.3% in 2010 to 5.9% in 2017 meant a subsequent decrease in the number of uninsured county

residents.<sup>14</sup> In reverse, this situation negatively impacts both the immediate and future health of these residents. Research indicates that chronically ill patients without insurance are less likely to visit health professionals for treatment and medical advice. Uninsured patients are more likely to delay medical care and use emergency departments as usual sources of care.<sup>7</sup> Lack of health insurance is also associated with reduced access to preventive care services, increasing poor health outcomes, particularly among young adults and racial/ethnic minorities.<sup>7</sup>

## Morbidity and Mortality Indicators

Rates of death and medical encounter can be measured and used to describe the impact of non-communicable (chronic) disease, communicable disease, maternal and child health, injury, and behavioral health conditions on the community. For example, while asthma death rates are relatively low compared to other non-communicable (chronic) diseases, asthma-related emergency department (ED) discharges and hospitalizations are high, especially in certain groups of the population. High rates of asthma ED discharge and hospitalization might indicate higher rates of uncontrolled asthma and, thus, lower access to and utilization of appropriate preventive and treatment services. They might also relate to poor air quality and greater exposure to environmental hazards. By using morbidity and mortality indicators to identify health disparities, efforts can be made to address the underlying factors contributing to these differences in health outcomes.

## The Social Determinants of Health

According to the Centers for Disease Control and Prevention (CDC), Social Determinants of Health (SDOH) are “conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes.”<sup>1</sup> Often times these circumstances are influenced by things such as socioeconomic status, policies and systems, social norms, power, or resources which can affect, positively or negatively, one’s health status. Research suggests that SDOH account for between 30-55% of health outcomes.<sup>2</sup> Thus, health inequities can be mitigated, eliminated or avoided by ameliorating these circumstances that lead to poor health. Examples of such SDOH include:



<sup>1</sup><https://www.cdc.gov/socialdeterminants/about.html>

<sup>2</sup><https://www.who.int/health-topics/social-determinants-of-health#tab=1>

## Geographic Areas Assessed in this Report

### SANDAG Subregional Areas (SRAs)

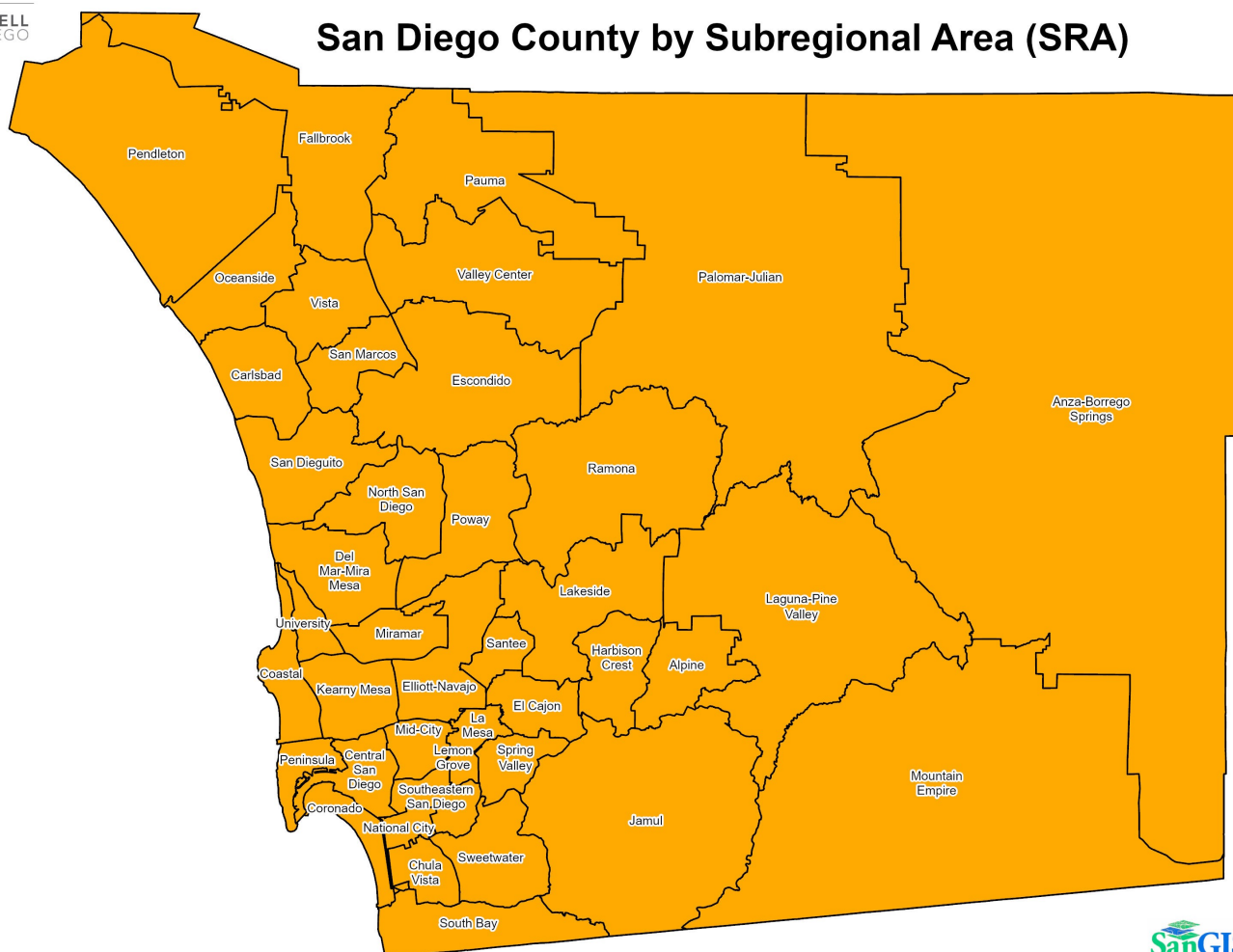
San Diego Association of Governments (SANDAG) develops annual demographic estimates and long range forecasts in addition to maintaining census data files. Data is available by county, Subregional Area (SRA), zip code, and census tract.

San Diego County has 41 SRAs, which are aggregations of census tracts. While the boundaries of many geographical areas, such as cities, change over time, SRA boundaries have remained essentially the same since their formation which allows for meaningful comparisons of time series information because identical areas are being compared. While SRAs are composed of census tracts, they are defined by SANDAG, not the Census Bureau.<sup>19</sup>

Figure 2



### San Diego County by Subregional Area (SRA)



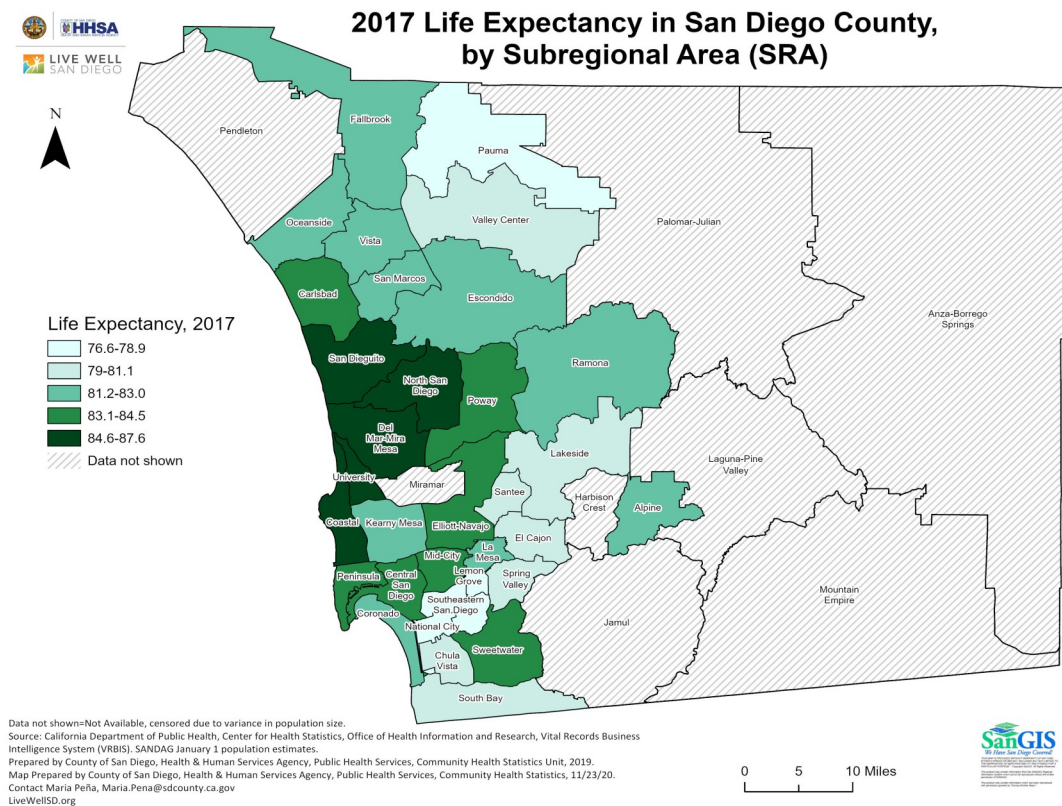
Map Prepared by County of San Diego, Health & Human Services Agency, Public Health Services, Community Health Statistics, 11/23/20.  
Contact Maria Peña, Maria.Pena@sdcounty.ca.gov  
LiveWellSD.org

0 5 10 Miles



# Live Well San Diego and Health Equity

Figure 3



## What is Live Well San Diego?

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

## Live Well San Diego and Health Equity

*Live Well San Diego* identifies 10 indicators to measure the collective impact of these efforts and the work of partners over the long term to create a San Diego County where all residents are healthy, safe, and thriving. Life expectancy, or the average number of years a person can expect to live at birth, is a key measure of health equity and is one of the 10 indicators identified in the *Live Well San Diego* vision. In San Diego County, life expectancy varies by gender, race/ethnicity, and geography.

Overall, the life expectancy in San Diego County was 82.5 years in 2017.<sup>9</sup> On average, females lived about four and a half years longer than males. Compared to other racial and ethnic groups, Asian residents had the highest life expectancy at 86.5 years, while black residents had the lowest (77.2 years).<sup>9</sup> Geographically, residents in the Coastal SRA in the North Central Region had the highest life expectancy (87.6 years), while residents in the Lemon Grove SRA in the East Region had the lowest life expectancy of 76.6 years.<sup>9</sup> Activities, programs, and policies in the *Live Well San Diego* vision work to positively influence life expectancy and increase health equity among San Diego County residents.

## Health Equity in San Diego County: Gender

*Exploring Health Disparities in San Diego County by Gender* is a document prepared by the Division of Public Health Services in the County of San Diego Health and Human Services Agency. The report identifies health disparities among San Diego County residents. The information in this report is meant to be used to identify disparities and serve as a starting point in developing solutions that will help close the gap in existing disparities.

This report supports the *Live Well San Diego* regional vision, identifying health disparities and inequities that are critical in developing prevention and intervention measures, ultimately leading to a healthier San Diego. This document is designed for local agencies, organizations, groups, services, and individuals who have an interest in improving the health of county residents.

Health outcome data were compiled from the County of San Diego Community Health Statistics Unit's San Diego County Community Profiles document. Specifically, death, hospitalization, in-patient treatment, skilled nursing facility/intermediate care, physical rehabilitation, emergency department discharge rates for various health outcomes were analyzed to identify health disparities within San Diego County's populations.

In addition to identifying health disparities, demographic information and lifestyle/behavioral data on each group was provided to highlight some of the potential contributing factors to these health outcomes.

Lastly, prevention strategies, as well as links to related websites, are provided for further information on non-communicable (chronic) disease, communicable disease, injury, behavioral health, and maternal and child health.

For further resources, including local health and demographic information, please visit [www.sdhealthstatistics.com](http://www.sdhealthstatistics.com).



# HEALTH EQUITY IN SAN DIEGO COUNTY:

## Gender Health Disparities



### Introduction to Gender Health Disparities

In San Diego County, there is an even proportion of males to females.

In 2017, in San Diego County:

- Overall, males had a higher burden of poor behavioral health outcomes compared to females.
- Overall, females had a higher burden of non-communicable (chronic disease) compared to males.
- Overall, females had a higher burden of communicable diseases compared to males.
- Females had a higher burden of injuries in San Diego County, however, males had higher rates of death due to an injury than females.

Overall, health outcomes impact female and male residents of San Diego County differently. A series of health indicators and related lifestyle behaviors are presented throughout the report, which aim to describe the most important health concerns facing both populations in San Diego County.

# Demographics

## Females

In 2017, females accounted for half of the San Diego County population. Over half of females (51)% in San Diego County were between the ages of 25 and 64 years, 33% were 24 years or younger, and 16% were ages 65 or older.<sup>10</sup> By the year 2030, the number of female residents is projected to increase by 14%, from 1.6 million to 1.9 million.<sup>11</sup>

By 2030, the number of female residents in San Diego County is projected to increase by 14%.<sup>11</sup>

The median household income of full-time working females in 2017 was an estimated \$47,000, nearly \$5,000 less than San Diego male residents.<sup>12</sup> In the same year, 31% of females lived below 200% of the federal poverty level.<sup>13</sup>

Among females ages 25 years and older, nearly one-third had a high school diploma or less, 30% had some college education or an associate's degree, and 39% completed a bachelor's degree or higher.<sup>12</sup>

In 2017, 63% of females reported they were in excellent or very good health, 24% were in good health, and 14% reported fair or poor health.<sup>13</sup>

In 2017, 93% of females in San Diego County had health insurance.<sup>12</sup>

Nearly nine out of ten females had at least one doctor's visit in 2017. Further, nearly two out of ten females reported visiting an emergency room for medical care. However, one in eight females delayed, or did not receive, needed medical care in San Diego County.<sup>13</sup>



In 2017, one in eight females delayed, or did not receive, needed medical care in San Diego County.<sup>13</sup>

Generally, San Diego County females had lower rates of non-communicable (chronic) disease, injury, and poor behavioral health outcomes compared to San Diego males. However, rates of reported communicable diseases among females were considerably higher compared to males.

In 2017, 93% of females in San Diego County had health insurance.<sup>12</sup>

Further, among maternal and child health outcomes, specific groups within the female population were at higher risk for poor health outcomes. In the following sections, a series of health indicators and related lifestyle behaviors are presented which aim to describe the most important health concerns facing the female population in San Diego County.

# Demographics

## Males

In 2017, half of San Diego County residents were male.<sup>10</sup> Among the male population in San Diego County, 51% were between the ages of 25 and 64 years, 36% were 24 years or younger, and 12% were 65 or over in 2017.<sup>12</sup>

In 2017, 50% of San Diego County residents were male.<sup>10</sup>

As the population continues to grow, the number of male residents in the county is expected to increase by 11% by the year 2030.<sup>11</sup>

The median income of full-time working males in 2017 was an estimated \$53,000 in San Diego County.<sup>12</sup> In the same year, 30% of all San Diego County males earned incomes that were below 200% of the federal poverty level.<sup>13</sup>

Among males ages 25 years and older, 31% reported having a high school education or less, 30% had some college education or an associate's degree, and 38% completed a bachelor's degree or higher.<sup>12</sup>

In 2017, 9% of males delayed or didn't get needed medical care in San Diego County.<sup>13</sup>

In 2017, 91% of males in San Diego County had health insurance.<sup>12</sup>

In 2017, eight out of ten males reported at least one doctor's visit in the past year and nearly two out of ten males reported visiting an emergency room for medical care in the past 12 months. In the same year, 9% of males delayed or didn't get needed medical care in San Diego County.<sup>13</sup>

In general, death due to injury and behavioral health outcomes were higher for males compared to females.

Rates of medical outcomes affected females and males disproportionately in San Diego County. A series of health indicators and related lifestyle behaviors are presented in the following sections, which describes some of the most important health concerns facing the male population in San Diego County.



# Non-Communicable (Chronic) Disease

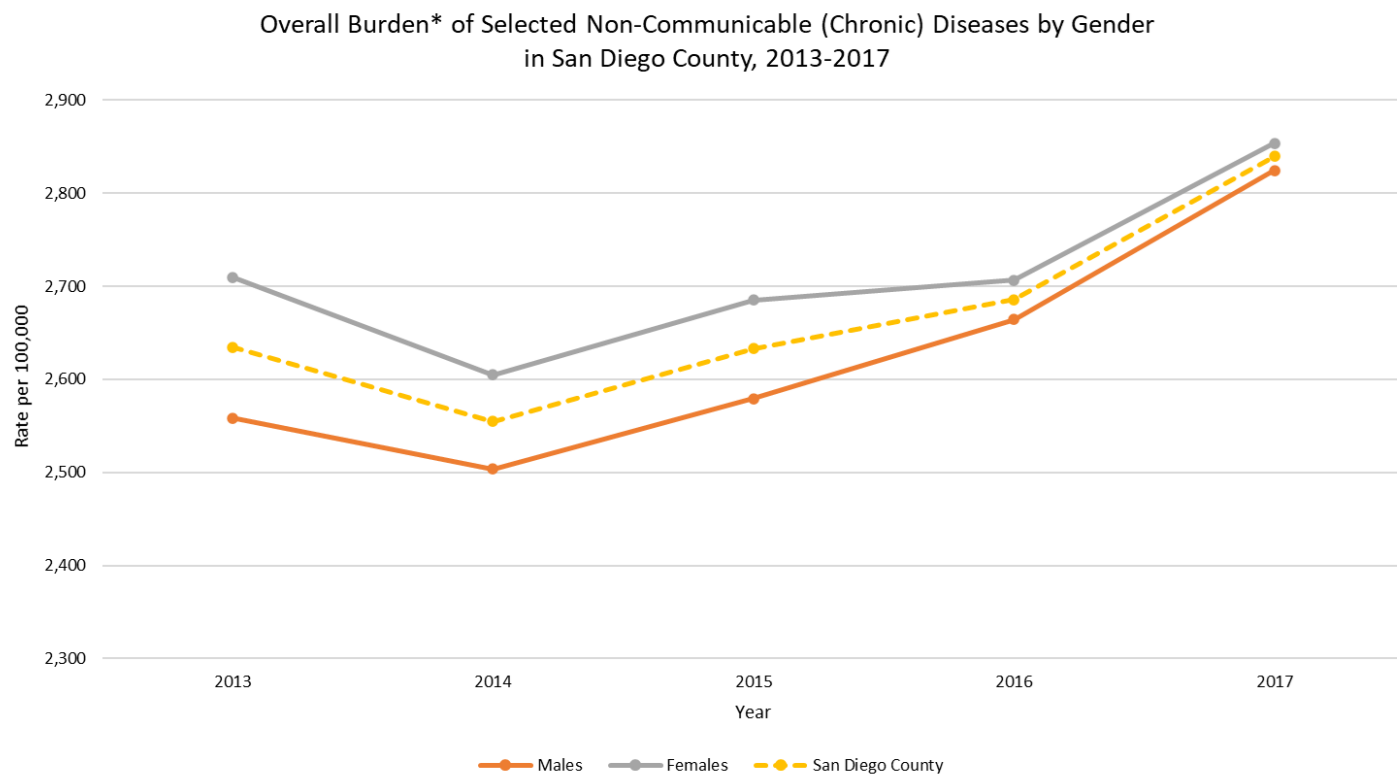
Non-communicable (chronic) diseases are conditions that affect an individual's health for one year or more, require ongoing medical attention or intervention, and may limit activities of daily living. Examples of chronic disease include cancer, heart disease, and diabetes. Many chronic diseases are the result of risk behaviors, such as tobacco use, poor diet, low physical activity, or excessive alcohol use.<sup>19</sup>

Genetics differ between males and females, and may modify disease course and severity. Gender roles also may influence health behaviors such as smoking diet, and physical activity. Access to and use of health care may also differ between men and women, leading to more severe untreated disease.<sup>20</sup> It is important to analyze medical encounter rates by gender to identify where disparities exist, and factors that may be contributing to increased rates.



# Non-Communicable (Chronic) Disease by Gender in San Diego County

Figure 4



Source: California Department of Public Health, 2013 Death Statistical Master Files, 2014-2017 California Vital Records Business Intelligence System (VRBIS); California Office of Statewide Health Planning & Development (OSHPD), Patient Discharge Data & Emergency Department Data, 2013-2017.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics Unit, 2020.

\*Overall burden includes Death, ED Discharge, Hospitalization, In-Patient Treatment, Skilled Nursing Facility (SNF)/Intermediate Care, and Physical Rehabilitation for the following chronic health conditions: Asthma, Coronary Heart Disease (CHD), Chronic Obstructive Pulmonary Disease/Chronic Lower Respiratory Diseases, Diabetes, Lupus and Connective Tissue Disorders, Osteoarthritis, Osteoporosis, Overall Cancer, Overall Hypertensive Diseases, Rheumatoid Arthritis, and Stroke.

Overall, between 2013 to 2017, the burden of non-communicable (chronic) diseases in San Diego County increased for both males and females.

## Females

- Females had a higher burden of non-communicable (chronic) diseases every single year between 2013 and 2017.

# Prevent Gender Health Disparities

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## What You Can Do to Reduce Your Risk of Non-Communicable (Chronic) Disease and Live Well:

- Exercise at least 150 min/week
  - Avoid smoking
  - Limit alcohol consumption
  - Eat more fruits & vegetables
  - Visit your doctor for preventive check-ups
- 

## What Your Community Can Do to Reduce the Risk of Non-Communicable (Chronic) Disease and Live Well:

- Invest in safe parks and recreational facilities
  - Increase the availability and affordability of fresh produce
  - Encourage healthy behaviors
  - Adopt walkable communities
- 



*Live Well San Diego* focuses on creating an environment that encourages all San Diego County residents to live healthy, safe, and thriving lives.

# Non-Communicable (Chronic) Disease

## Females

Females had a higher burden of chronic disease compared to males. Females had a higher burden of overall hypertensive diseases, chronic obstructive pulmonary disease/chronic lower respiratory diseases, osteoarthritis, asthma, and stroke compared to males in 2017.

### Overall Hypertensive Diseases

In 2017, the rate of ED discharge due to overall hypertensive diseases was 1.3 times higher among females compared to males in San Diego County.

- Females in South Region had higher rates of hospitalization due to overall hypertensive diseases compared to females in the other regions of the county. Females in East Region had a higher rate of ED discharge due to overall hypertensive diseases compared to females in other regions of the county.

### Chronic Obstructive Pulmonary Disease (COPD)/ Chronic Lower Respiratory Diseases (CLRD)

In 2017, the rates of death, ED discharge, hospitalization, and skilled nursing facility/intermediate care discharges were higher among females than males in San Diego County.

- Females in Central Region had the highest rate of ED discharge due to COPD/CLRD (338.4 per 100,000 residents) compared to females in all other regions of the county, followed by females in East Region (300.5 per 100,000 residents) and South Region (260.6 per 100,000 residents).

### Osteoarthritis

The burden of osteoarthritis in San Diego County was higher among females compared to males in 2017.

- Compared to females in other regions of the county, the rate of hospitalization due to osteoarthritis among females was highest in East Region, followed by females in North Coastal Region and North Inland Region.

### Asthma

In 2017, the rate of ED discharge due to asthma was 1.2 times higher among females compared to males in San Diego County.

- Females in the Central, South, and East Regions of San Diego County had the highest rates of ED discharge compared to females in other regions of the county.

### Stroke

In 2017, the burden of stroke was higher among females in San Diego County. Notably, the rate of death due to stroke was 1.4 times higher among San Diego County females compared to males.

- Females in North Inland Region had the highest rate of death due to stroke compared to females in other regions of the county.

### Risk Factors and Prevention Strategies

Tobacco use, lack of physical activity, poor diet, and abuse of alcohol are leading risk factors for the development of non-communicable (chronic) disease.<sup>14</sup> Smoking and secondhand exposure to tobacco smoke greatly increases the risk of developing asthma or triggering an asthma attack.<sup>14</sup> Changes in modifiable risk factors such as tobacco use, lack of physical activity, and poor diet, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among the residents of San Diego County.<sup>14</sup>

- In 2017, 7% of San Diego County females ages 18 and over were current smokers. 1 in 5 female adults reported being former smokers in 2017.<sup>13</sup>
- Among females aged 11 years and younger, 43% did not engage in at least four or more days of physical activity in 2017.<sup>13</sup>
- In 2017, nearly 69% of female adults consumed less than five servings of fruits and vegetables daily.<sup>13</sup>
- In 2017, 7% of adult females reported binge drinking at least once during the past 30 days.<sup>13</sup>

# Non-Communicable (Chronic) Disease

## Males

In 2017, males had a higher burden of overall cancer, coronary heart disease, diabetes, and heart failure compared to females in San Diego County.

### Overall Cancer

In 2017, males had higher rates of death and medical encounters due to overall cancer compared to females, with the exception of ED discharge which was slightly higher among females.

- Male residents in the East Region had the highest rate of death due to cancer compared to males living in other regions of the county in 2017.
- Male residents in the South and East Regions had the highest rates of hospitalization due to cancer compared to males living in all other regions of the county in 2017.

### Prostate Cancer

In San Diego County, prostate cancer was the most common cancer afflicting males in 2017. Compared to males in other regions of the county, residents of East and North Inland Regions had the highest rates of death due to prostate cancer in 2017. Males living in North Coastal Region had a higher rate of hospitalization due to prostate cancer compared to males in any other region of the county.

### Coronary Heart Disease (CHD)

In 2017, the rates of death, hospitalization, and discharges from the ED, in-patient treatment, physical rehabilitation, and skilled nursing facility/intermediate care due to CHD were highest among males compared to females in San Diego County. Males living in East Region had the highest rates of death (135.5 per 100,000 residents) and ED discharge (68.4 per 100,000 residents) due to CHD compared to males in all other regions of the county.

### Diabetes

Males had higher rates of death, hospitalization, and discharges from the ED, in-patient treatment, physical

rehabilitation, and skilled nursing facility/intermediate care due to diabetes compared to females and the county overall.

Males living in East and Central Regions had the highest rates of ED discharge and hospitalization due to diabetes compared to males living in all other regions of the county.

### Heart Failure

In 2017, the rates of hospitalization and ED discharge due to heart failure were highest among males in San Diego County. Males living in East Region had the highest rates of hospitalization, ED discharge, and death due to heart failure compared to males living in all other regions of the county in 2017.

### Risk Factors and Prevention Strategies

Tobacco use, lack of physical activity, poor diet, and abuse of alcohol are leading risk factors for the development of non-communicable (chronic) disease.<sup>14</sup>

Smoking and secondhand exposure to tobacco smoke greatly increases the risk of developing asthma or triggering an asthma attack.<sup>14</sup>

Changes in modifiable risk factors such as tobacco use, lack of physical activity, and poor diet, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among the residents of San Diego County.<sup>14</sup>

- In 2017, 14% of San Diego County adult males were current smokers. Additionally, one out of four males reported being a former smoker in 2017.<sup>13</sup>
- Among adult males who can walk, 49% engaged in 4 or more days of physical activity lasting at least 20 minutes at a time in 2017.<sup>13</sup>
- In 2017, 1 in 9 males reported binge drinking at least 3 times or more in the past 30 days.<sup>13</sup>

# Communicable Disease

Communicable diseases are those that spread from one person to another, or from an animal to a person. Communicable diseases may be spread through the air, bodily fluids, or by touching a contaminated surface. Several communicable diseases are vaccine preventable. Good hygiene, such as proper handwashing, is also effective in slowing the spread of communicable diseases.<sup>21</sup>

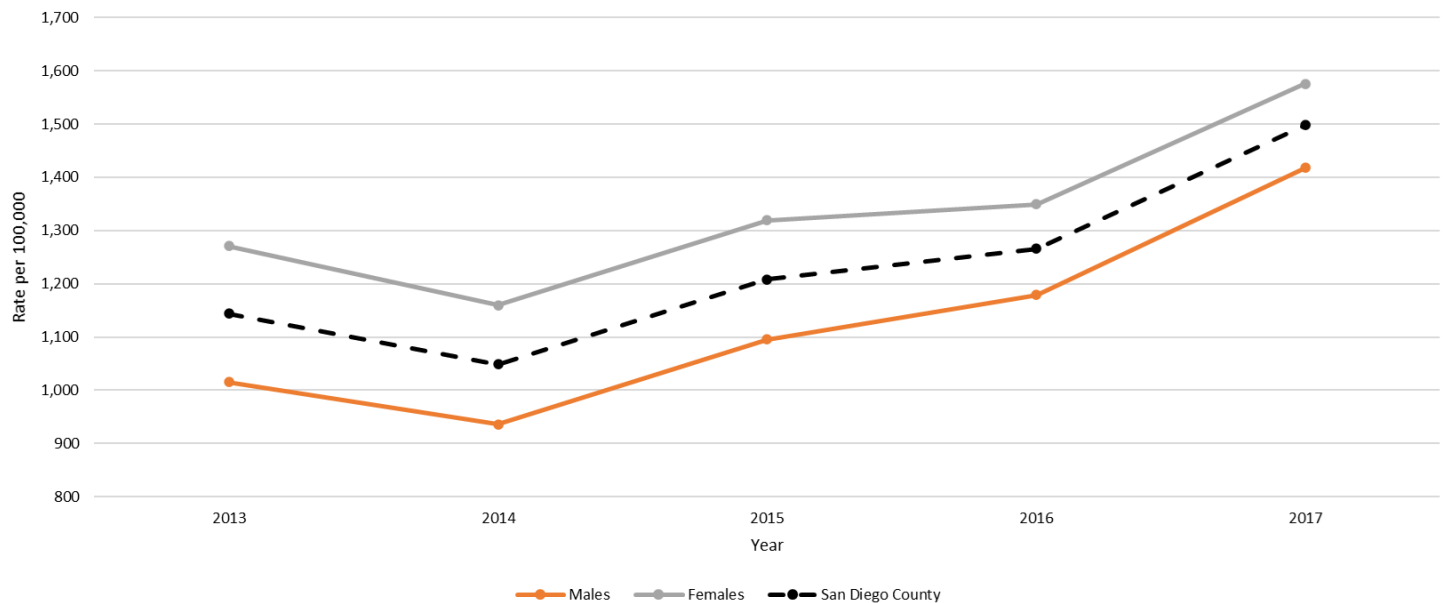
Genetics differ between males and females, and may modify the individual's immune response to an infection. There also may be gender differences in risk of exposure to infectious pathogens.<sup>20</sup> It is important to analyze medical encounter rates by gender to identify where disparities exist, and factors that may be contributing to increased rates.



# Communicable Disease by Gender in San Diego County

Figure 5

Overall Burden\* of Selected Communicable Diseases by Gender in San Diego County, 2013-2017



Source: California Department of Public Health, 2013 Death Statistical Master Files, 2014-2017 California Vital Records Business Intelligence System (VRBIS); California Office of Statewide Health Planning & Development (OSHPD), Patient Discharge Data & Emergency Department Data, 2013-2017; County of San Diego (CoSD), Health & Human Services Agency (HHSA), Tuberculosis Control and Refugee Health Program, 2013-2017; County of San Diego (CoSD), Health & Human Services Agency (HHSA), HIV, STD and Hepatitis Branch (HSHB), 2013-2017. Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics Unit, 2020.

\*Overall burden includes Death, ED Discharge, Hospitalization, In-Patient Treatment, Skilled Nursing Facility (SNF)/Intermediate Care, and Physical Rehabilitation for Flu/Pneumonia and incidence of the following communicable health conditions: Chlamydia, Gonorrhea, Syphilis, and Tuberculosis.

Overall, the burden of communicable diseases among San Diego County males and females increased between 2013 and 2017, with the exception of 2013-2014 where the burden for communicable diseases decreased.

## Females

- Females had a higher burden of communicable diseases compared to males and the county overall from 2013 to 2017.

## Males

- Males had a lower burden of communicable diseases every year between 2013 and 2017 compared to females and the county overall.

# Prevent Gender Health Disparities

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## What You Can Do to Reduce Your Risk of Communicable Disease and Live Well:

- Get all recommended age appropriate vaccinations
  - Visit your doctor regularly
  - Get early treatment for infections, and complete entire treatment regimens
- 

## What Your Community Can Do to Reduce the Risk of Communicable Disease and Live Well:

- Encourage education about protective measures
  - Promote vaccination opportunities
  - Support public health campaigns aimed at reducing disease
- 



*Live Well San Diego* focuses on creating an environment that encourages all San Diego County residents to live healthy, safe, and thriving lives.

# Communicable Disease

## Females

Overall, the burden of communicable disease was higher among females compared to males in 2017. However, this was largely due to the high rate of health care utilization for urinary tract infections among females. In addition, females had higher rates of influenza, pneumonia, and chlamydia in 2017.

### Urinary Tract Infections

Compared to males, females had the highest burden of urinary tract infections in 2017. In San Diego County, the burden of urinary tract infections was 4.1 times higher among females than males.

Females living in South, Central, and East Regions had the highest rates of ED discharge due to urinary tract infections compared to females in all other regions of the county.

### Influenza (Flu)

In 2017, females had a higher burden of flu than males in San Diego County.

While females living in South, Central, and East Regions had the highest rates of ED discharge due to flu, females in East Region had the highest rate of death due to flu compared to females in all other regions of the county.



### Pneumonia

Overall, females had slightly higher rates of ED discharge, hospitalization, and death due to pneumonia compared to males in 2017.

While females living in South, North Coastal, and Central Regions had the highest rates of ED discharge due to pneumonia, females living in East Region had the highest rate of death due to pneumonia compared to females in all other regions of the county in 2017 followed closely by those living in North Coastal Region.

### Chlamydia

In 2017, the burden of chlamydia was higher among females compared to males in San Diego County.

Females living in the Central and South Regions had the highest incidence rates of chlamydia compared to females in other regions of the county.

### Other Notable Communicable Disease Comparisons

It is worth noting that there were differences between females by region. Generally, there was a higher burden of reported communicable disease among females living in the Central and South Regions compared to other regions in the county.

### Risk Factors and Prevention Strategies

Prevention measures against communicable diseases, frequent testing, seeking early treatment, completing treatment regimens, and staying current with recommended vaccinations are key ways to reduce the burden of communicable disease among the low income communities in San Diego County.<sup>15</sup>

# Communicable Disease

## Males

From 2013 to 2017, females had a higher burden of communicable disease compared to males in San Diego County. However, males had a higher burden of tuberculosis and sexually transmitted infections such as gonorrhea and syphilis except chlamydia which was higher among females in 2017.

### Tuberculosis (TB)

In 2017, the incidence of TB among males was 1.6 times higher than females in San Diego County. Furthermore, the incidence of TB was higher among males compared to females in all regions of the county.

### Gonorrhea

In San Diego County, the incidence rate of gonorrhea was 2.7 times higher among males compared to females in 2017.

Males living in the Central and South Regions had the highest incidence rates of gonorrhea compared to males living in all other regions of the county.

### Syphilis

In 2017, the incidence rate of syphilis that was 22.4 times higher among males compared to females.

Males living in the Central and East Regions had the highest incidence rates of syphilis compared to males living in all other regions of the county.

### Risk Factors and Prevention Strategies

Prevention measures against communicable diseases, frequent testing, seeking early treatment, completing treatment regimens, and staying current with recommended vaccinations are key ways to reduce the burden of communicable disease among the low income communities in San Diego County.<sup>15</sup>



# Injury

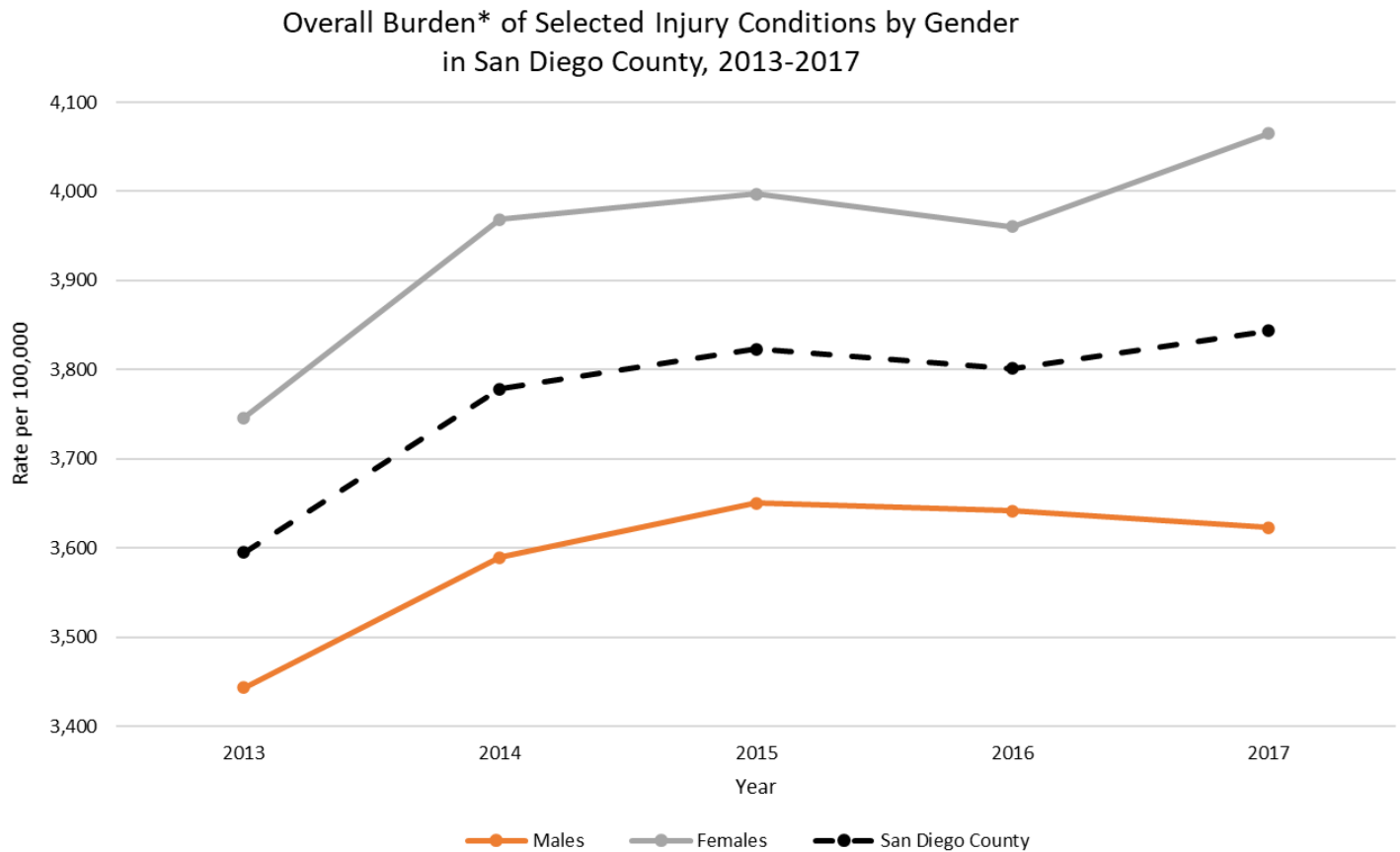
Injury is bodily harm that occurs as a result of severe exposure to an external force, substance, or submersion. Injuries may be the result of a fall, a motor vehicle collision, violence, or drowning.<sup>22</sup>

Gender differences exist in risk-taking behavior, which may influence an individual's risk of injury. Age modifies this relationship as well.<sup>23</sup> It is important to analyze medical encounter rates by gender to identify where disparities exist, and factors that may be contributing to increased rates.



# Injury by Gender in San Diego County

**Figure 6**



Source: California Department of Public Health, 2013 Death Statistical Master Files, 2014-2017 California Vital Records Business Intelligence System (VRBIS); California Office of Statewide Health Planning & Development (OSHPD), Patient Discharge Data & Emergency Department Data, 2013-2017.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics Unit, 2020.

\*Overall burden includes Death, ED Discharge, Hospitalization, In-Patient Treatment, Skilled Nursing Facility (SNF)/Intermediate Care, and Physical Rehabilitation for the following injury conditions: Assault/Homicide, Drowning, Falls, Firearm-Related Injuries, Hip Fractures, Motor Vehicle Injuries, Pedestrian injuries, not Motor Vehicle, Poisoning, and Self-Inflicted Injuries/Suicide.

Between 2013 and 2017, the burden of injuries increased for males and females in San Diego County.

## Females

- Females had a higher burden of injuries every year compared to males and the county overall from 2013 to 2017.

## Males

- Notably, however, males had a higher burden of assault/homicide, drowning, and firearm-related injuries every year between 2013 and 2017.

# Prevent Gender Health Disparities

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## What You Can Do to Reduce Your Risk of Injury and Live Well:

- Be aware of your surroundings
  - Never drink and drive
  - Always wear your seatbelt
  - Always wear your helmet while on a bike or skateboard
- 

## What Your Community Can Do to Reduce the Risk of Injury and Live Well:

- Invest in walkable sidewalks and safe roads
  - Invest in drug and alcohol treatment programs
  - Make safety a priority through education
- 



*Live Well San Diego* focuses on creating an environment that encourages all San Diego County residents to live healthy, safe, and thriving lives.

# Injury

## Females

Overall, the burden of injury was higher among females compared to males in 2017. Particularly, the burden of falls, hip fracture, and self-inflicted injury were highest among females.

### Falls

The burden of falls was higher among females compared to males in San Diego County in 2017. Females living in East Region had the highest rates of ED discharge and hospitalization due to falls compared to females in other regions of the county in 2017.

### Hip Fracture

Females in San Diego County had higher rates of death, hospitalization, discharges from the ED, in-patient treatment, physical rehabilitation, and from skilled nursing facility/intermediate care due to hip fracture compared to males in 2017. Notably, the rate of hospitalization due to hip fracture was 2 times higher among females than males in San Diego County.

Females living in East, North Coastal, and North Inland Regions had higher rates of hospitalization due to hip fractures compared to females living in all other regions of the county in 2017.

### Self-Inflicted Injury and Suicide

Overall, females had higher rates of hospitalization and discharges from the ED, in-patient treatment, physical rehabilitation, and skilled nursing facility/intermediate care due to self-inflicted injuries compared to males in 2017, although males had higher rates of suicide compared to females.

Compared to females living in other regions of the county, females living in East Region had the highest rates of ED discharge, hospitalization, and in-patient treatment facility discharges in 2017.



### Risk Factors and Prevention Strategies

Failure to use protective equipment and active restraints, lack of supervision of children during play and other activities, and not being aware of safety hazards increase the risk of an injury.<sup>16</sup>

Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>16</sup>

In 2017, 25.3% of females in San Diego County reported needing help for an emotional/mental health problem or use of alcohol/drugs.<sup>13</sup>

# Injury

## Males

In 2017, females had slightly higher rates of injury compared to males, although males had higher rates of assault,\* poisoning, motor vehicle-related pedestrian injuries, pedacycle motor vehicle collision injuries, firearm-related injuries, and suicide compared to females in San Diego County.

### Assault\*

In 2017, the burden of assault was higher among males compared to females in San Diego County.

Compared to males living in all other regions of the county, males living in Central Region had the highest rates of ED discharge, hospitalization, in-patient treatment facility discharge, and death due to assault/homicide in 2017.

### Poisoning

Males had higher rates of ED discharge, hospitalization, and death due to poisoning compared to females in San Diego County in 2017.

Males living in the Central and East Regions had the highest rates of ED discharge, hospitalization, and death due to poisoning compared to males living in all other regions of the county in 2017.

### Self-Inflicted Injury and Suicide

In 2017, the rate of suicide was 3 times higher in males compared to females in San Diego County.

Compared to males living in all other regions of the county, males living in East Region had the highest rate of suicide followed by males in North Inland Region.

### Firearm-Related Injuries

In 2017, males were 6 times more likely to be hospitalized due to firearm-related injuries and 4.7 times more likely to be discharged from the ED due to firearm-related injuries in San Diego County. Males

living in the East, Central, and South Regions had the highest rates of ED discharge, hospitalization, and death due to firearm-related injuries compared to males living in all other regions of the county in 2017.

### Motor Vehicle-Related Pedestrian Injuries

While males living in the Central and East Regions had a higher rate of ED discharge due to motor vehicle-related pedestrian injuries, those living in North Coastal Region had a higher rate of hospitalization due to motor vehicle-related pedestrian injuries compared to males in all other regions in 2017.

### Pedacycle Motor Vehicle Collision Injuries

In 2017, males living in East Region had a higher rate of ED discharge due to pedacycle motor vehicle collision injuries compared to males living in all other regions of the county.

### Risk Factors and Prevention Strategies

Failure to use protective equipment and active restraints, lack of supervision of children during play and other activities, and not being aware of safety hazards increase the risk of an injury.<sup>16</sup>

Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>16</sup>

- In 2017, 1 in 9 males reported to have ever seriously thought about committing suicide in San Diego County.<sup>13</sup>
- Additionally, 1 in 7 males reported needing help for emotional/mental health problems or use of alcohol/drugs in San Diego County.<sup>13</sup>

\*Assault includes homicide, neglect, abandonment, and maltreatment.

# Behavioral Health

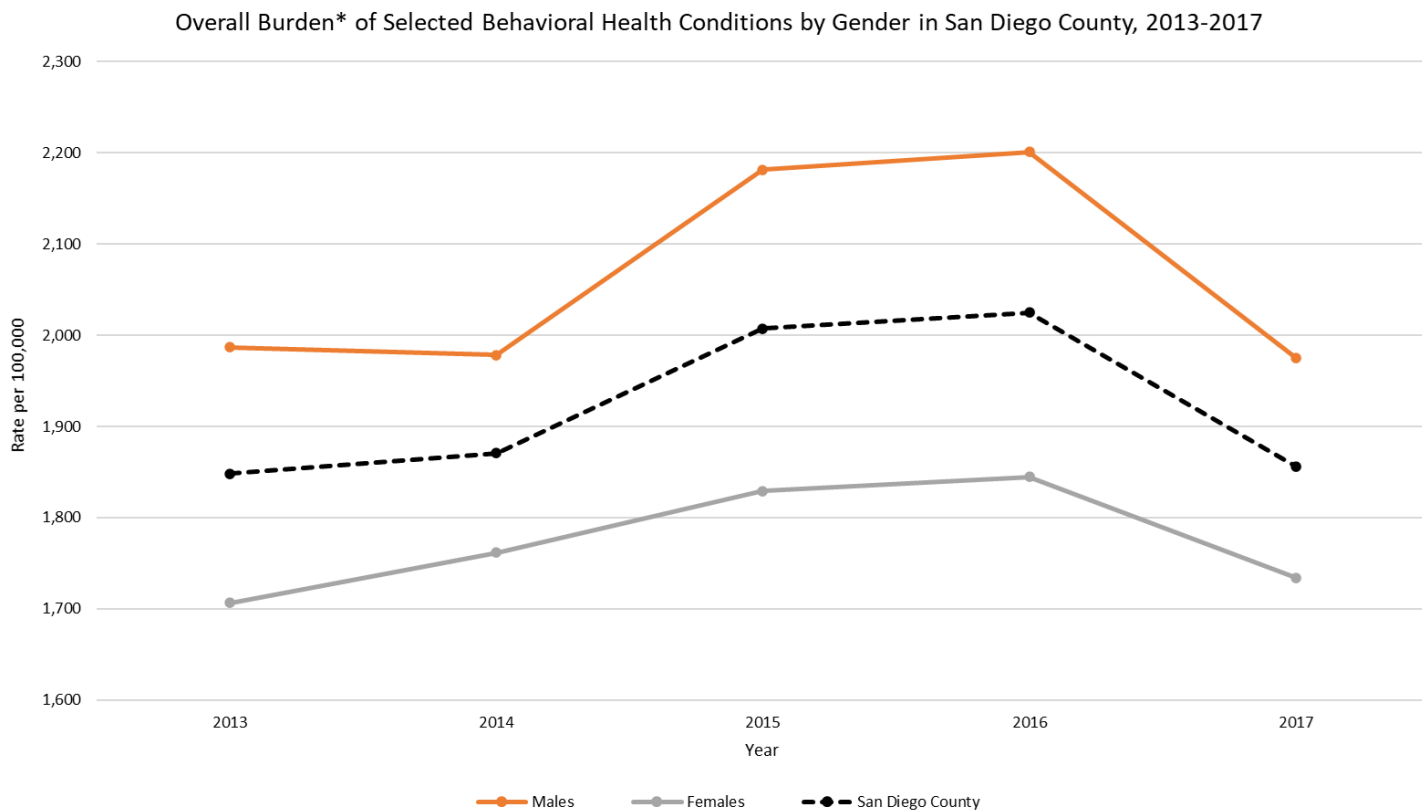
Behavioral health conditions may affect a person's thinking, feeling, behavior, or mood. Behavioral health conditions may be affected by an individual's genetics and lifestyle. Environment, stress, and traumatic life events may also make an individual more likely to develop behavioral health conditions.<sup>24</sup>

Gender influences an individual's likelihood of developing a behavioral health condition with females experiencing different social, economic, and environmental factors to males.<sup>25</sup> It is important to analyze medical encounter rates by gender to identify where disparities exist, and factors that may be contributing to increased rates.



# Behavioral Health Outcomes by Gender in San Diego County

**Figure 7**



Source: California Department of Public Health, 2013 Death Statistical Master Files, 2014-2017 California Vital Records Business Intelligence System (VRBIS); California Office of Statewide Health Planning & Development (OSHPD), Patient Discharge Data & Emergency Department Data, 2013-2017.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics Unit, 2020.

\*Overall burden includes Death, ED Discharge, Hospitalization, In-Patient Treatment, Skilled Nursing Facility (SNF)/Intermediate Care, and Physical Rehabilitation for the following behavioral health conditions: ADD and Related Disorders, Alcohol-Related Disorders, Alzheimer's Disease and Related Dementias (ADRD), Anxiety, Impulse Disorders, Mood Disorders, Personality Disorders, Schizophrenia, and Substance-Related Disorders.

Between 2013-2016, the burden of behavioral health conditions increased every year among males and females. However, the burden of behavioral health conditions decreased between 2016 and 2017 for both males and females.

## Females

- Overall, males had a higher burden of behavioral health conditions every year from 2013 to 2017 compared to females and the county overall.

## Males

- While females had a lower burden of behavioral health conditions overall, females had a higher burden of Alzheimer's disease and related dementias (ADRD), anxiety, and mood disorders every year between 2013 and 2017.

# Prevent Gender Health Disparities

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## What You Can Do to Reduce Your Risk of Poor Behavioral Health Outcomes and Live Well:

- Seek help for an emotional, behavioral health, or alcohol/drug use problem
  - Seek out healthy activities to reduce stress, and stay socially connected, such as exercising or volunteering
- 

## What Your Community Can Do to Reduce the Risk of Poor Behavioral Health Outcomes and Live Well:

- Educate residents about the warning signs of behavioral health issues
  - Foster environments that reduce the stigma associated with behavioral health issues
- 



*Live Well San Diego* focuses on creating an environment that encourages all San Diego County residents to live healthy, safe, and thriving lives.

# Behavioral Health

## Females

Overall, females had a lower burden of poor behavioral health outcomes compared to males in 2017. However, the burden of mood disorders, anxiety, delirium, Alzheimer's disease and related dementias (ADRD), benzodiazepines and other sedative-related disorders, adjustment disorders, and post-traumatic stress disorder (PTSD) were highest among females compared to males.

### Mood Disorders

In 2017, the burden of mood disorders was higher among females compared to males in San Diego County.

Compared to females living in all other regions of the county, females living in East, Central, and South Regions had the highest rates of in-patient treatment facility discharges and hospitalizations due to mood disorders in 2017.



### Delirium

In San Diego County, the burden of delirium was higher among females compared to males in 2017.

Females living in East Region had higher rates of death, ED discharge, and hospitalization due to delirium compared to females living in all other regions of the county in 2017.

### Alzheimer's Disease and Related Dementias (ADRD)

In San Diego County, the rates of death, hospitalization, discharges from the ED, in-patient treatment, and skilled nursing facility/intermediate care for ADRD were higher among females compared to males in 2017.

Compared to females living in all other regions of the county, females living in East and North Inland Regions had the highest rates of death and ED discharge due to ADRD in 2017.

### Benzodiazepines and Other Sedative-Related Disorders

In San Diego County, the burden of benzodiazepines and other sedative-related disorders among females was higher compared to males in 2017.

In 2017, females living in East Region had the highest rates of ED discharge and hospitalization due to benzodiazepines and other sedative-related disorders compared to females living in all other regions of the county.

### Adjustment Disorders

In 2017, the burden of adjustment disorders was higher among females compared to males.

Compared to females living in all other regions of the county, the rate of ED discharge due to adjustment disorders was highest among females living in the Central and North Coastal Regions.

# Behavioral Health

## Females

### Post-Traumatic Stress Disorder (PTSD)

In 2017, the burden of PTSD was higher among females compared to males in San Diego County.

The rate of in-patient treatment facility discharge due to PTSD was highest among females living in the Central and North Inland Regions compared to females living in other regions of the county. Furthermore, the rate of in-patient treatment facility discharges among females was nearly 3 times that of males in Central Region.

### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>17</sup>

Seeking help for an emotional/behavioral health or alcohol/drug problem, exercising to reduce stress, and avoiding social isolation are major prevention strategies that can help reduce poor behavioral health outcomes.<sup>17</sup>

In 2017, 11% of adult females in San Diego County reported experiencing serious psychological distress during the past year.<sup>13</sup>

One out of 7 adult females in San Diego County made 4 or more visits to a professional for mental/drug/alcohol issues in the past year.<sup>13</sup>

In 2017, 20% of working adult females in San Diego County experienced emotions that created moderate to severe work impairment in the past 12 months.<sup>13</sup>



# Behavioral Health

## Males

In 2017, males had a higher burden of poor behavioral health outcomes compared to females in San Diego County. Males had a higher burden of alcohol-related disorders, schizophrenia and other psychotic disorders, substance-related disorders, attention deficit disorder (ADD) and other conduct disorders and impulse disorders compared to females in 2017.

### Alcohol-Related Disorders

In 2017, the burden of alcohol-related disorders was highest among males compared to females in all geographic areas of San Diego County. The rates of ED discharge and death due to alcohol-related disorders was highest among males living in Central Region compared to males living in all other regions of the county in 2017.



### Impulse Disorders

In San Diego County, males had higher rates of ED and in-patient treatment facility discharges due to impulse disorders compared to females in 2017.

Moreover, males living in East Region had higher rates of ED and in-patient treatment facility discharges compared to males living in all other regions of the county in 2017.

### Substance-Related Disorders

Overall, males had higher rates of ED discharge, in-patient treatment facility discharge, and death due to substance-related disorders compared to females in 2017.

### Opioid-Related Disorders

In 2017, the burden of opioid-related disorders in San Diego County was higher among males compared to females. Additionally, males living in Central Region had the highest rate of ED discharge due to opioid-related disorders compared to males living in all other regions of the county in 2017.

### Cannabis-Related Disorders

In San Diego County, males had higher rates of ED discharge, hospitalization, and in-patient treatment facility discharges due to cannabis-related disorders compared to females in 2017.

Moreover, males in Central Region had higher rates of ED discharge and hospitalization due to cannabis-related disorders compared to males living in all other regions of the county in 2017.

### Schizophrenia and Other Psychotic Disorders

In San Diego County, males had higher rates of ED discharge, hospitalization, and in-patient treatment facility discharges due to schizophrenia and other psychotic disorders compared to females in 2017.

Moreover, males living in Central Region had a higher rates of in-patient treatment facility discharge, ED discharge, and hospitalization due to schizophrenia and other psychotic disorders compared to males living in all other regions of the county in 2017.

# Behavioral Health

## Males

### Attention Deficit Disorder (ADD) and Other Conduct Disorders

In 2017, males were 2.7 times more likely to be discharged from in-patient treatment and 2 times more likely to be discharged from the ED due to ADD and other conduct disorders compared to females in San Diego County. Additionally, males had higher rates of ED discharge due to ADD and other conduct disorders across all HSA Regions in 2017.

Males living in East Region had higher rates of ED discharge and in-patient treatment facility discharges due to ADD and other conduct disorders compared to males living in all other regions of the county in 2017.



### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>17</sup>

Seeking help for an emotional/behavioral health or alcohol/drug problem, exercising to reduce stress, and avoiding social isolation are major prevention strategies that can help reduce poor behavioral health outcomes.<sup>17</sup>

In 2017, 1 in 20 adult males in San Diego County reported binge drinking at least once in the past 30 days.<sup>19</sup>

About 6% of adult males in San Diego County reported having serious psychological distress during the past year.<sup>13</sup>

In 2017, 1 in 12 adult males visited a professional for mental/drug/alcohol issues in the past year at least 4 or more times in San Diego County.<sup>13</sup>

# Maternal & Child Health

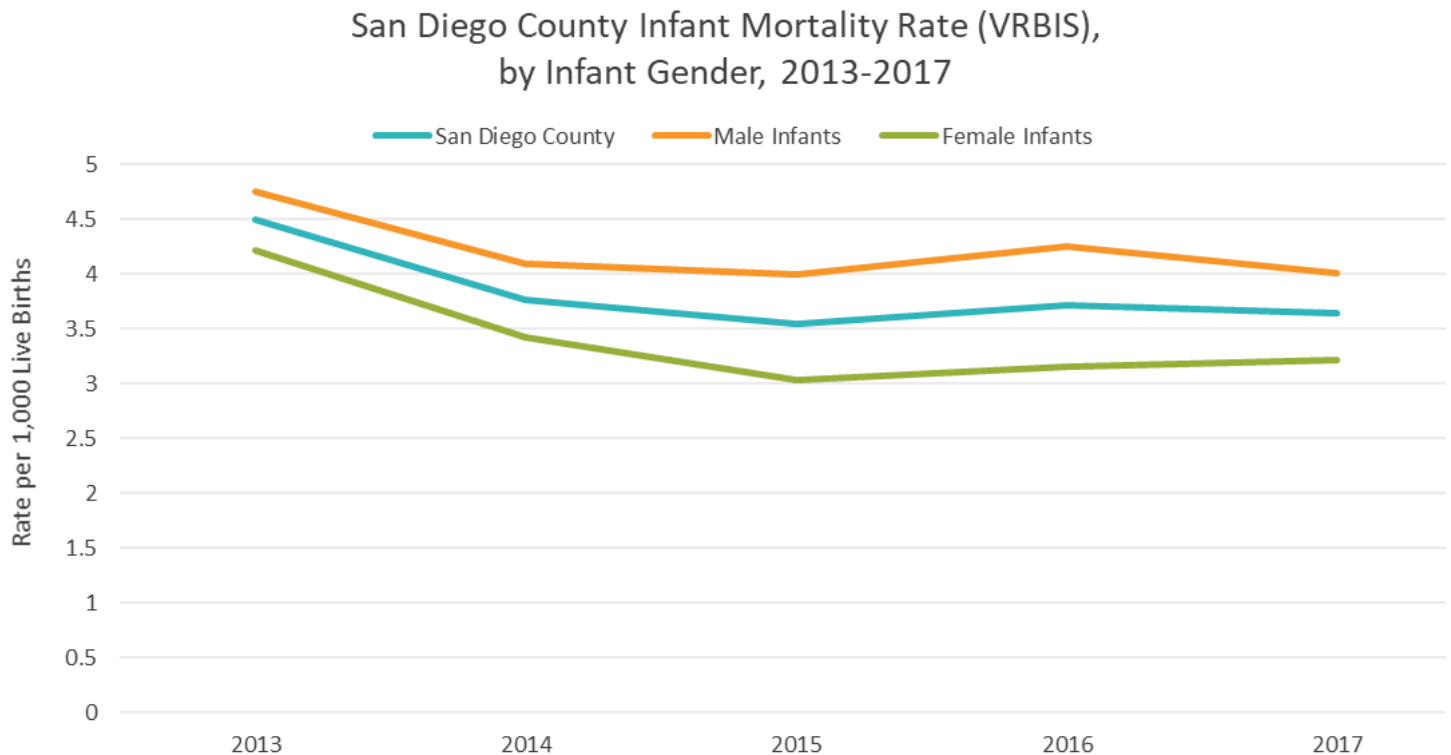
Maternal and child health focus on health issues of women, infants, and children.<sup>26</sup> Conditions falling into this category include low birth weight among newborns and infant mortality. Also discussed are utilization of prenatal care, preterm births, and births to teenaged mothers.

Racial and ethnic disparities in maternal and child health exist as a combination of other social determinants of health, such as income, educational attainment, health insurance coverage and subsequent access to care.<sup>26</sup> Biological, physical, cognitive, and social differences between male and female children may also affect differences in the development of childhood disorders.<sup>27</sup> It is important to analyze medical encounter rates by gender to identify where disparities exist, and factors that may be contributing to increased rates.



# Maternal & Child Health in San Diego County

Figure 8



Source: State of California, Department of Public Health, Death Statistical Master Files (before 2014), California Comprehensive Death Files (2014 and later), Birth Statistical Master Files (before 2017), and California Comprehensive Birth Files (2017 and later). County of San Diego, Health and Human Services Agency, Public Health Services, Maternal, Child and Family Health Services (MCFHS).

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics Unit, 2020.

- Between 2013 to 2017, the rates of infant mortality were highest among male infants every year compared to female infants and the county overall.
- While the rates fluctuated between 2013 and 2017, the greatest decrease occurred between 2013 and 2014.
- The greatest increase in infant mortality rates between 2013 and 2017 occurred between 2015 and 2016.

# Prevent Gender Health Disparities

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## What You Can Do to Reduce Your Risk of Poor Maternal & Child Health Outcomes and Live Well:

- Seek early prenatal care
  - Eat a balanced diet
  - Avoid smoking, alcohol consumption, or using drugs while pregnant
  - Engage in physical activity
- 

## What Your Community Can Do to Reduce the Risk of Poor Maternal & Child Health Outcomes and Live Well:

- Encourage early prenatal care
  - Develop lactation policies
  - Provide affordable daycare options
  - Encourage enrollment in nutrition assistance programs for eligible mothers and children
- 



*Live Well San Diego* focuses on creating an environment that encourages all San Diego County residents to live healthy, safe, and thriving lives.

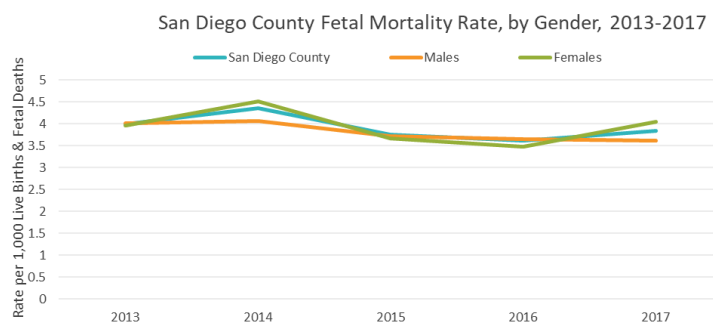
# Maternal & Child Health

## Females

In general, maternal and child health among San Diego County females have met or exceeded the Healthy People 2020 goals. However, there are some key differences by region and race/ethnicity. For nearly all maternal and child health indicators, the proportion of adverse health outcomes was higher for black mothers and children, and those living in the Central and South Regions of the county.

### Fetal Mortality

In 2017, the rate of fetal mortality among San Diego County residents was 3.8 per 1,000 live births and fetal deaths, lower than the Healthy People 2020 goal of 5.6 per 1,000 live births.



Source: State of California, Department of Public Health, Center for Health Statistics and Informatics, Birth and Fetal Death Statistical Master Files, and California Comprehensive Birth Files. County of San Diego, Health and Human Services Agency, Public Health Services, Maternal, Child and Family Health Services (MCFHS). Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics Unit, 2020.

The rate of fetal mortality was highest among black mothers (7.4 deaths per 1,000 live births and fetal deaths) in San Diego County in 2017.

Central Region had the highest fetal mortality rate (5.1 deaths per 1,000 live births and fetal deaths) compared to all other regions in 2017.

### Infant Mortality

In 2017, the rate of infant mortality among San Diego County residents was 3.6 per 1,000 live births, lower than the Healthy People 2020 goal of 6.0.

South Region had the highest rate of infant mortality at 4.6 per 1,000 live births compared to all other regions in 2017.

The rate of infant mortality was highest among black mothers (6.8 deaths per 1,000 live births) in San Diego County in 2017.

### Low Birth Weight

In 2017, the percentage of infants born with low birth weight in San Diego County was 6.5%, lower than the Healthy People 2020 goal of 7.8%.

The percentage of low birth weight was highest among black mothers (10.1%) compared to all other races/ethnicities in the county in 2017.

Central Region had the highest percentage of low birth weight compared to all other regions in 2017.

### Very Low Birth Weight

In 2017, the percentage of infants born with very low birth weight in San Diego County was 1.0%, lower than the Healthy People 2020 goal of 1.4%.

The percentage of very low birth weight was highest among black mothers (2.0%) in San Diego County.

Central Region had the highest percentage of very low birth weight (1.2%) compared to all other regions in the county.

# Maternal & Child Health

## Females

There were some key differences in maternal and child health outcomes by region and race/ethnicities. For nearly all maternal and child health indicators, the proportion of adverse health outcomes was higher for Black and Hispanic mothers and children, and those living in the Central, East, and South Regions of the county.

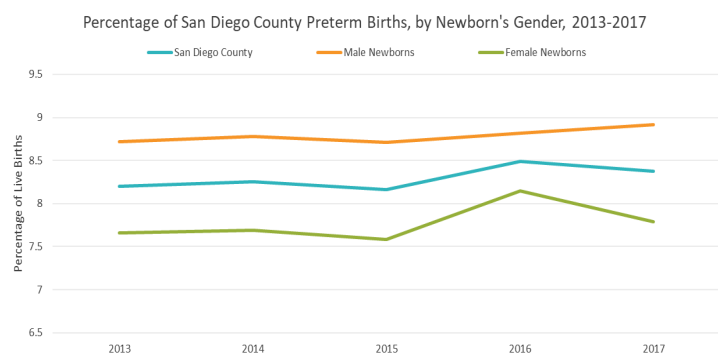
### Sudden Infant Death Syndrome (SIDS)

In 2016, the rate of infant mortality among San Diego County residents was 4.0 per 1,000 live births, lower than the Healthy People 2020 goal of 6.0.<sup>28</sup>

- The rate of infant mortality was highest among black mothers (7.3 deaths per 1,000 live births) in San Diego County in 2016.
- South Region had the highest rate of infant mortality at 5.6 per 1,000 live births compared to all other regions in 2016.

### Preterm Births

In 2017, the percentage of preterm births in San Diego County was 8.4%, lower than the Healthy People 2020 goal of 9.4%.



Sources: State of California, Department of Public Health, Center for Health Statistics and Informatics, Birth Statistical Master Files and Birth Public Use Files. County of San Diego, Health and Human Services Agency, Public Health Services, Maternal, Child and Family Health Services (MCFHS). Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHS), Community Health Statistics Unit, 2020.

The percentage of preterm births was highest among black mothers (11.3%) in San Diego County.

South Region had the highest percentage of preterm births compared to all other regions in the county in 2017.

### Early Prenatal Care

In 2017, the percentage of mothers with newborns who received early prenatal care in San Diego County was 85.6% which exceeded the Healthy People 2020 goal of 84.8%.

The percentage of mother's with newborns who received early prenatal care in San Diego County was highest among white and Asian/Pacific Islander mothers and lowest among black mothers in 2017.

### Risk Factors and Prevention Strategies

Maternal and child health outcomes are influenced by several factors including age, race and ethnicity, socioeconomic status, and a mother's health. Specifically, lack of prenatal care, poor nutrition, alcohol and tobacco use, and lack of physical activity are major lifestyle risk factors for adverse maternal and child health outcomes.<sup>15</sup>

The health of mothers, infants, and children are key indicators of the health of a community overall. Their health outcomes often reflect the health of future generations, as well as emerging public health concerns. Therefore, engaging in healthy behaviors associated with favorable maternal and child health outcomes has the potential to positively impact the health of the county overall.<sup>15</sup>

# Maternal & Child Health

## Males

In general, maternal and child health among San Diego County females have met or exceeded the Healthy People 2020 goals and have affected females more than males. However, the rates of congenital anomalies, attention deficit disorder (ADD) and other conduct disorders, childhood disorders, and autism spectrum disorders were higher among males in 2017.

### Congenital Anomalies

In 2017, males had higher rates of hospitalization, ED discharge, SNF/intermediate care, and physical rehabilitation due to congenital anomalies in San Diego County.

Compared to all other regions, males in East Region had some of the highest rates of hospitalization, ED discharge, and death due to congenital anomalies in 2017.

### Attention Deficit Disorder (ADD) and Other Conduct Disorders

In 2017, the rates of ED discharge due to ADD and related disorders among males was nearly 33% higher than the county overall.

Furthermore, males in East Region had the highest ED discharge rate due to ADD and related disorders compared to all other regions in 2017.

### Childhood Disorders

In 2017, males had higher rates of ED discharge, in-patient treatment, and hospitalization due to childhood disorders compared to the county.

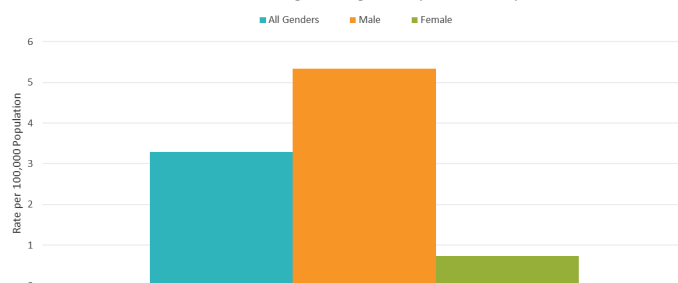
East Region had the highest rate of males who were discharged from the emergency department due to childhood disorders in 2017.

### Autism Spectrum Disorders

In 2017, males had higher rates of ED discharge and in-patient treatment due to autism compared to the county overall.

Males in East Region had the highest rate of ED discharge due to autism spectrum disorders compared to males in all other regions in 2017.

Overall Burden of Autism Among San Diego County Residents, by Gender, 2017



Source: California Department of Public Health, 2017 California Vital Records Business Intelligence System (VRBIS). California Office of Statewide Health Planning & Development (OSHPD), Patient Discharge Data & Emergency Department Data, 2017.  
Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHS), Community Health Statistics Unit, 2020.  
\*Overall burden includes Death, ED Discharge, Hospitalization, In-Patient Treatment, SNF/Intermediate Care, and Physical Rehabilitation.



# Gender Health Disparities: Summary

Overall, health outcomes impact San Diego females and males differently. A series of health indicators and related lifestyle behaviors were presented throughout this report, describing the most important health concerns facing both populations in San Diego County.

In San Diego County, there is an even proportion of males to females.<sup>10</sup> Comparatively, the average life expectancy for San Diego females is about four years longer than males.<sup>9</sup>

## Burden Comparison by Gender in San Diego County during 2017

### Females:

- **Chronic Disease:** Hypertensive diseases, chronic obstructive pulmonary diseases, osteoarthritis, asthma, and stroke were higher among females.
- **Communicable Disease:** Urinary tract infections, influenza (flu), pneumonia, and chlamydia were higher among females.
- **Injury:** Falls, hip fracture, and non-fatal self-inflicted injury were higher among females.
- **Behavioral Health:** Mood disorders, anxiety, Alzheimer's disease and related dementias (ADRD), benzodiazepine and other sedative-related disorders, adjustment disorders, and post traumatic stress disorder (PTSD) were higher among females.
- **Maternal and Child Health:** Black mothers had a higher burden of poor maternal and child health outcomes.

### Males:

- **Chronic Disease:** Cancer, coronary heart disease (CHD), diabetes, and heart failure were higher among men.
- **Communicable Disease:** Tuberculosis, gonorrhea, and syphilis were higher among males.
- **Injury:** Assault, poisoning, pedalcycle motor vehicle collision injuries, motor vehicle-related pedestrian injuries, firearm-related injuries, and suicide were higher among males.
- **Behavioral Health:** Alcohol-related disorders, schizophrenia and other psychotic disorders, substance-related disorders, attention deficit disorder (ADD) and other conduct disorders, and impulse disorders were higher among males.
- **Maternal and Child Health:** Congenital anomalies, childhood disorders, and autism spectrum disorders were higher among males.

# Actions to support *Live Well San Diego*

Creating an environment that encourage residents to live healthy, safe, and thriving lives is a priority in San Diego County. *Live Well San Diego* plans to advance the health and overall well-being of all San Diegans through a collective effort that involves residents, community and faith-based organizations, businesses, schools, law enforcement, local city and tribal jurisdictions, and the County of San Diego.

*Live Well San Diego* is a framework to help achieve health equity among all residents. To learn more, visit <https://www.livewellsd.org/>.

## 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 residents.

For more local data and statistics on noncommunicable (chronic) disease, visit the [Non-Communicable \(Chronic\) Disease Workbook](#) or the [Non-Communicable \(Chronic\) Disease Dashboard](#).

For information on non-communicable (chronic) disease, visit the County of San Diego's Community Health Statistics website at, and view the [data dashboards](#).

## 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 San Diegans.

For more local data and statistics on communicable disease, please go to the [Communicable Disease Workbook](#) or the [Communicable Disease Dashboard](#). For more information on communicable disease, visit the County of San Diego's [Epidemiology and Immunization Services Branch](#).

## Maternal and Child Health

The health of mothers, infants, and children are key indicators of the health of the community overall. Health outcomes often reflect the health of future generations as well as emerging public health concerns.<sup>7</sup> Prevention measures such as increased nutrition, early prenatal care, as well as cessation of smoking, alcohol consumption, and illicit drug use are all key ways to improve maternal and child health.<sup>17</sup>

For more local data and statistics on maternal and child health, visit the [Maternal Child Health Data Workbook](#) or [Maternal Child Health Dashboard](#).

For more information on maternal and child health outcomes, visit the County of San Diego's [Maternal, Child and Family Health Services Branch](#).

## Injury

Of the major causes of disability and death, injuries are among the most preventable. Increased safety education, awareness of fall prevention strategies, and investing in safer communities are key ways to reduce the burden of injury among county residents.<sup>16</sup>

For more local data and statistics on injury, visit the [Injury Data Workbook](#) or [Injury Dashboard](#).

For more information on injury, visit the County of San Diego's [Emergency Medical Services Branch](#).

## Behavioral Health

Seeking help for an emotional, behavioral 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 Diegans.<sup>17</sup>

For more local data and statistics on behavioral health outcomes, visit the [Behavioral Health Data Workbook](#) or [Behavioral Health Dashboard](#).

For more information on behavioral health outcomes, visit the County of San Diego's [Behavioral Health Services Division](#).

# Appendix. Methodology

*Exploring Health Disparities in San Diego County by Age* is part of series of reports exploring disparities among San Diego County residents. The goal of this report was to identify health and sociodemographic disparities which could provide local agencies, organizations, groups, services, and individuals a starting point in developing solutions to improve the health and wellbeing of the residents of San Diego County.

The series of reports can be found in the reports section of [www.sdhealthstatistics.com](http://www.sdhealthstatistics.com).

Disclaimer: It should be noted that these reports are not an update of the series of health equity reports published in March of 2016. The current iteration of reports include more indicators and health outcomes than the previous reports, which used 2011 data (2010 for two maternal child health indicators).

## Data Sources

### Health Data

Health outcome data were compiled from the County Community Health Statistics Unit's San Diego County Community Profiles document. Specifically, death, hospitalization, in-patient treatment, skilled nursing facility/intermediate care, physical rehabilitation, and emergency department discharge rates for various health outcomes were analyzed to identify health disparities within San Diego County's populations.

Emergency department and patient discharge data provided by the Office of Statewide Health Planning and Development (OSHPD) was grouped via the Healthcare Cost and Utilization Project (H-CUP) Clinical Classification Software (CCS) groupings. H-CUP is a family of healthcare databases and related software tools developed through a Federal-State-Industry partnership and sponsored by the Agency for Healthcare Research and Quality (AHRQ). Mortality data was provided by the California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records and Business Intelligence System (VRBIS). Mortality codes were grouped according to the National Center for Health Statistics (NCHS) ICD-10 Mortality Codebook 2e-

v1, 2017. Alzheimer's Disease and Related Dementias (ADRD) emergency department, patient discharge and mortality ICD-10 codes were grouped according to Alzheimer's Association [2017 Facts and Figures Report](#). Additional information on code grouping sources for health indicators, population data, and geographies are available in [Community Health Statistics Data Guide and Metadata file](#).

### Demographic Data

In addition to identifying health disparities, demographic information and lifestyle/behavioral data on each group was provided to highlight some of the potential contributing factors to these health outcomes.

#### San Diego Association of Governments (SANDAG)

The number of residents in report including any breakdowns by age, gender, and race/ethnicity as well as population forecast numbers by the same breakdowns come from SANDAG.

#### American Community Survey (ACS)

Sociodemographic and economic data from the U.S. Census Bureau's ACS was used, wherever available. 2017 1-year estimates were used except for the Geography and Socioeconomic (SES) Reports which are based on subregional area data requiring 5-year estimates (data years 2013-2017).

### Lifestyle/Behavioral Health Data

#### California Health Interview Survey (CHIS)

In lieu of socioeconomic data from ACS at the race and ethnicity levels required for the county, these type of indicators were pulled from CHIS. Where available, lifestyle and behavioral indicators such as the percent of current adult smokers and percent of residents reporting at least one doctor's visit in the past year were pulled from CHIS. Lastly, whenever possible, 2017 estimates were used; however, years may have been combined to arrive to statistically stable estimates. Note: Even combining multiple years, subdividing the population may produce unstable estimate which were noted in the text.

# Appendix. Methodology

## Definitions

**Burden of disease** includes death and discharges from the emergency department, hospital, in-patient treatment, skill nursing facility, and physical rehab facility.

## Overall Methods

The overall methods used to explore health disparities among San Diego County residents were the following:

- Death and primary discharge data from the community health profiles was used to first, look at the overall burden of chronic, communicable, injury, behavioral health outcomes, and maternal and child health outcomes in the last 5 years (2013-2017) to look at the trends among subpopulations by age, gender, and race/ethnicity. This step was not possible for the geography and SES reports due to shifting of categories from year to year.
- Subsequently, the exploration of health disparities focused on the 2017 data only. Each section attempts to highlight the conditions and death and/or medical encounters most relevant among the subgroup of the population.
- Where relevant, differences across groups are also mentioned in the text.

## Age, Gender, and Race and Ethnicity Reports

Data in the community health profiles are already produced and broken down by age, gender, and race/ethnicity. However, groupings used for the geography and socioeconomic status reports were developed with different criteria detailed below.

For the Race and Ethnicity report, Asian and Native Hawaiian/Pacific Islanders (NHPI) were combined to form a single category referred to as Asian/Pacific Islander (API) to provide a larger sample size since NHPI has a low count demographically and low representation in the medical encounter database.

In the Geography report, geography is measured using urbanicity type based on ESRI's Urbanicity Tapestry data. ESRI defines urbanicity as the "degree of population density, size of city, and location relative to a metropolitan area."<sup>11</sup> Each of the 41 subregional Areas (SRAs) of San Diego County were assigned into one of six urbanicity groups based on ESRI's tapestry data: rural, semirural, suburban periphery, metro cities, urban periphery, and principal urban centers. Few of the SRAs were 100% rural, for example. In most cases, SRAs were a combination of urbanicity types and were assigned into the urbanicity type that had the highest distribution in the SRA. Based on this criteria, San Diego County SRAs fell into one of five urbanization categories because none of the SRAs could be categorized as semirural. The following sections contain more information on the urbanicity characteristics.

## Socioeconomic Status (SES) Report

Socioeconomic Status (SES) was calculated using Median Household Income (MHI) as the proxy measure. The MHI was pulled for 2017 by subregional area (SRA) from ESRI Community Analyst. A Jenks Natural Breaks Optimization method was then applied to the data, resulting in 5 categories with the best goodness of variance fit (GVF=.96). Finally, the 41 SRAs were assigned into one of the five groups: lowest, low, middle, high, and highest income groups.

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