

# IDENTIFYING HEALTH DISPARITIES TO ACHIEVE HEALTH EQUITY IN SAN DIEGO COUNTY: SOCIOECONOMIC STATUS



March 2016

# *Identifying Health Disparities to Achieve Health Equity in San Diego County: Socioeconomic Status*

County of San Diego  
Health & Human Services Agency  
Public Health Services

*March 2016*

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# *Identifying Health Disparities to Achieve Health Equity in San Diego County: Socioeconomic Status*

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**RON ROBERTS**  
CHAIRMAN, FOURTH DISTRICT  
SAN DIEGO COUNTY BOARD OF SUPERVISORS

Dear Fellow San Diego County Residents:

The health and wellbeing of most Americans has improved significantly over the past century; however, some groups continue to experience a higher rate of death and illness.

The *Identifying Health Disparities to Achieve Health Equity in San Diego County* report was developed to identify those San Diegans who, because of their age, gender, geography, race/ethnicity or socioeconomic status are experiencing a disproportionate burden of disease. It describes some of the lifestyle behaviors and other relevant factors that may contribute to these disparities, as well as prevention strategies to help all San Diegans live well.



Health equity is a key component of the *Live Well San Diego* vision in San Diego County. Addressing health disparities is essential to increasing and ultimately achieving health equity for our nearly 3.2 million residents. This document is designed for local agencies, organizations, groups, services and individuals who have an interest in improving the health of county residents. Using the information gathered in this report, we can work together to support healthy choices and improve the lives of San Diego residents.

Sincerely,

A handwritten signature in black ink that reads "Ron Roberts".

RON ROBERTS  
Chairman  
San Diego County Board of Supervisors



# County of San Diego

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Dear San Diegans,

The County of San Diego Health and Human Services Agency, which includes Public Health Services, is proud to release *Identifying Health Disparities to Achieve Health Equity in San Diego County*.

These reports identify health disparities among San Diego County residents through the lenses of age, gender, geography, race/ethnicity, and socioeconomic status. The information in these reports is meant to identify health disparities among different groups and serve as a starting point in developing solutions that will help close the gap in existing disparities, thereby building better health for all San Diegans.

As the County continues towards the vision of *Live Well San Diego*, identifying health disparities and inequities are critical in developing prevention and intervention measures, ultimately leading to a healthier San Diego. For more information about *Live Well San Diego* and how you can contribute, please visit [www.LiveWellSD.org](http://www.LiveWellSD.org).

Live Well

A handwritten signature in blue ink that appears to read "Nick Macchione".

NICK MACCHIONE  
Director, Health and Human Services Agency

A handwritten signature in blue ink that appears to read "Wilma J. Wooten, M.D., M.P.H.". The signature is written in a flowing cursive style.

WILMA J. WOOTEN, M.D., M.P.H.  
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### Acknowledgements

# Acknowledgements

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## Introduction

### 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 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/ethnicity, and socioeconomic status.



**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>**

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>

### Measuring Health Disparities

The health of a community is not simply the presence or absence of disease, rather, it is a dynamic interaction of several factors. In order to describe health disparities in San Diego County, a variety of measures are used. These measures can be broadly considered together as lifestyle behaviors, socioeconomic status, healthcare access and utilization, as well as morbidity and mortality. Collectively, these factors affect an individual’s ability to live a healthy lifestyle, including eating healthy foods, getting enough physical activity, not smoking, abstaining from alcohol abuse and substance use, and overall, leading positive, fulfilling, happy, and healthy lives.

### 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 by 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 on San Diego County residents comes from local, state, and national health surveys. In this report, lifestyle behavior information was obtained from the 2011-2012 California Health Interview Survey (CHIS).

### 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.

**Socioeconomic status, including the circumstances in which one lives and works, can affect health.<sup>6</sup>**

### Healthcare Access and Utilization

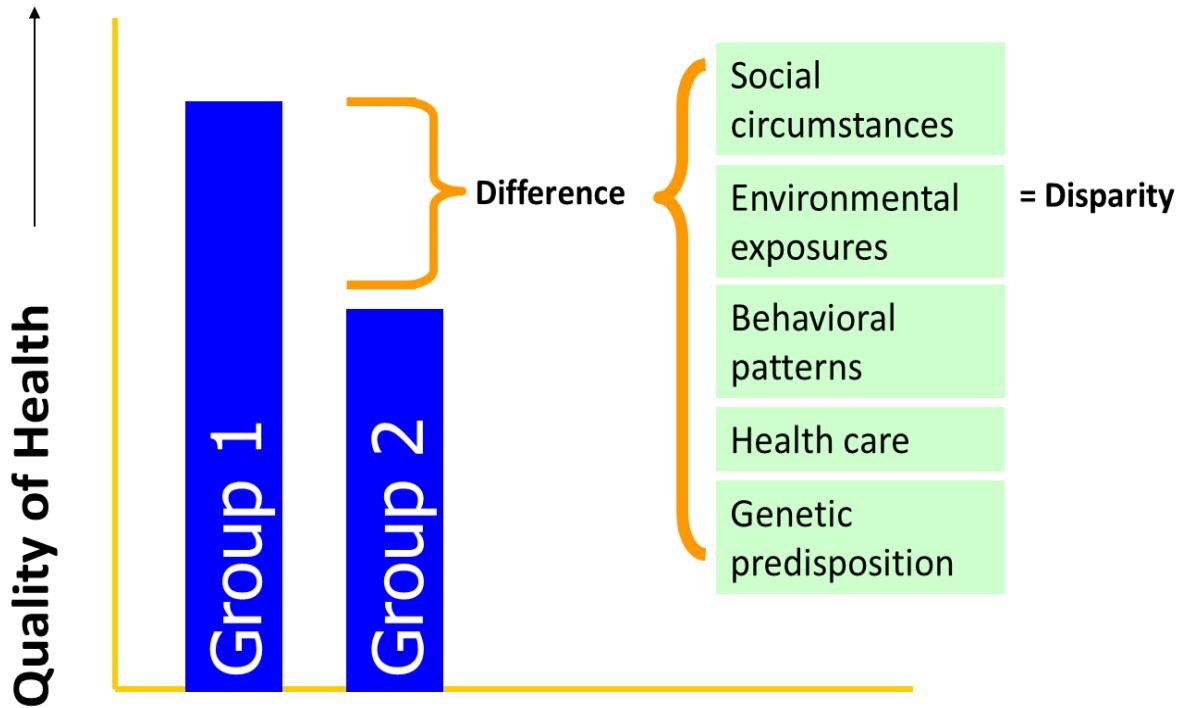
Healthcare service access and utilization are closely aligned with socioeconomic status and are major factors in individual and community health. The unemployment increase in San Diego from 4% in 2006 to nearly 10% in 2011 meant a subsequent increase in the number of uninsured county residents. This 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.

Figure 1

## Quality of Health, Differences and Disparities



*Adapted from Gomes and McGuire, 2001*

### Live Well San Diego and Health Equity

*Live Well San Diego* is a regional vision adopted by the San Diego County Board of Supervisors in 2010 that aligns the efforts of County government, community partners and individuals to help all San Diego County residents be healthy, safe, and thriving. 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.

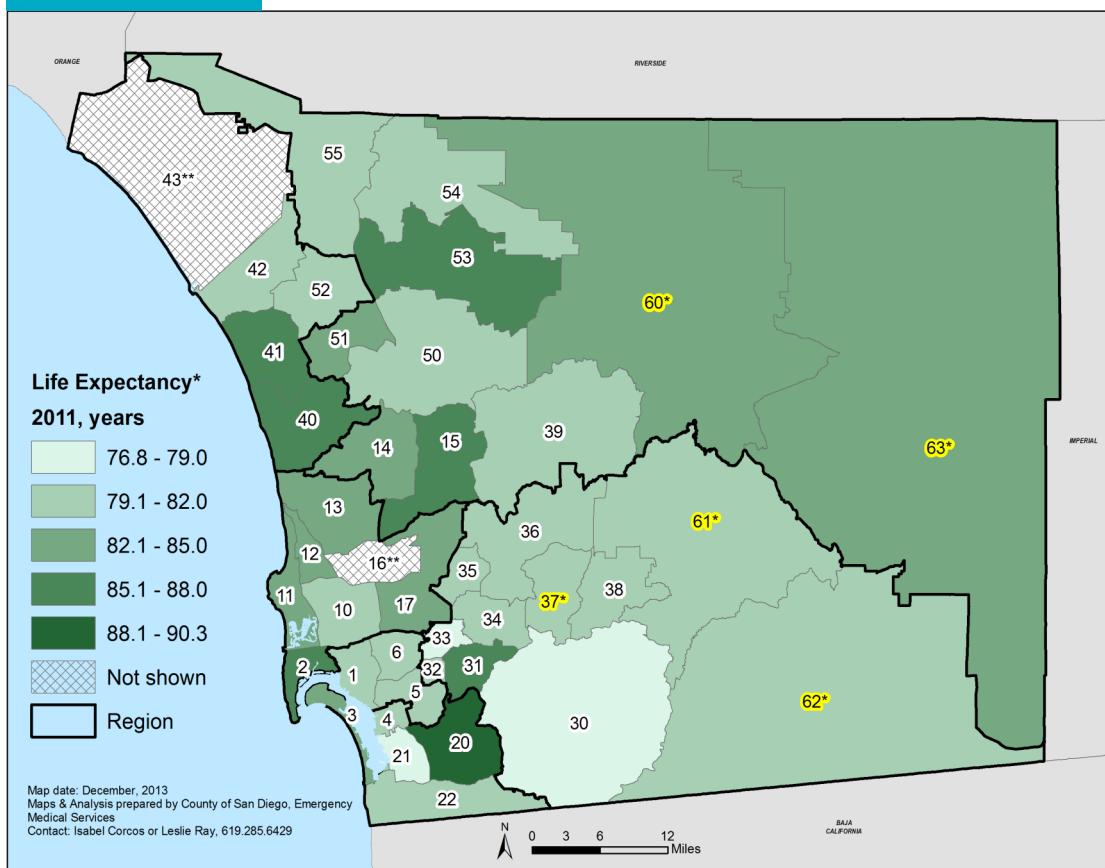
*Live Well San Diego* identifies [10 indicators](#) to measure the collective impact of these efforts and the work of partners over the long term to create a San Diego County where all residents are healthy, safe, and thriving. Life expectancy, or the average number of years a person can expect to live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

Overall, the life expectancy in San Diego County was 81.6 years in 2011.<sup>9</sup> On average, females lived about four years longer than males. Compared to other racial/ethnic groups, Asian and Pacific Islander residents had the highest life expectancy at 86.4 years, while black residents had the lowest (76.5 years).<sup>9</sup> Geographically, residents in Sweetwater had the highest life expectancy (90.3 years), while Chula Vista, a Subregional Area that borders Sweetwater, had the lowest life expectancy of 76.8 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.

# Identifying Health Disparities to Achieve Health Equity in San Diego County

## Introduction

**Figure 2**



\*The life expectancy of the Subregional Areas in yellow were statistically unstable. Therefore, the regional life expectancy was substituted for Subregional Area life expectancy.

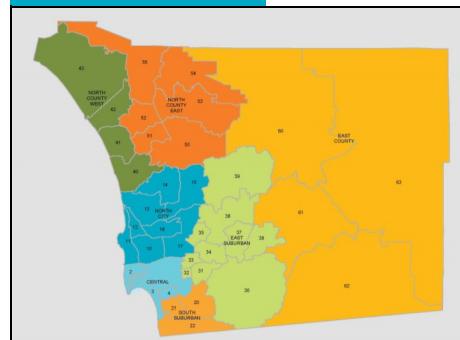
\*\*Miramar and Pendleton Subregional Areas could not be calculated due to the specialized age structure of military personnel.

Source: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Death Statistical Master Files. County of San Diego, Health & Human Services Agency, Public Health Services, Epidemiology & Immunization Services Branch, 9/27/2013.

San Diego Association of Governments (SANDAG) develops annual demographical 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 inside of one of seven Major Statistical Areas (MSAs). The first digit of the SRA number identifies the MSA in which it lies. 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>17</sup>

**Figure 2a**



### Health Equity in San Diego County: Socioeconomic Status

*Identifying Health Disparities to Achieve Health Equity in San Diego County: Socioeconomic Status* is a document prepared by the Division of Public Health Services in the County of San Diego Health & 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.

As the county implements the *Live Well San Diego* vision, identifying health disparities and inequities 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 Community Health Statistics Unit's *San Diego County Community Profiles* document. Specifically, death, hospitalization, and 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 chronic disease, communicable disease, maternal and child health, injury, and behavioral health.

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



# Socioeconomic Health Disparities

## Introduction to Socioeconomic Health Disparities

There is a total population of 3,115,810 people covering 4,526 square miles that make up San Diego County.<sup>10</sup> In this report socioeconomic status is discussed using the 41 sub-regional areas defined by the San Diego Association of Governments.<sup>10</sup> Based on median household income, these areas were divided into six major community groups— lowest, low, moderately low, moderately high, high, and highest incomes. The communities included in these groupings, and select characteristics of each group, are shown in the table on page 8.

Substantial differences in health indicators and health-related behaviors exist in the different socioeconomic groups of the County.

For example:

- Although the average life expectancy for all San Diego County residents is 81 years, the lowest and low income residents have a life expectancy below the county average at 78 and 80 years, respectively, while residents of all other income groups have a life expectancy greater than the county average.<sup>9</sup>
- The lowest and low income groups are disproportionately affected by chronic disease, communicable disease, poor maternal and child health outcomes, injury, and behavioral health outcomes.

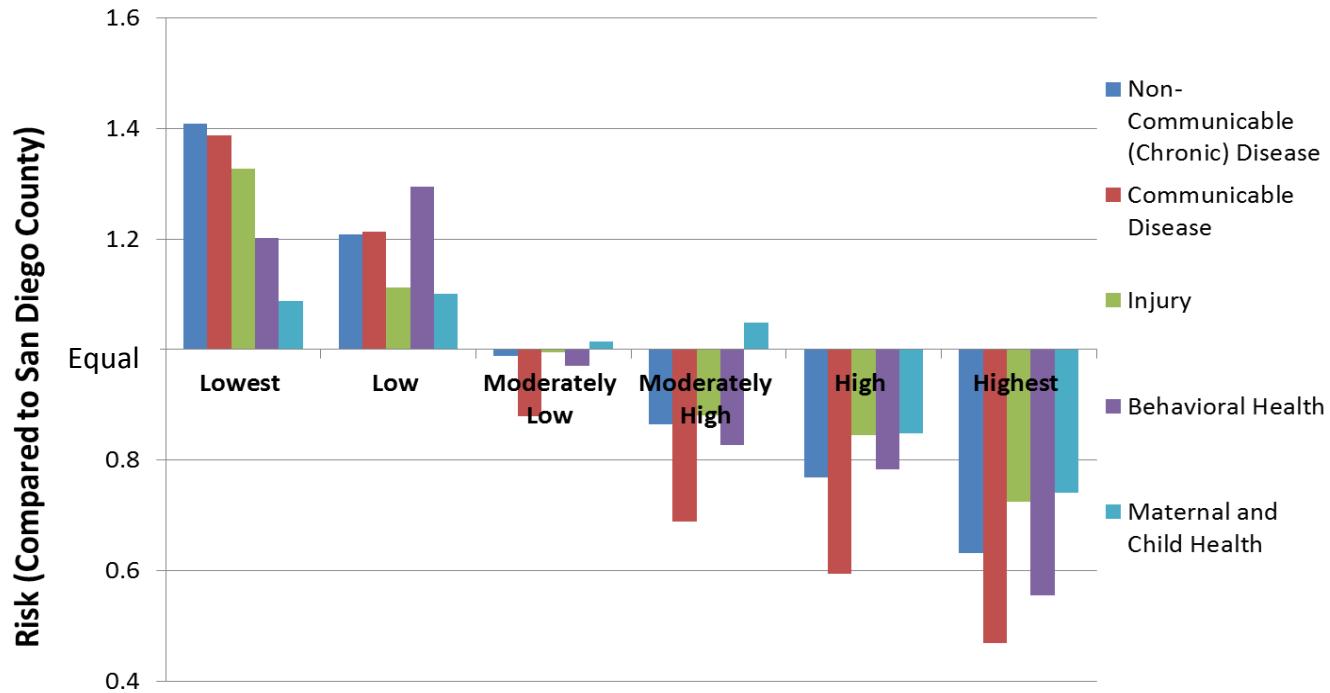
A series of health indicators and related health behaviors are presented in the following sections, which aim to describe the most important health concerns facing the communities of San Diego County.



## Socioeconomic Health Disparities

**Figure 3**

### Risk of Health Outcomes Compared to San Diego County by Income Status, 2011



Source: Death Statistical Master Files (CDPH), Patient Discharge Data, (CA OSHPD), Emergency Department Data (CA OSHPD); HIV/AIDS Reporting System and STD Morbidity Database (CoSD HIV,STD, and Hepatitis Branch), County of San Diego, Health & Human Services Agency, Epidemiology & Immunization Services Branch, Emergency Medical Services Branch, HIV, STD, and Hepatitis Branch; SANDAG, Current Population Estimates, 10/2012.

Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 2013.

### Top Non-Communicable (Chronic) Disease Health Disparities Among Lowest Income San Diego County Residents:

- Compared to the other populations in the county, the low and lowest income communities had the highest rates of nearly all non-communicable (chronic) disease, communicable disease, injury, poor maternal and child health outcomes, and poor behavioral health outcomes in 2011.

## Select Characteristics of San Diego County's Communities by Income Group, 2011

**Table 1**

Income Group and Corresponding Communities	Population as a Percent of Total San Diego County Population	Median Household Income	Percent Minority	Percent 16 and Older Unemployed	Percent with Less than a High School Diploma or Equivalent	Percent Speaking English Only	Percent Rent Housing	Percent Own Housing	Percent Spending Less than 30% of Income on Housing
<b>Lowest</b> Anza-Borrego Springs Chula Vista Mid City National City	11.0%	\$45,316.00	77.7%	11.4%	27.6%	42.3%	61.3%	38.7%	49.8%
<b>Low</b> Central San Diego El Cajon La Mesa Lemon Grove Mountain Empire Palomar-Julian South Bay Southeastern San Diego Vista	28.0%	\$56,199.89	62.2%	9.7%	21.5%	54.4%	54.1%	45.9%	47.4%
<b>Moderately Low</b> Escondido Kearny Mesa Laguna-Pine Valley Lakeside Oceanside Peninsula San Marcos	17.0%	\$58,375.38	41.2%	8.6%	15.7%	67.1%	43.8%	56.2%	46.2%
<b>Moderately High</b> Fallbrook Santee Spring Valley University	7.6%	\$72,987.75	42.3%	8.9%	11.0%	71.3%	41.9%	58.1%	47.3%
<b>High</b> Alpine Carlsbad Coastal Elliot-Navajo Pauma Ramona Valley Center	11.8%	\$84,476.29	38.0%	7.2%	6.1%	82.1%	38.1%	61.9%	46.6%
<b>Highest</b> Coronado Del Mar-Mira Mesa Jamul North San Diego Poway San Dieguito Sweetwater	22.8%	\$105,513.43	49.7%	6.6%	6.3%	65.2%	30.2%	69.8%	42.5%

\*Three communities (Harbison Crest, Miramar, and Pendleton) are not included in the analysis due to data limitations.

Source: 1. San Diego Association of Governments (SANDAG), Current Population Estimates, released 10/2012.

2. U. S. Census Bureau, American Community Survey, 2007-2011 5-Year Estimates, accessed March 2013.

### Lowest Income Status

The communities of San Diego County with the lowest income status include Anza-Borrego Springs, Chula Vista, Mid City, and National City. Residents belonging to these communities are characterized by an annual median household income between \$40,000 to \$50,000.

In 2011, the population of these communities was about 342,000, making up 11% of the County's total population.<sup>10</sup>

Between 2007 and 2011:

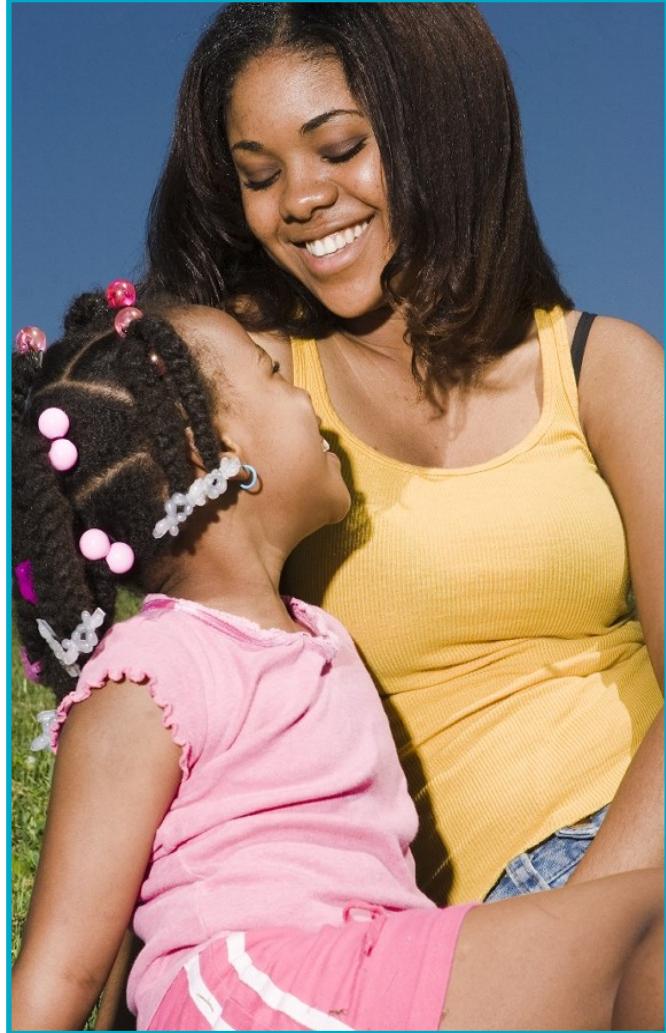
- The median household income of residents within the lowest income communities was \$45,316 per year.<sup>12</sup>
- Nearly 50% of the population spent less than 30% of their income on housing.<sup>12</sup>

During this same time period, 10% of the population within these communities was 65 years old and over, and 22% of the population was white.<sup>12</sup>

**The median household income of residents within the lowest income communities was \$45,316 in 2011.<sup>12</sup>**

Other characteristics of the lowest income group, between 2007 and 2011 include:

- Nearly 28% of the lowest income group had less than a high school diploma.<sup>12</sup>
- 11% of the lowest income group was unemployed.<sup>12</sup>

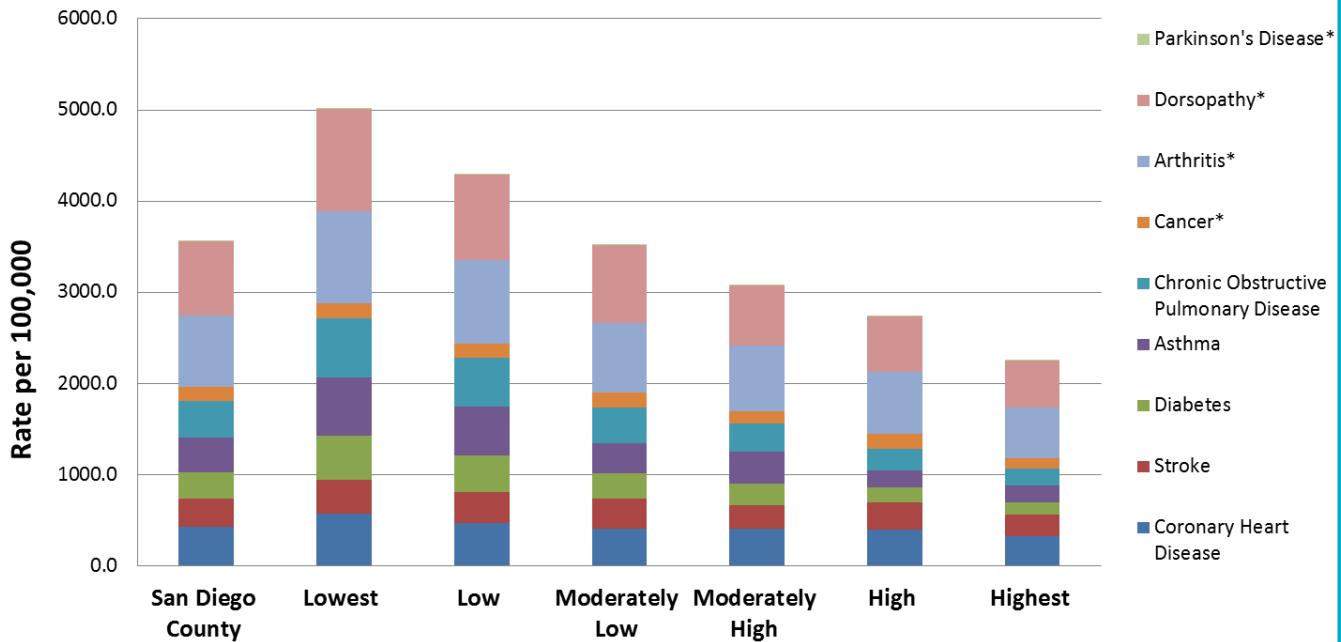


Compared to the county overall, the lowest income communities were disproportionately affected by injury, chronic disease, communicable disease, maternal and child health indicators, as well as behavioral health outcomes. A series of health indicators are described in the following sections, which affect lowest income communities more than other areas in San Diego County. Rate of death, hospitalization discharge, and emergency department discharge due to specific causes can provide insight to the severity of disease and injury occurring in the lowest income communities.

## Non-Communicable Disease (Chronic) Among Lowest Income Status Residents

Figure 4

### Overall Burden\* of Non-Communicable (Chronic) Disease in San Diego County by Income Status, 2011



\*Overall burden (except for cancer, arthritis, dorsopathy, and Parkinson's disease) includes death, hospitalization and emergency department (ED) discharge. Cancer includes death only. Arthritis, dorsopathy, and Parkinson's disease include hospitalization and emergency department discharge.

### Top Non-Communicable (Chronic) Disease Health Disparities Among Lowest Income San Diego County Residents:

- The rate of emergency department (ED) discharge due to asthma was 1.7 times higher than the county overall.
- The rate of hospitalization due to asthma was 1.4 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### 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 and appealing parks and recreational facilities
- Increase the availability and affordability of fresh produce
- Adopt walkable communities



**LIVE WELL**  
SAN DIEGO

Building  
Better  
Health

Living  
Safely

Thriving

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

# Identifying Health Disparities to Achieve Health Equity in San Diego County

## Lowest Income Status

### Non-Communicable (Chronic) Disease

The lowest income communities of San Diego County were disproportionately affected by many chronic diseases. Compared to the other populations in the county, the lowest income communities had the highest rates of nearly all chronic conditions. The top chronic diseases affecting this population include asthma, chronic obstructive pulmonary disease (COPD), and diabetes.

### Asthma

Compared to the county overall, those with the lowest incomes had higher rates of asthma hospitalization and emergency department (ED) discharge in 2011. Notably, the rates of hospitalization and ED discharge were 1.4 and 1.7 times higher, respectively, among lowest income communities compared to the county overall.

- National City had the highest rates of asthma hospitalizations and deaths due to asthma in 2011. However, Chula Vista had the highest rate of asthma emergency discharges compared to the other lowest income communities.

### Chronic Obstructive Pulmonary Disease (COPD)

COPD death, hospitalization and emergency department discharge rates were higher among the lowest income communities than any other income group in San Diego County in 2011. Notably, the COPD emergency department discharge rate was 1.7 times higher among lowest income communities compared to the county overall.



- Anza-Borrego Springs had the highest rate for COPD related deaths, whereas Chula Vista had the highest rates of COPD hospitalization and ED discharge.

### Diabetes

Diabetes death, hospitalization, and emergency department discharge rates were higher among the lowest income communities than any other income group in San Diego County in 2011. Notably, the rates of hospitalization and ED discharge were 1.7 and 1.6 times higher, respectively, among lowest income communities compared to the county overall.

- National City had the highest rates of diabetes hospitalization, emergency discharge, and death due to diabetes of all lowest income communities.

### 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>13</sup>

#### Tobacco Use

Smoking and secondhand exposure to tobacco smoke greatly increases the risk of developing asthma or triggering an asthma attack.<sup>13</sup>

- In 2011, 14.3% of those belonging to the lowest income group in San Diego County were current smokers.<sup>11</sup>

#### Alcohol Abuse

- Nearly 30% of those belonging to the lowest income group in San Diego County engaged in binge drinking in 2011.<sup>11</sup>

#### Poor Diet

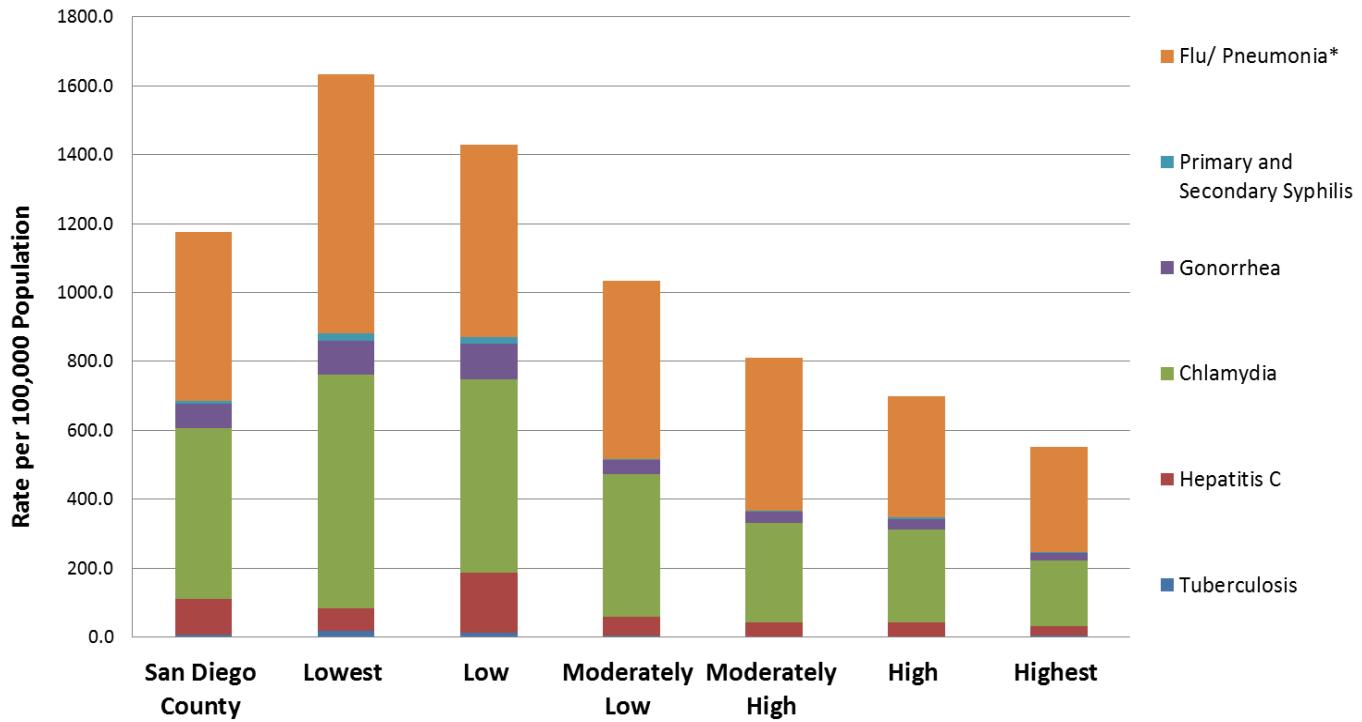
- In 2011, 36.9% of those belonging to the lowest income group in San Diego County reported eating fast food two or more times in the past week, in 2011.<sup>11</sup>

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 lowest income communities of San Diego County.<sup>13</sup>

## Communicable Disease Among Lowest Income Status Residents

Figure 5

### Overall Burden\* of Communicable Disease in San Diego County by Income Status, 2011



\*Overall burden (except for flu/pneumonia) includes incidence only. Flu/pneumonia includes death, hospitalization, and emergency department discharge.

### Top Communicable Disease Health Disparities Among Lowest Income San Diego County Residents :

- The rate of tuberculosis was 2.3 times higher than the county overall.
- The rate of primary/secondary syphilis was 2.3 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

Lowest Income Status

### 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

Building  
Better  
Health

Living  
Safely

Thriving

*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

Overall, communities with the lowest incomes had the highest rates of communicable diseases compared to the county overall. However, rates of tuberculosis (TB) and primary/secondary syphilis were notably higher among the lowest income communities compared to the county overall.

### Primary/ Secondary Syphilis

As with TB, the lowest income communities had primary/ secondary syphilis rates that were 2.3 times higher compared to the county overall, at 21 per 100,000 population.

- Mid-City had the highest rate of primary/ secondary syphilis of all the lowest income communities.

### Tuberculosis (TB)

In 2011, the rates of tuberculosis was nearly 2.3 times higher in communities with the lowest incomes than the county overall, at 19.3 per 100,000 population.

- Anza-Borrego Springs had the highest rate of tuberculosis of all the lowest income communities.

**In 2011, the lowest income communities had primary/secondary syphilis rates that were 2.3 times higher compared to the county overall.**

### 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 lowest income communities in San Diego County.<sup>14</sup>

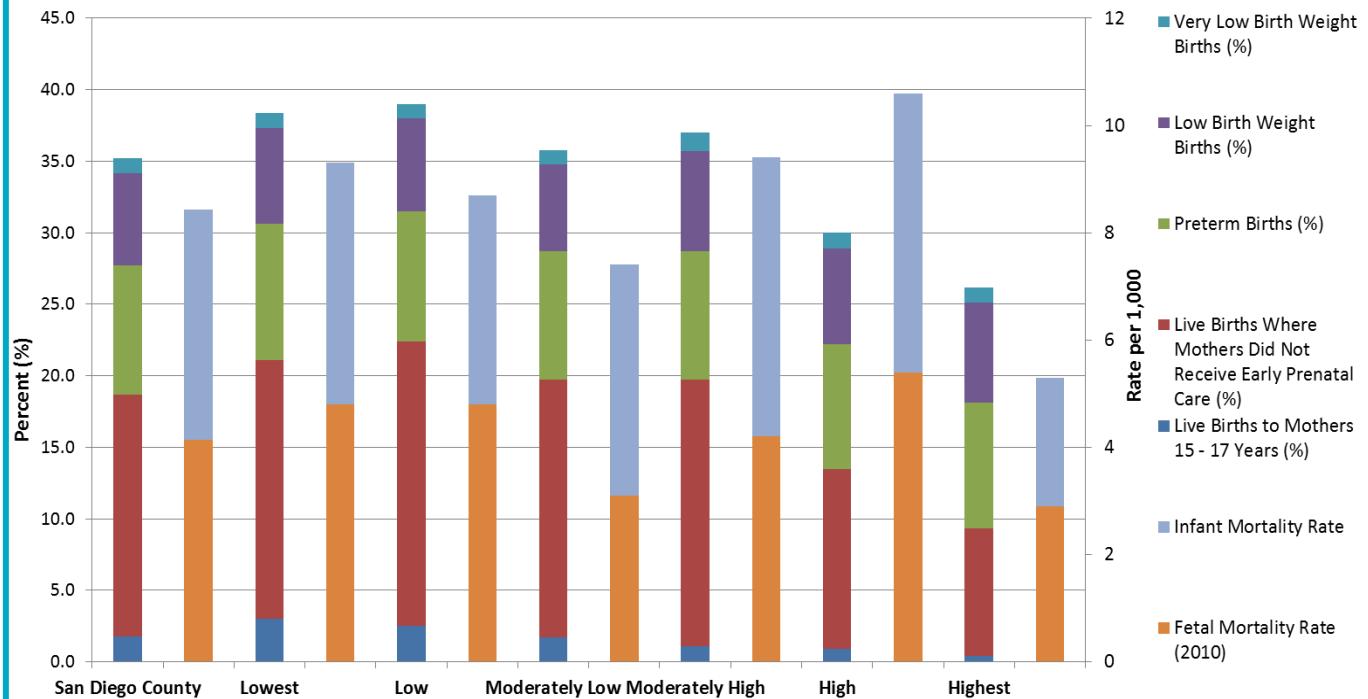
- In 2011, only 35% of the lowest income residents reported being vaccinated for the flu in the past 12 months.<sup>11</sup>



## Maternal and Child Health Among Lowest Income Status Residents

**Figure 6**

### Overall Burden\* of Maternal and Child Health in San Diego County by Income Status, 2011



\*Overall burden includes percentages and rates.

### Top Maternal & Child Health Outcome Health Disparities Among Lowest Income San Diego County Residents:

- The percentage of teen births amongst lowest income women was nearly 70% higher than the county overall.
- The fetal mortality rate was nearly 1.2 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### What You Can Do to Reduce Your Risk of Poor Maternal and 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 and 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



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### Maternal and Child Health

The lowest income communities of San Diego County are disproportionately affected by many poor maternal and child health outcomes. Compared to the other populations in the County, the lowest income communities have the highest rates and percentages of nearly all maternal and child health conditions, most notably affected by a large proportion of teen births and a high fetal mortality rate.

#### Fetal Mortality

In 2010\*, the rate of fetal mortality countywide was 4.1 fetal deaths per 1,000 live births, meeting and exceeding the Healthy People 2020 goal of 5.6 fetal deaths per 1,000 live births.<sup>14</sup> However, there were notable differences between income groups. The lowest income communities had a fetal mortality rate 1.2 times higher than the county overall.



- The fetal mortality rate was highest among Mid-City residents compared to both the county overall and all other lowest income communities, at 5.2 fetal deaths per 1,000 live births in 2011.

### Teen Births

San Diego County had 779 teen births in 2011, which made up 1.8% of all live births. Compared to the county overall, the percentage of teen births was higher, at 3%, among mothers in lowest income communities in 2011.

- National City had the highest percentage, at 5% of all births belonging to teens, compared to both the county and other lowest income communities.

### Risk Factors and Prevention Strategies

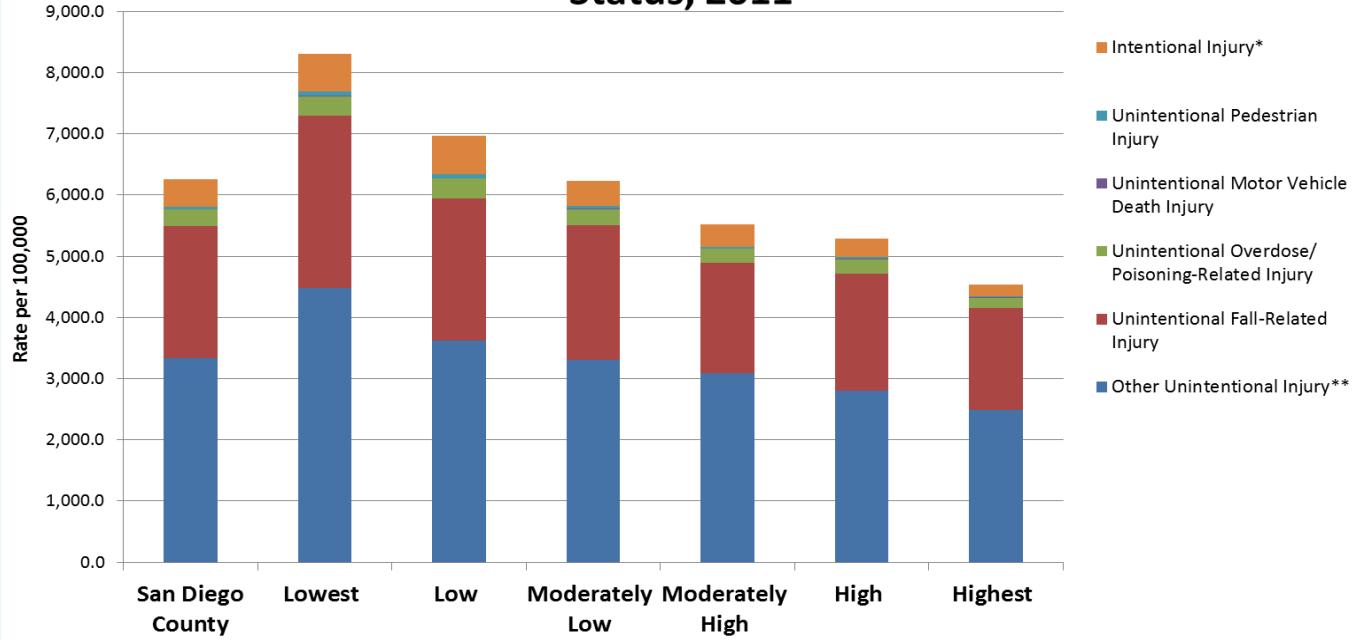
Maternal and child health outcomes are influenced by several factors including age, race/ethnicity, socioeconomic status, and a mother's health. Specifically, lack of prenatal care, poor nutrition, alcohol and tobacco use, and lack of physical activity are major lifestyle risk factors for adverse maternal and child health outcomes.<sup>14</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>14</sup>

## Injury Among Lowest Income Status Residents

Figure 7

### Overall Burden\* of Injury in San Diego County by Income Status, 2011



\*Overall burden includes death, hospitalization, and emergency department (ED) discharge.

\*\*Intentional injury includes homicide, assault, suicide, and self-inflicted injury. Other unintentional injury include cut/pierce injury, struck by an object injury, suffocation, drowning, overexertion injury, fire-related/burn injury, and sport/recreational injury.

### Top Injury Health Disparities Among Lowest Income San Diego County Residents:

- The rate of hospitalizations due to assault and pedestrian injuries were both 1.8 times higher compared to the county overall.
- The rate of emergency department (ED) discharge due to dental injury was 1.7 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Injury

Overall, injury rates were 33% higher among lowest income communities compared to the county overall. Notably, rates of unintentional pedestrian injury, and intentional injuries were particularly higher among lowest income communities in San Diego County.

#### Intentional Injury

Intentional injury rates, represented by homicide, assault, suicide, and self-inflicted injuries, were 38% higher in lowest income communities compared to the county overall. Notably, homicide and assault hospitalizations were considerably higher than the county overall. In 2011, residents in the lowest income communities had assault hospitalization rates and homicide rates that were 1.8 times higher than the county overall.

- Chula Vista had the highest assault hospitalization and ED rates of all the lowest income communities, where Anza-Borrego Springs had the highest homicide rates.

#### Unintentional Pedestrian Injury

The rates of unintentional pedestrian injuries were 63% higher in the lowest income communities than the county overall. The rate of hospitalizations for pedestrian injuries was 1.8 times higher in lowest income communities and emergency department (ED) discharge was 1.6 times higher compared to the county in 2011.

- National City had the highest rates of unintentional pedestrian deaths and hospitalizations, while Chula Vista had the highest rate of emergency discharges in 2011.

**In 2011, the rates of unintentional pedestrian injuries were 63% higher in the lowest income communities than the county overall.**



#### Risk Factors and Prevention Strategies

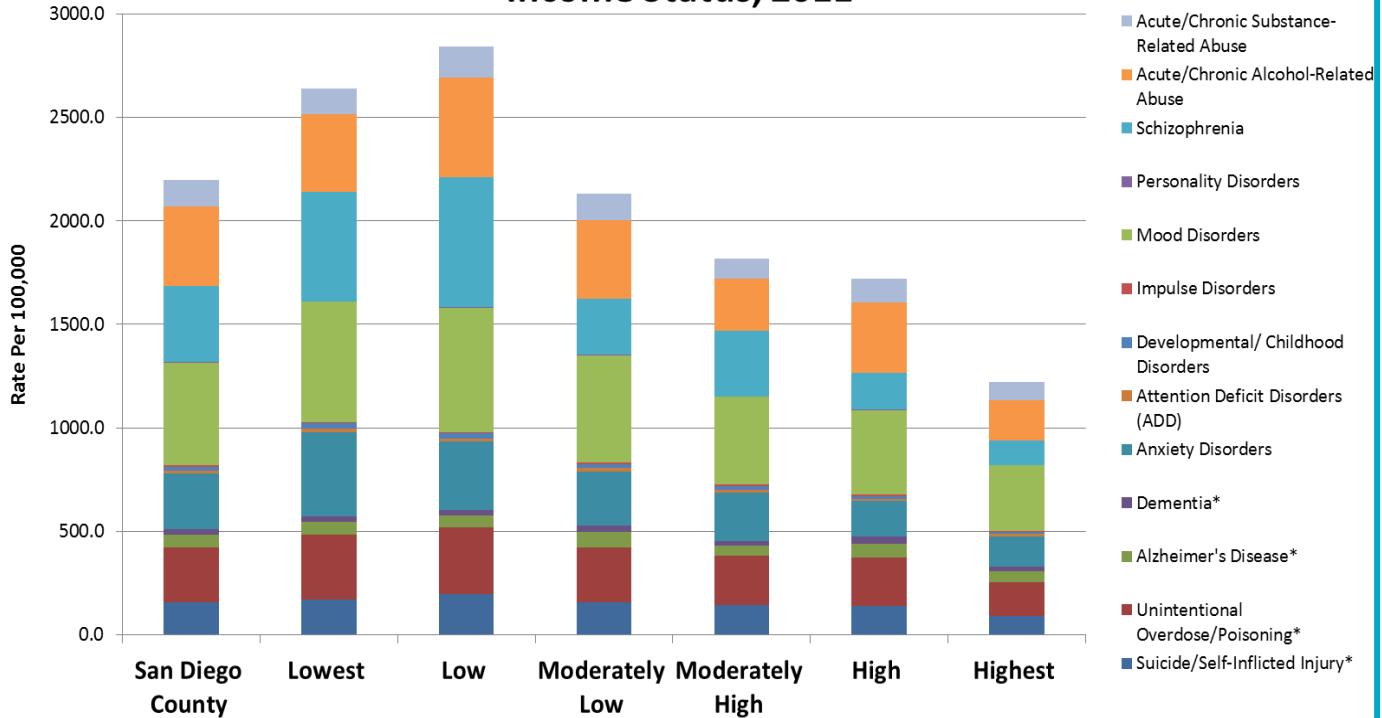
Failure to use protective equipment and active restraints, lack of supervision of children during play and other activities, and not being aware of safety hazards increase the risk of an injury.<sup>15</sup>

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>15</sup>

## Behavioral Health Among Lowest Income Status Residents

**Figure 8**

### Overall Burden\* of Behavioral Health in San Diego County by Income Status, 2011



\*Overall burden (except for suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia) includes hospitalization, and emergency department (ED) discharge. Suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia include death, hospitalization, and ED discharge.

### Top Behavioral Health Disparities Among Lowest Income San Diego County Residents:

- The rate of schizophrenia hospitalization was 1.6 times higher than the county overall.
- The rate of emergency department discharges due to anxiety disorders was 1.5 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Behavioral Health

Overall, poor behavioral health outcome rates were 20% higher among lowest income communities compared to the county overall. Notably, rates of anxiety and schizophrenia were particularly higher among lowest income communities in San Diego County.

### Anxiety Disorders

Rates of anxiety disorders in the lowest income communities were 52% higher compared to the county in 2011. Hospitalization and emergency department (ED) discharge rates were higher among the lowest income communities compared to the county overall. Notably the rates were 1.3 and 1.5 times higher, respectively, compared to the county.

- Chula Vista had the highest rates of anxiety hospitalization and ED discharge of all the lowest income communities in 2011.

### Schizophrenia

Rates of schizophrenia in the lowest income communities were 44% higher compared to the county overall in 2011. Hospitalization and ED discharge were higher among the lowest income communities compared to the county overall. Notably the rates were 1.6 and 1.2 times higher, respectively, compared to the county.

- National City had the highest rate of schizophrenia hospitalization, while Chula Vista had the highest rate of ED discharge of all the lowest income communities in 2011.



### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>16</sup>

- In 2011, 17% of lowest income residents reported needing help for an emotional or mental health problem in San Diego County.<sup>11</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>16</sup>

**Chula Vista had the highest rates of anxiety hospitalization and emergency department discharge of all the lowest income communities, in 2011.**

## Low Income Status

The communities of San Diego County belonging to the low income status category include Central San Diego, Southeastern San Diego, South Bay, Lemon Grove, La Mesa, El Cajon, Vista, Palomar-Julian, and Mountain Empire. Residents belonging to these communities are characterized by an annual median household income between \$50,000 to \$60,000.

In 2011, the population of these communities was about 873,000, making up 28% of the County's total population.<sup>10</sup>

Between 2007 and 2011:

- The median household income of residents within the low income communities was \$56,199 per year.<sup>12</sup>
- About 47% of the population spent less than 30% of their income on housing.<sup>12</sup>

During this same time period, 11% of the population within these communities was 65 years old and older, and nearly two in five residents were white.<sup>12</sup>

Other characteristics of the low income group, between 2007 and 2011 include:

**The median household income of residents within the low income communities was \$56,199 per year.<sup>12</sup>**

- Nearly 22% of the low income group had less than a high school diploma.<sup>12</sup>
- 9.7% of the low income group was unemployed.<sup>12</sup>

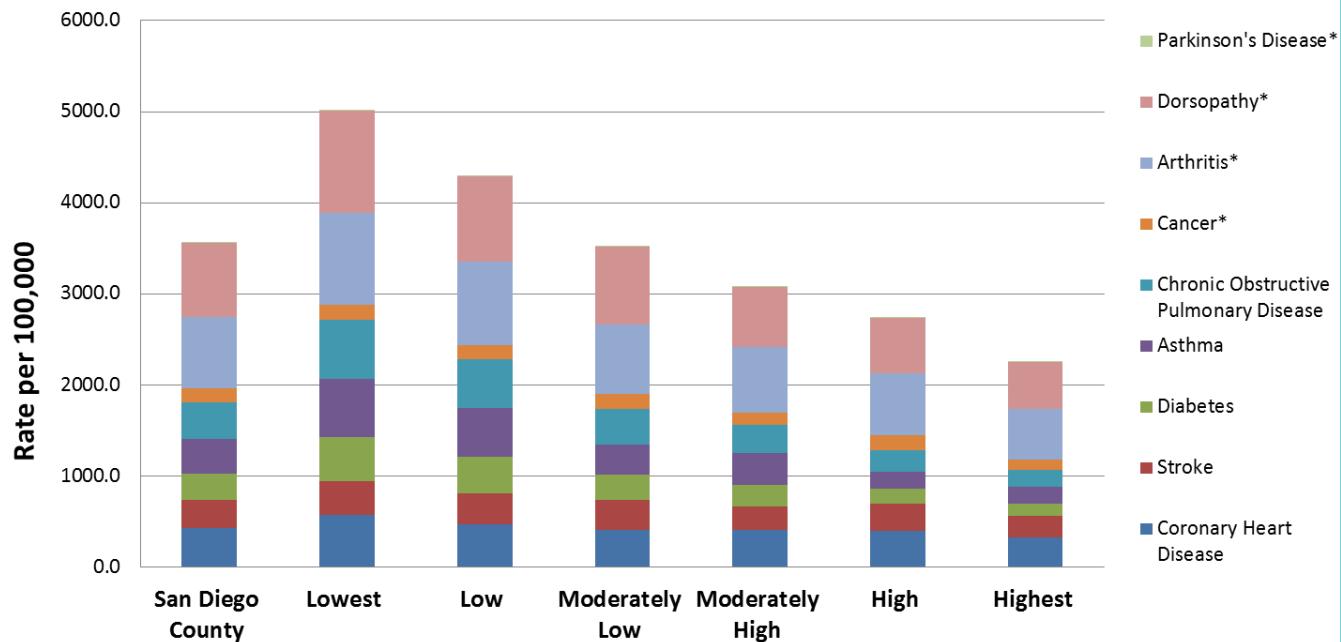
Compared to the county overall, the low income communities are disproportionately affected by injury, chronic disease, communicable disease, maternal and child health indicators, and behavioral health outcomes. A series of health indicators are described in the following sections, which affect low income communities more than other areas in San Diego County. Rates of death, hospitalization discharge, and emergency department discharge due to specific causes can provide insight to the severity of disease and injury occurring in the low income communities.



## Non-Communicable Disease (Chronic) Among Low Income Status Residents

Figure 9

### Overall Burden\* of Non-Communicable (Chronic) Disease in San Diego County by Income Status, 2011



\*Overall burden (except for cancer, arthritis, dorsopathy, and Parkinson's disease) includes death, hospitalization and emergency department (ED) discharge. Cancer includes death only. Arthritis, dorsopathy, and Parkinson's disease include hospitalization and emergency department discharge.

### Top Non-Communicable (Chronic) Disease Health Disparities Among Low Income San Diego County Residents:

- Rates of death due to asthma were 1.7 times higher among low income residents compared to the county overall.
- Diabetes hospitalizations rates were 1.4 times higher among low income residents compared to the county overall.

### Preventing Socioeconomic Health Disparities

#### 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 and appealing parks and recreational facilities
- Increase the availability and affordability of fresh produce
- Adopt walkable communities



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### Non-Communicable (Chronic) Disease

Overall, non-communicable (chronic) disease rates were 20% higher in low income communities compared to the county overall. Rates of asthma and diabetes were notable non-communicable (chronic) diseases affecting, and of growing concern, among low income residents in San Diego County.

#### Asthma

In 2011, low income communities had an asthma death rate 1.7 times higher compared to the county overall. Likewise, the rates of hospitalization and emergency department (ED) discharge due to asthma were both 1.4 times higher compared to the county overall.

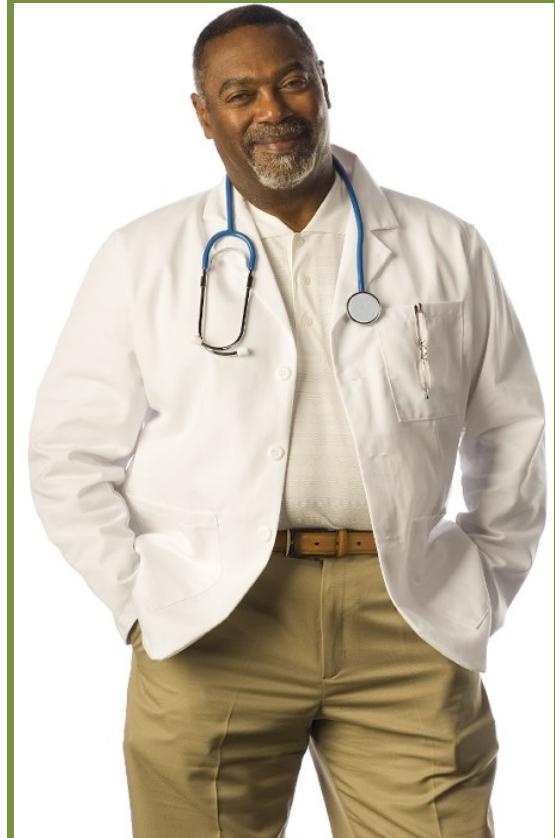
- Lemon Grove had the highest rates of deaths due to asthma, while Southeastern San Diego had the highest rates of hospitalizations and ED discharge compared to the other low income communities.

#### Diabetes

Diabetes hospitalization and ED discharge rates were both 1.4 times higher among the lowest income communities compared to the county in 2011. Likewise, the rate of death due to diabetes was nearly 1.2 times higher compared to the county overall.

- Mountain Empire had the highest rate of death due to diabetes, whereas Southeastern San Diego had the highest rates of hospitalization and ED discharge of all other low income communities.

**More than 44% of low income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>**



### 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>13</sup>

#### Tobacco Use

- In 2011, 19.4% of low income San Diego County residents were current smokers.<sup>11</sup>

#### Poor Diet

- More than 44% of low income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>

#### Alcohol Abuse

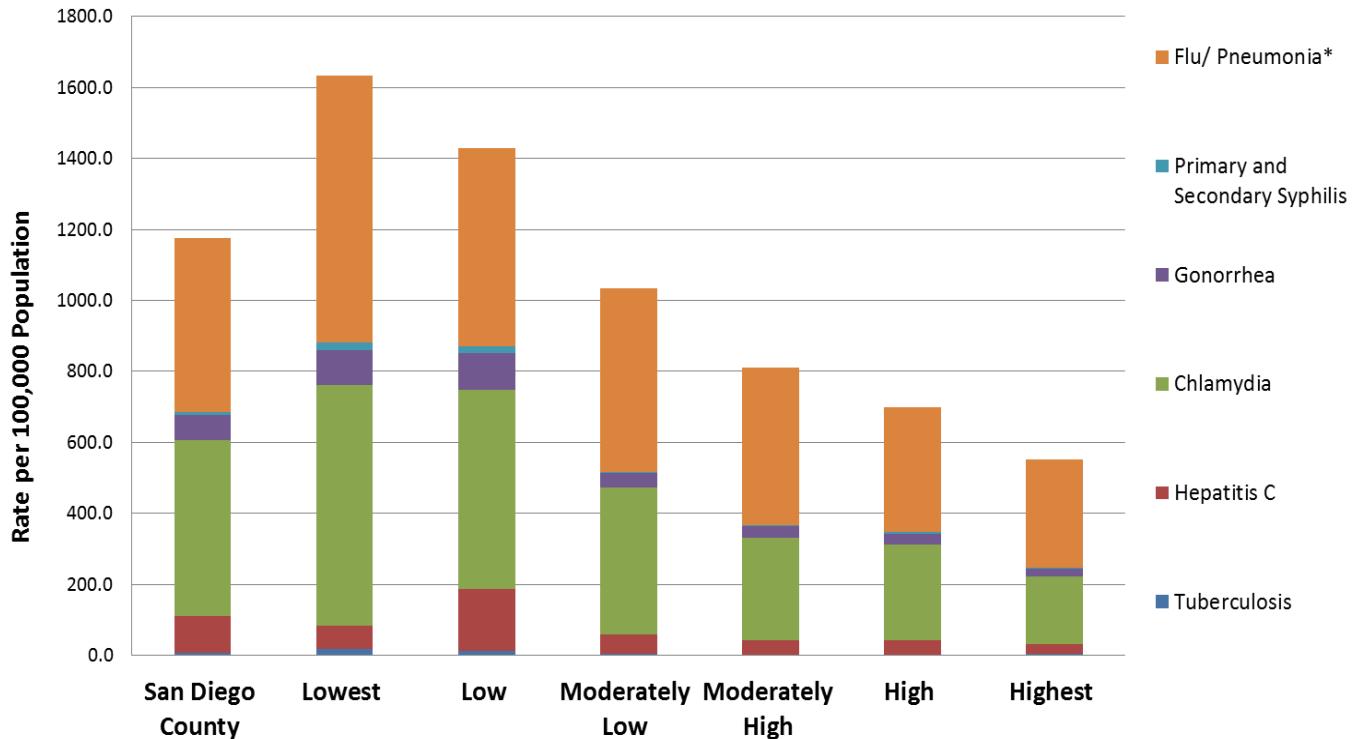
- In 2011, roughly 50% of low income residents had engaged in binge drinking in the past year.<sup>11</sup>

Changes in modifiable risk factors such as tobacco use, lack of physical activity, poor diet, and abuse of alcohol, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among San Diego County residents.<sup>13</sup>

## Communicable Disease Among Low Income Status Residents

Figure 10

### Overall Burden\* of Communicable Disease in San Diego County by Income Status, 2011



\*Overall burden (except for flu/pneumonia) includes incidence only. Flu/pneumonia includes death, hospitalization, and emergency department discharge.

### Top Communicable Disease Health Disparities Among Low Income San Diego County Residents:

- The rate of reported primary/secondary syphilis was 1.9 times higher than the county overall.
- The rate of reported hepatitis C was 1.7 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### 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



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### Communicable Disease

Overall, residents belonging to the low income communities had some of the highest rates of communicable diseases compared to the county overall. However, rates of primary/secondary syphilis, hepatitis C, and gonorrhea were notably higher among the low income communities compared to the county overall.

### Gonorrhea

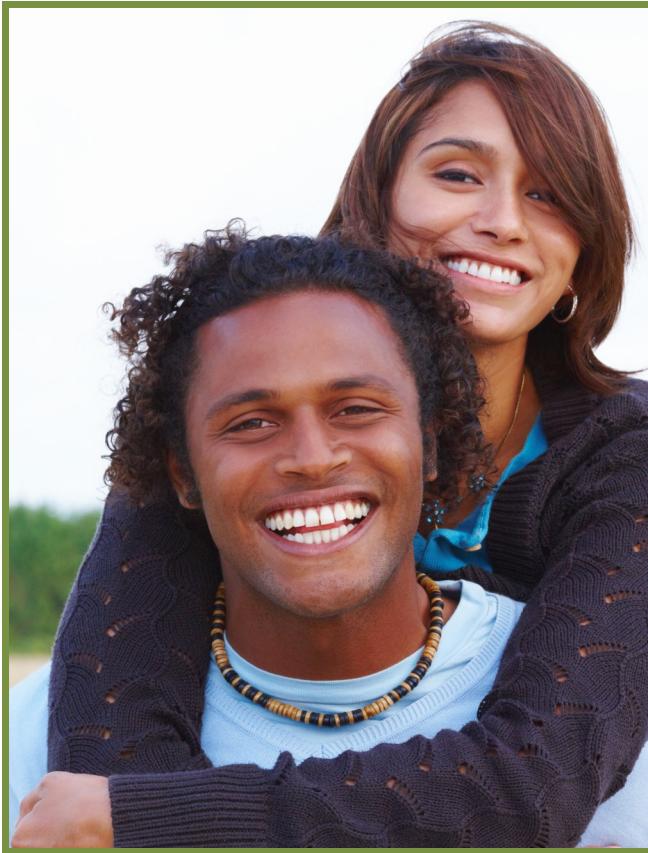
In 2011, the low income communities had a reported gonorrhea rate that was 1.5 times higher compared to the county overall, at 106 per 100,000 population.

- Central San Diego had the highest rate of gonorrhea of all the low income communities and the county overall.

### Hepatitis C

The rate of reported hepatitis C in 2011 was 1.7 times higher in communities with low incomes than the county overall, at 174.5 per 100,000 population.

- South Bay had the highest rate of hepatitis C of all the low income communities and the county overall.



**In 2011, the low income communities had a reported primary/secondary syphilis rate that was 1.9 times higher compared to the county overall.**

### Primary/Secondary Syphilis

In 2011, the low income communities had a reported primary/secondary syphilis rates that was 1.9 times higher compared to the county overall, at 17.4 per 100,000.

- Central San Diego had the highest rate of primary/secondary syphilis of all the low income communities and the county overall.

### Risk Factors and Prevention Strategies

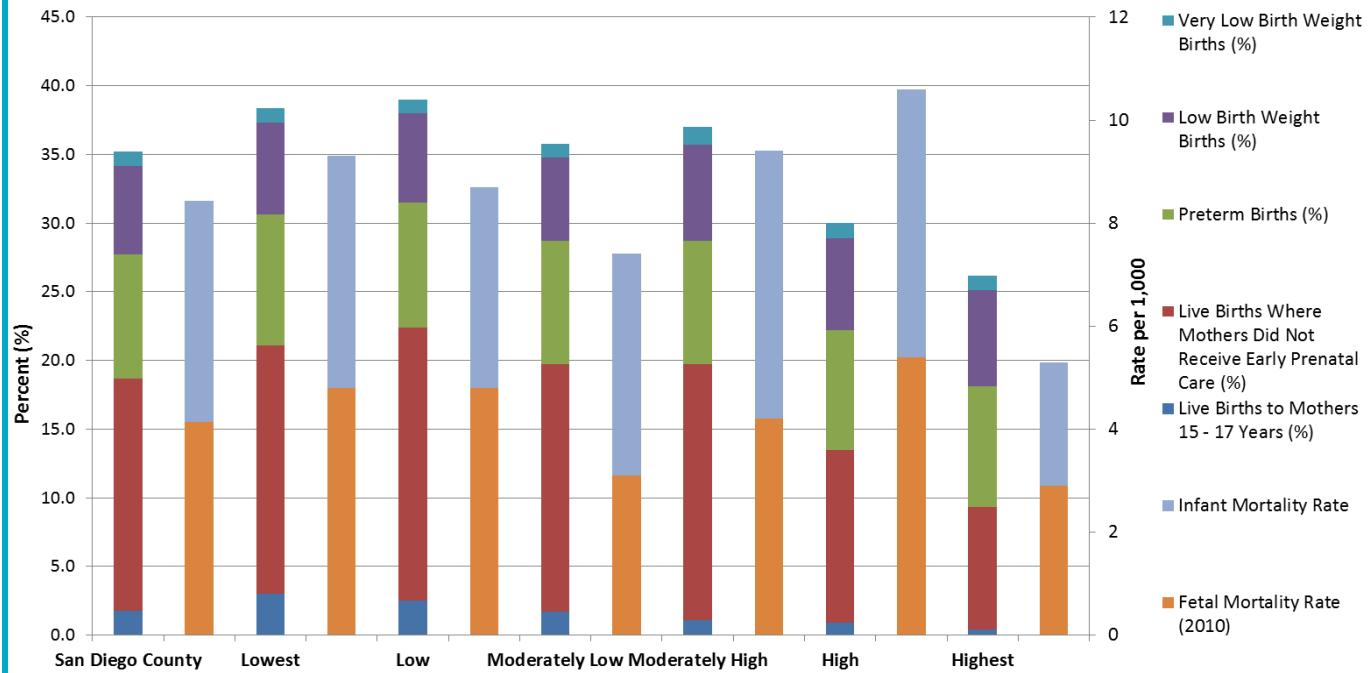
Prevention measures against communicable diseases, frequent testing, seeking early treatment, completing treatment regimens, and staying current with recommended vaccinations are key ways to reduce the burden of communicable disease among the low income communities in San Diego County.<sup>14</sup>

- In 2011, 38.3% of low income residents reported being vaccinated for the flu in the past 12 months.<sup>11</sup>

## Maternal and Child Health Among Low Income Status Residents

**Figure 11**

### Overall Burden\* of Maternal and Child Health in San Diego County by Income Status, 2011



\*Overall burden includes percentages and rates.

### Top Maternal & Child Health Outcome Health Disparities Among Low Income San Diego County Residents:

- The percentage of teen births amongst low income women was nearly 40% higher than the county overall.
- The percentage of mothers receiving early prenatal care was 3.5% lower than the county overall.

### Preventing Socioeconomic Health Disparities

#### What You Can Do to Reduce Your Risk of Poor Maternal and 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 and 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



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### Maternal and Child Health

The low income communities of San Diego County are disproportionately affected by many poor maternal and child health outcomes. Compared to the other populations in the county, the low income communities have the second and third highest rates and percentages of nearly all maternal and child health conditions, most notably with a large proportion of teen births and a high fetal mortality rate.

#### Fetal Mortality

In 2010, the rate of fetal mortality countywide was 4.1 fetal deaths per 1,000 live births, meeting and exceeding the Healthy People 2020 goal of 5.6 fetal deaths per 1,000 live births.<sup>14</sup> However, there were notable differences between income groups. The low income communities had a fetal mortality rate nearly 1.2 times higher than the county overall.

- The fetal mortality rate was highest among Central San Diego residents compared to both the county overall and all other lowest income communities, at 8.3 fetal deaths per 1,000 live births in 2011.

#### Teen Births

San Diego County had 779 teen births in 2011, which made up 1.8% of all live births. Compared to the county overall, the percentage of teen births was higher among mothers in low income communities in 2011 at 2.5%.

- Mountain Empire had the highest percentage of all births belonging to teens, at 3.9%, compared to both the county and other low income communities.



**Mountain Empire had the highest percentage of all births belonging to teens, at 3.9%, compared to both the county and other low income communities in 2011.**

#### Risk Factors and Prevention Strategies

Maternal and child health outcomes are influenced by several factors including age, race/ethnicity, socioeconomic status, and a mother's health. Specifically, lack of prenatal care, poor nutrition, alcohol and tobacco use, as well as lack of physical activity, are major lifestyle risk factors for adverse maternal and child health outcomes.<sup>14</sup>

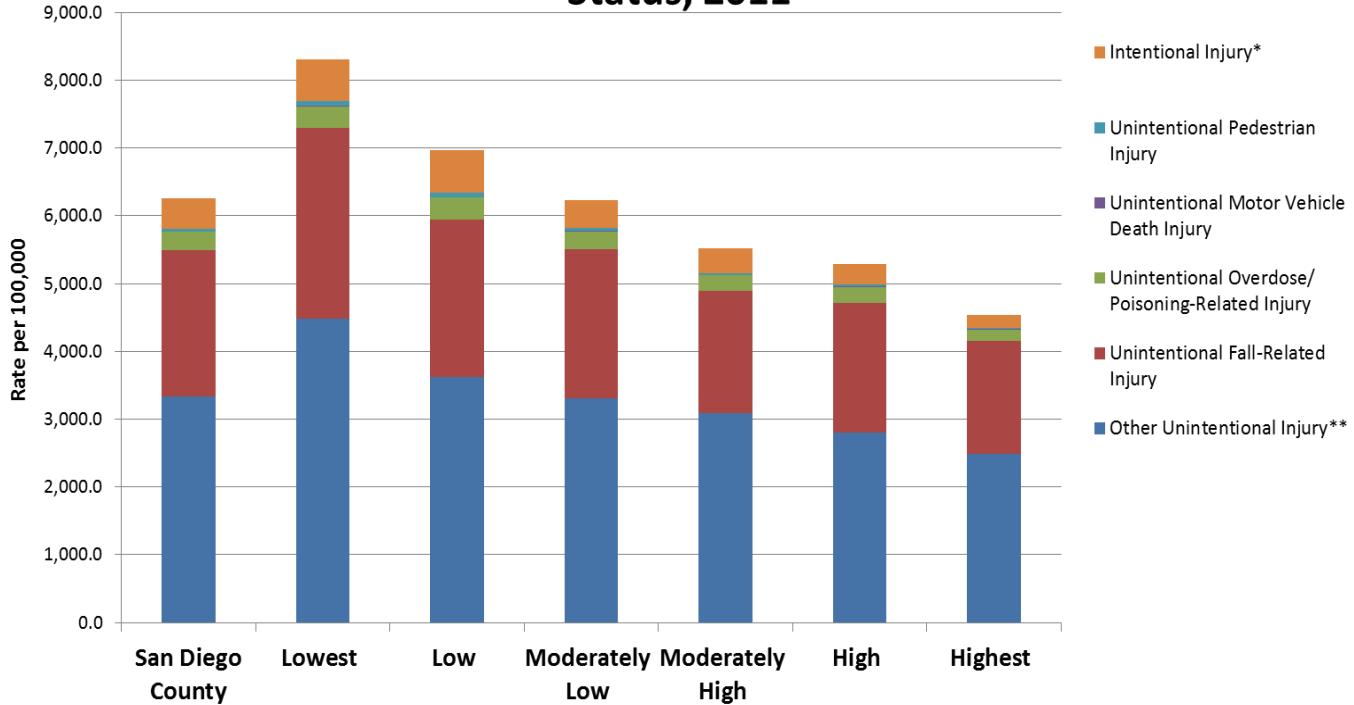
The health of mothers, infants, and children are key indicators of the health of a community overall. Their health outcomes often reflect the health of future generations, as well as emerging public health concerns. Therefore, engaging in healthy behaviors associated with favorable maternal and child health outcomes has the potential to positively impact the health of the county overall.<sup>14</sup>

#### Injury

## Injury Among Low Income Status Residents

Figure 12

### Overall Burden\* of Injury in San Diego County by Income Status, 2011



\*Overall burden includes death, hospitalization, and emergency department (ED) discharge.

\*\*Intentional injury includes homicide, assault, suicide, and self-inflicted injury. Other unintentional injury include cut/pierce injury, struck by an object injury, suffocation, drowning, overexertion injury, fire-related/burn injury, and sport/recreational injury.

### Top Injury Health Disparities Among Low Income San Diego County Residents:

- The rate of hospitalization due to pedestrian injury was 1.6 times higher than the county overall.
- The rate of hospitalization due to assault was 1.7 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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Overall, injury rates were 11% higher among low income communities compared to the county overall. Notably, rates of unintentional pedestrian injury, and intentional injuries were particularly higher among low income communities in San Diego County.

### Intentional Injury

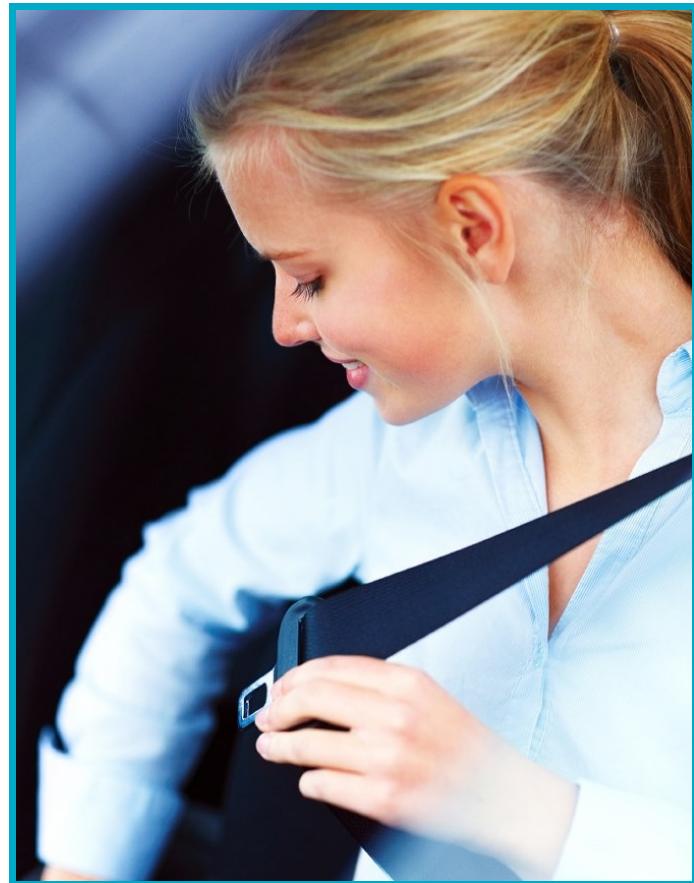
Intentional injury rates, represented by homicide, assault, suicide, and self inflicted injuries, were 40% higher in low income communities compared to the county overall. Notably, assault hospitalizations and emergency department (ED) discharge rates were considerably higher than the county overall. In 2011, residents in the low income communities had an assault hospitalization rate that was 1.7 times higher than the county overall. Similarly, residents in the low income communities had an assault ED rate that was 1.4 times higher than the county overall.

- Central San Diego had the highest assault hospitalization and ED rates of all the low income communities, as well as the highest self-inflicted hospitalization rates. In addition, Mountain Empire had the highest self-inflicted ED rates.

### Unintentional Pedestrian Injury

The rate of unintentional pedestrian injuries was 42% higher in the low income communities than the county overall. The rate of hospitalizations for pedestrian injuries was 1.6 times higher in low income communities and the ED discharge rate was 1.4 times higher compared to the county in 2011.

- Palomar-Julian had the highest rate of unintentional pedestrian injury deaths and hospitalizations, while Central San Diego had the highest rate of pedestrian injury ED discharge in 2011.



### 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>15</sup>

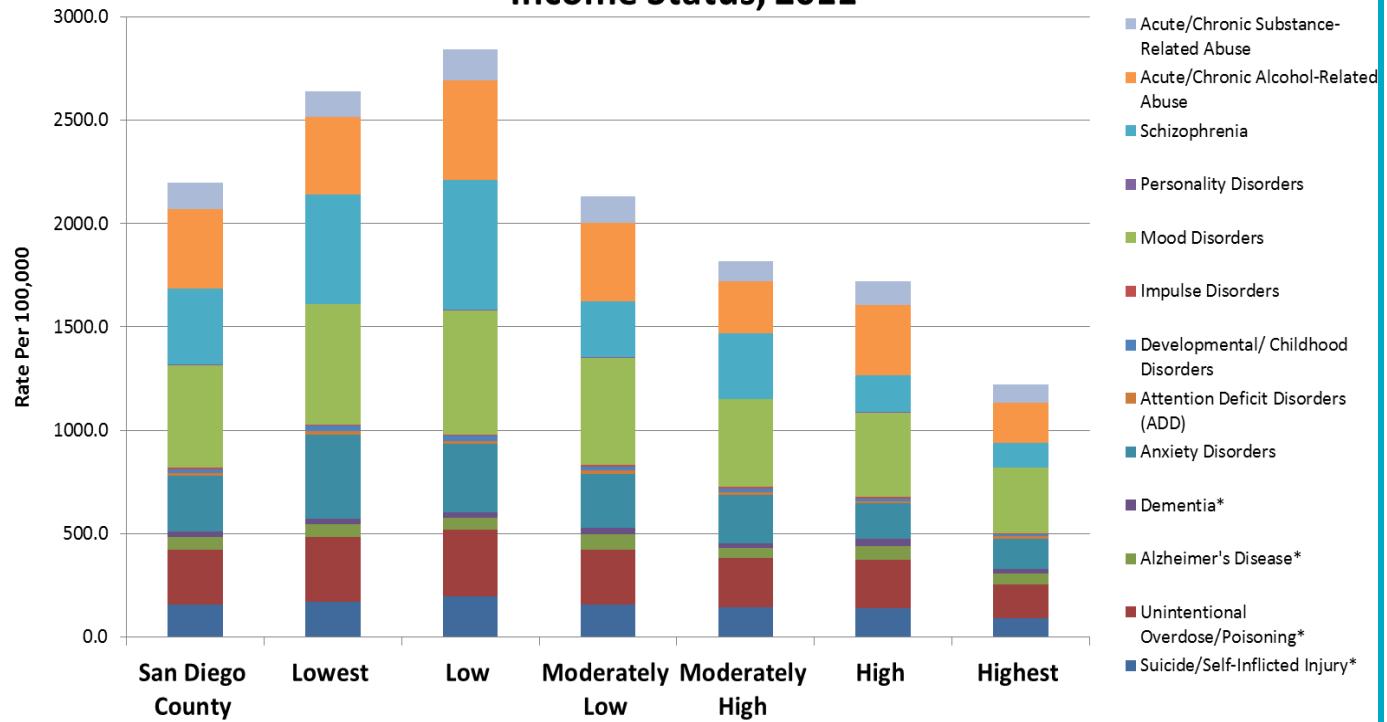
Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>15</sup>

**Intentional injury rates, represented by homicide, assault, suicide, and self inflicted injuries, were 40% higher in low income communities compared to the county overall.**

## Behavioral Health Among Low Income Status Residents

**Figure 13**

### Overall Burden\* of Behavioral Health in San Diego County by Income Status, 2011



\*Overall burden (except for suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia) includes hospitalization, and emergency department (ED) discharge. Suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia include death, hospitalization, and ED discharge.

### Top Behavioral Health Disparities Among Low Income San Diego County Residents:

- The rate of emergency department discharges due to personality disorders was 1.5 times higher than the county overall.
- The rate of schizophrenia hospitalization was 1.8 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### 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



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### Behavioral Health

Overall, poor behavioral health outcome rates were 30% higher among low income communities compared to the county overall. Notably, rates of personality disorders and schizophrenia were particularly higher among low income communities in San Diego County.

### Personality Disorders

Hospitalization and emergency department (ED) discharge rates due to personality disorders were higher among the low income communities compared to the county overall. Notably, the rates were both 1.5 times higher compared to the county.

- Among the low income communities, South Bay had the highest rate of personality disorder hospitalization, whereas Mountain Empire had the highest rate of ED discharge.



**Rates of schizophrenia in the low income communities, on their own, were 71% higher compared to the county overall, in 2011.**

### Schizophrenia

In 2011, rates of schizophrenia in the low income communities were 71% higher compared to the county overall. Hospitalization and ED discharge were higher among the low income communities compared to the county overall. Notably, the rates were 1.8 and 1.4 times higher, respectively, compared to the county.

- Central San Diego had the highest rate of schizophrenia hospitalization, whereas Lemon Grove had the highest rate of emergency ED discharge of all the low income communities in 2011.

### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>16</sup>

- In 2011, 20.6% of low income residents reported needing help for an emotional or mental health problem in San Diego County.<sup>11</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>16</sup>

## Moderately Low Income Status

The communities of San Diego County belonging to the moderately low income status category include Escondido, Kearny Mesa, Laguna-Pine Valley, Lakeside, Oceanside, Peninsula, and San Marcos. Residents belonging to these communities are characterized by an annual median household income between \$60,000 to \$70,000.

In 2011, the population of these communities was about 538,000, making up 17% of the county's total population.<sup>10</sup>

Between 2007 and 2011:

- The median household income of residents within the moderately low income communities was \$58,375 per year.<sup>12</sup>
- 46% of the population spent less than 30% of their income on housing.<sup>12</sup>

During this same time period, 12% of the population within these communities was 65 years old and older, and nearly 60% residents were white.<sup>12</sup>

**The median household income of residents within the moderately low income communities was \$58,375 in 2011.<sup>12</sup>**

Other characteristics of the moderately low income group, between 2007 and 2011 include:

- Nearly 16% of the moderately low income group had less than a high school diploma.<sup>12</sup>
- 8.6% of the moderately low income group was unemployed.<sup>12</sup>

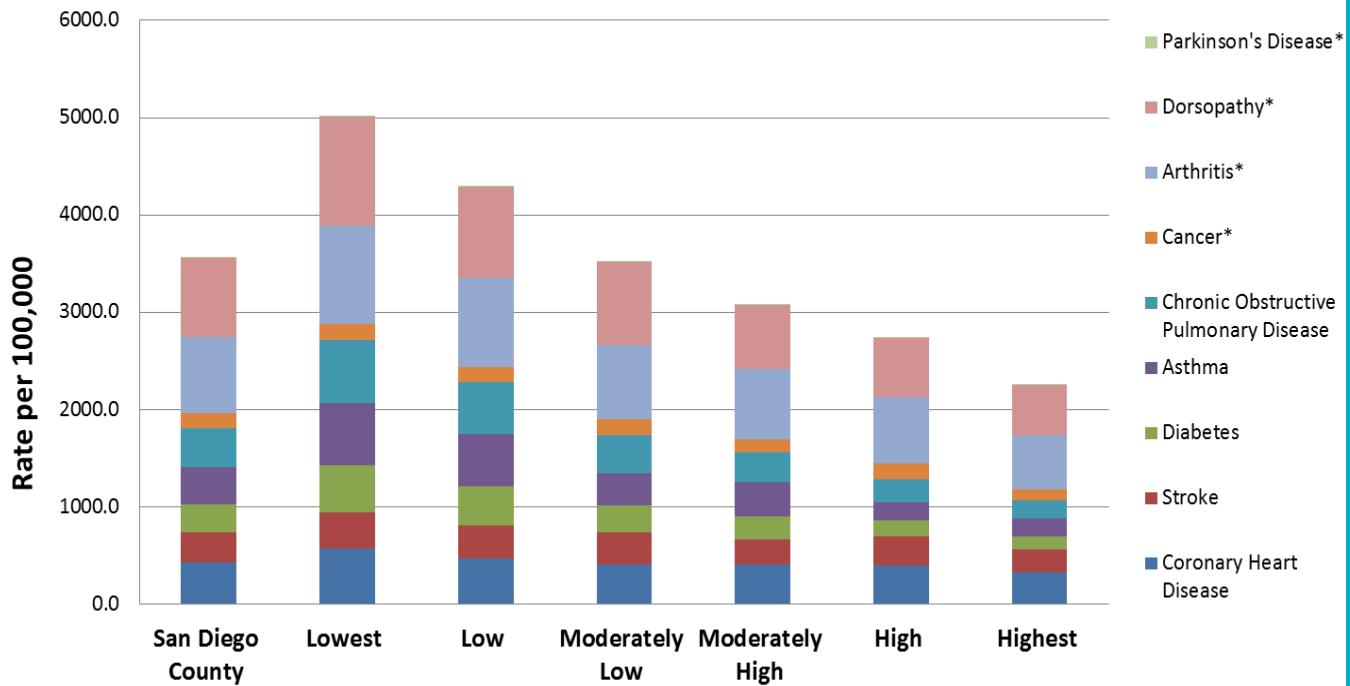
Compared to the county overall, the moderately low income communities were disproportionately affected by many health outcomes. A series of health indicators are described in the following sections, which affect moderately low income communities more than other areas in San Diego County. Rates of death, hospitalization discharge, and emergency department discharge due to specific causes can provide insight to the severity of disease and injury occurring in the moderately low income communities.



## Non-Communicable Disease (Chronic) Among Moderately Low Income Status Residents

Figure 14

### Overall Burden\* of Non-Communicable (Chronic) Disease in San Diego County by Income Status, 2011



\*Overall burden (except for cancer, arthritis, dorsopathy, and Parkinson's disease) includes death, hospitalization and emergency department (ED) discharge. Cancer includes death only. Arthritis, dorsopathy, and Parkinson's disease include hospitalization and emergency department discharge.

### Top Non-Communicable (Chronic) Disease Health Disparities Among Moderately Low Income San Diego County Residents:

- The stroke emergency department discharge rate was 1.2 times higher compared to the county overall.

### Preventing Socioeconomic Health Disparities

#### 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 and appealing parks and recreational facilities
- Increase the availability and affordability of fresh produce
- Adopt walkable communities



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### Non-Communicable (Chronic) Disease

Overall, non-communicable (chronic) disease rates were lower in moderately low income communities compared to the county overall. However, rates of cancer and stroke were notable non-communicable (chronic) diseases affecting moderately low income residents in San Diego County.

### Cancer

In 2011, moderately low income communities had a cancer death rate 1.1 times higher compared to the county overall.

- Kearny Mesa had the highest rate of death due to cancer at 185.2 per 100,000 population, while Laguna-Pine Valley had the lowest death rate due to cancer at 106.3 per 100,000 population, when compared to the other moderately low income communities.

### Stroke

In 2011, the overall burden of stroke in moderately low income communities was 1.1 times higher compared to the county overall. Stroke emergency department discharge rates were 1.2 times higher compared to the county. The rate of death due to stroke was 1.1 times higher compared to the county in moderately low income communities.

- Kearny Mesa had the highest rate of death due to stroke at 44.2 per 100,000 population of all other moderately low income communities. Oceanside had the highest rates of hospitalizations at 261.7 per 100,000 population, and Escondido had the highest emergency department discharge rate at 88.9 per 100,000 population, of all other moderately low income communities.

**More than 44% of moderately low income residents reported eating fast food at least 2 times in the past week in 2011.<sup>11</sup>**



### 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>13</sup>

#### Tobacco Use

- In 2011, 10.5% of moderately low income San Diego County residents were current smokers.<sup>11</sup>

#### Poor Diet

- More than 44% of moderately low income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>

#### Alcohol Abuse

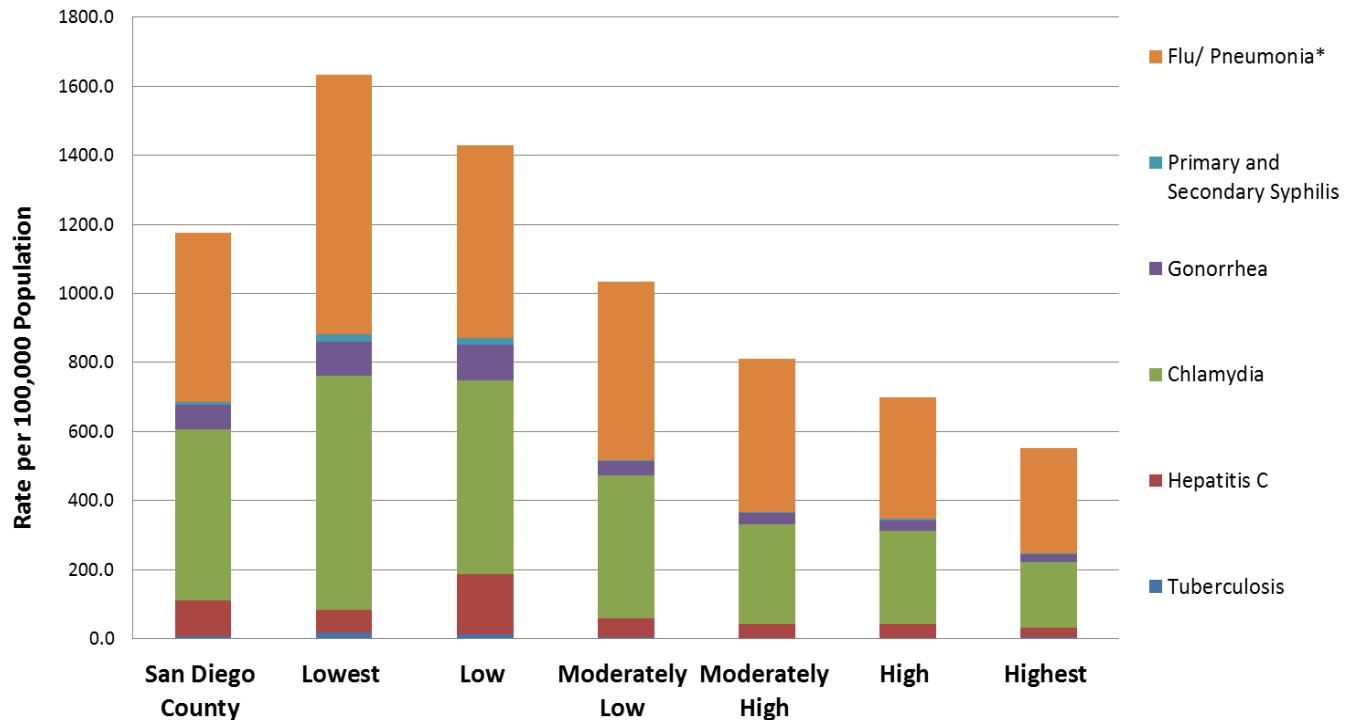
- In 2011, roughly 36.3% of moderately low income residents had engaged in binge drinking in the past year.<sup>11</sup>

Changes in modifiable risk factors such as tobacco use, lack of physical activity, poor diet, and abuse of alcohol, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among San Diego County residents.<sup>13</sup>

## Communicable Disease Among Moderately Low Income Status Residents

Figure 15

### Overall Burden\* of Communicable Disease in San Diego County by Income Status, 2011



\*Overall burden (except for flu/pneumonia) includes incidence only. Flu/pneumonia includes death, hospitalization, and emergency department discharge.

### Top Communicable Disease Health Disparities Among Moderately Low Income San Diego County Residents:

- The rates of death and emergency department discharge due to reported flu/pneumonia were both 1.1 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Communicable Disease

Overall, residents belonging to moderately low income communities had slightly lower rates of communicable disease compared to the county overall. However, rates of flu/pneumonia were notably higher among the moderately low income communities compared to the county overall.

### Flu/Pneumonia

In 2011, the burden of reported flu/pneumonia was 6% higher in moderately low income communities compared to the county overall. The rates of death and emergency department discharge due to reported flu/pneumonia were both 1.1 times higher than the county overall.

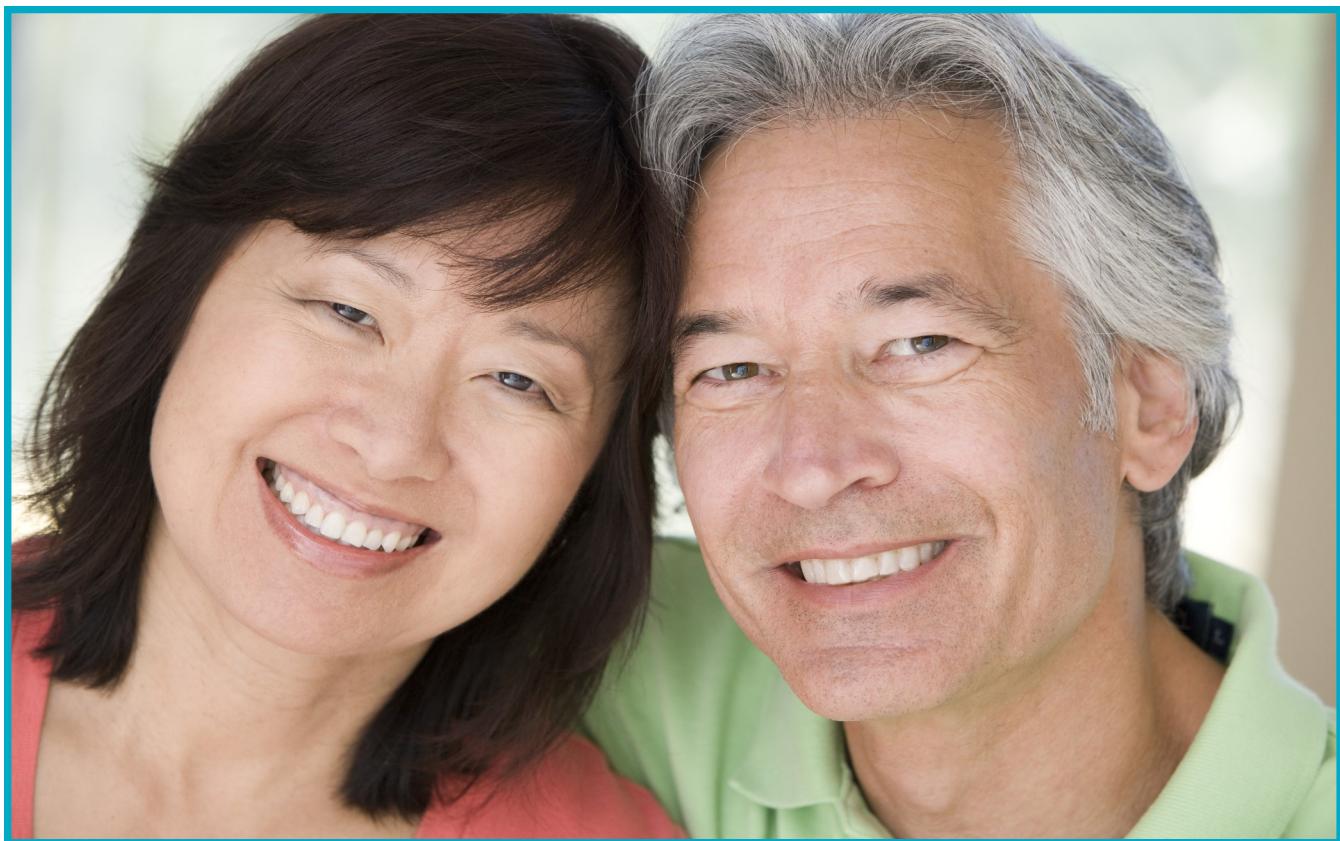
- Kearny Mesa had the highest flu/pneumonia death rate and pneumonia hospitalization rate of all the moderately low income communities and the county overall.
- Oceanside had the highest flu/pneumonia ED discharge rates of all the moderately low income communities and the county overall.

**In 2011, the burden of reported flu/pneumonia was 6% higher in moderately low income communities compared to the county overall.**

### Risk Factors and Prevention Strategies

Prevention measures against communicable disease, including 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 moderately low income communities in San Diego County.<sup>14</sup>

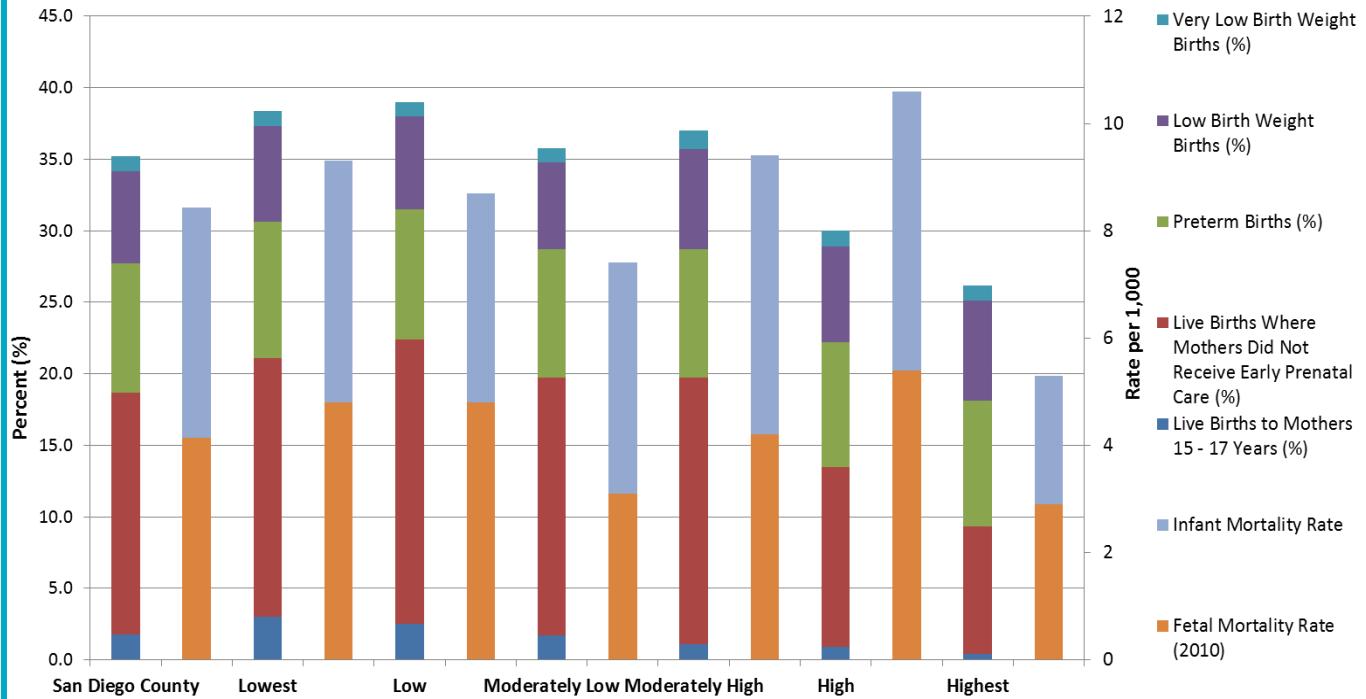
- In 2011, 33.9% of moderately low income residents reported being vaccinated for the flu in the past 12 months.<sup>11</sup>



## Maternal and Child Health Among Moderately Low Income Status Residents

**Figure 16**

### Overall Burden\* of Maternal and Child Health in San Diego County by Income Status, 2011



### Top Maternal & Child Health Outcome Health Disparities Among Moderately Low Income San Diego County Residents:

- The percentage of mothers receiving early prenatal care was 1.4% lower than the county overall.

### Preventing Socioeconomic Health Disparities

#### What You Can Do to Reduce Your Risk of Poor Maternal and 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 and 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



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### Maternal and Child Health

The moderately low income communities of San Diego County had an overall burden of poor maternal and child health outcomes comparable to that of the county.

#### Early Prenatal Care

In 2011, the percentage of mothers using early prenatal care was 83.1% countywide. However, there were notable differences between income groups. Eighty-two percent of moderately low income mothers received early prenatal care in 2011, which was 1.4% less than the county overall.

- Laguna-Pine Valley had the lowest percentage of mothers receiving early prenatal care, at 68.4%, compared to all the other moderately low income communities and the county overall.
- In contrast, Peninsula had the highest percentage of mothers receiving early prenatal care, at 92.6%, compared to all the other moderately low income communities and the county overall.



**Laguna-Pine Valley had the lowest percent of mothers using early prenatal care, at 68.4%, compared to all the other moderately low income communities and the county overall.**

#### Risk Factors and Prevention Strategies

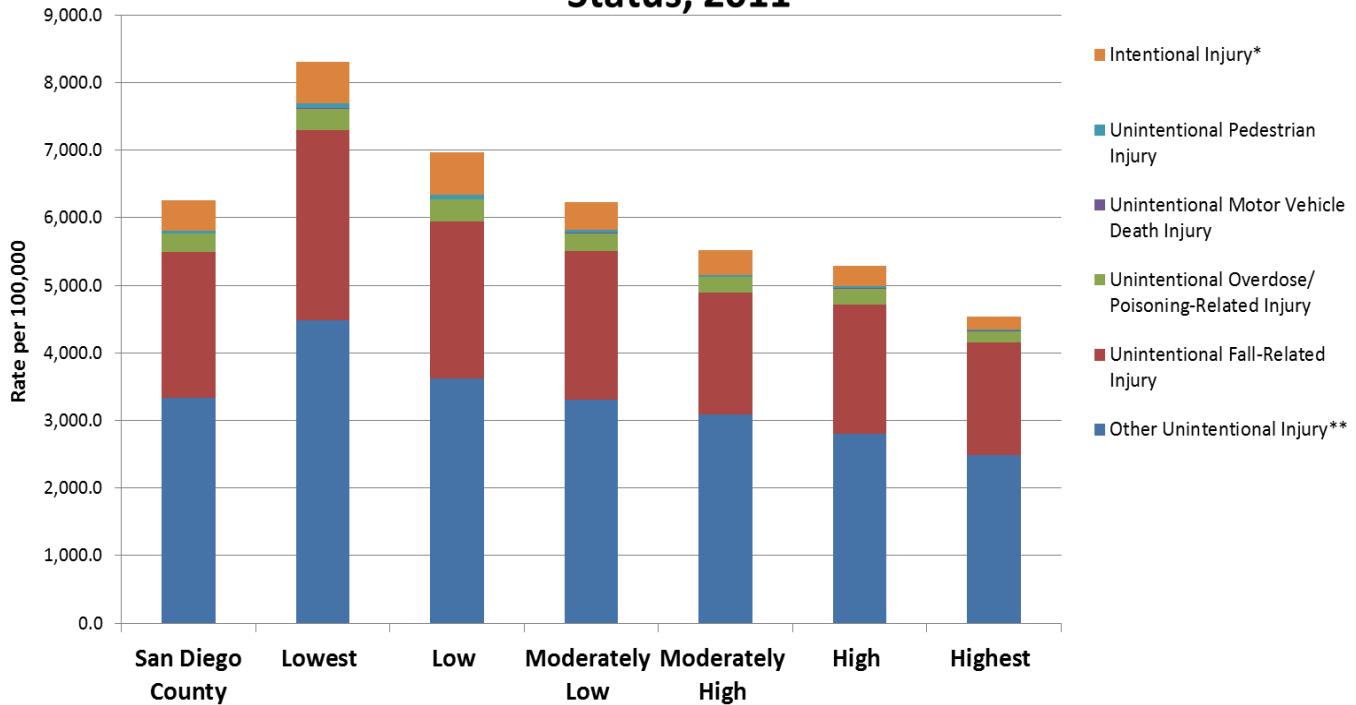
Maternal and child health outcomes are influenced by several factors including age, race/ethnicity, socioeconomic status, and a mother's health. Specifically, lack of prenatal care, poor nutrition, alcohol and tobacco use, and lack of physical activity are major lifestyle risk factors for adverse maternal and child health outcomes.<sup>14</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>14</sup>

## Injury Among Moderately Low Income Status Residents

Figure 17

### Overall Burden\* of Injury in San Diego County by Income Status, 2011



\*Overall burden includes death, hospitalization, and emergency department (ED) discharge.

\*\*Intentional injury includes homicide, assault, suicide, and self-inflicted injury. Other unintentional injury include cut/pierce injury, struck by an object injury, suffocation, drowning, overexertion injury, fire-related/burn injury, and sport/recreational injury.

### Top Injury Health Disparities Among Moderately Low Income San Diego County Residents:

- The rate of death due to unintentional motor vehicle injuries was 1.2 times higher than the county overall.
- The rate of emergency department (ED) discharge due to hip fractures was 1.3 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Injury

Injury rates were lower among moderately low income communities compared to the county overall.

However, rates of unintentional fall-related injury and unintentional motor vehicle death were all somewhat higher among moderately low income communities.

### Unintentional Fall-Related Injuries

In 2011, rates of unintentional fall-related injury were 2% higher in moderately low income communities compared to the county overall.

- Oceanside had the highest rates of unintentional fall-related death and ED discharge, whereas Kearny Mesa had the highest rate of unintentional fall-related hospitalization of all the moderately low income communities.

### Unintentional Motor Vehicle Deaths

In 2011, rates of unintentional motor vehicle deaths were 20% higher in moderately low income communities compared to the county overall.

- Escondido had the highest unintentional motor vehicle death rate of all the moderately low income communities and the county overall.

**In 2011, rates of unintentional motor vehicle deaths were 20% higher in moderately low income communities compared to the county overall.**

### 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>15</sup>

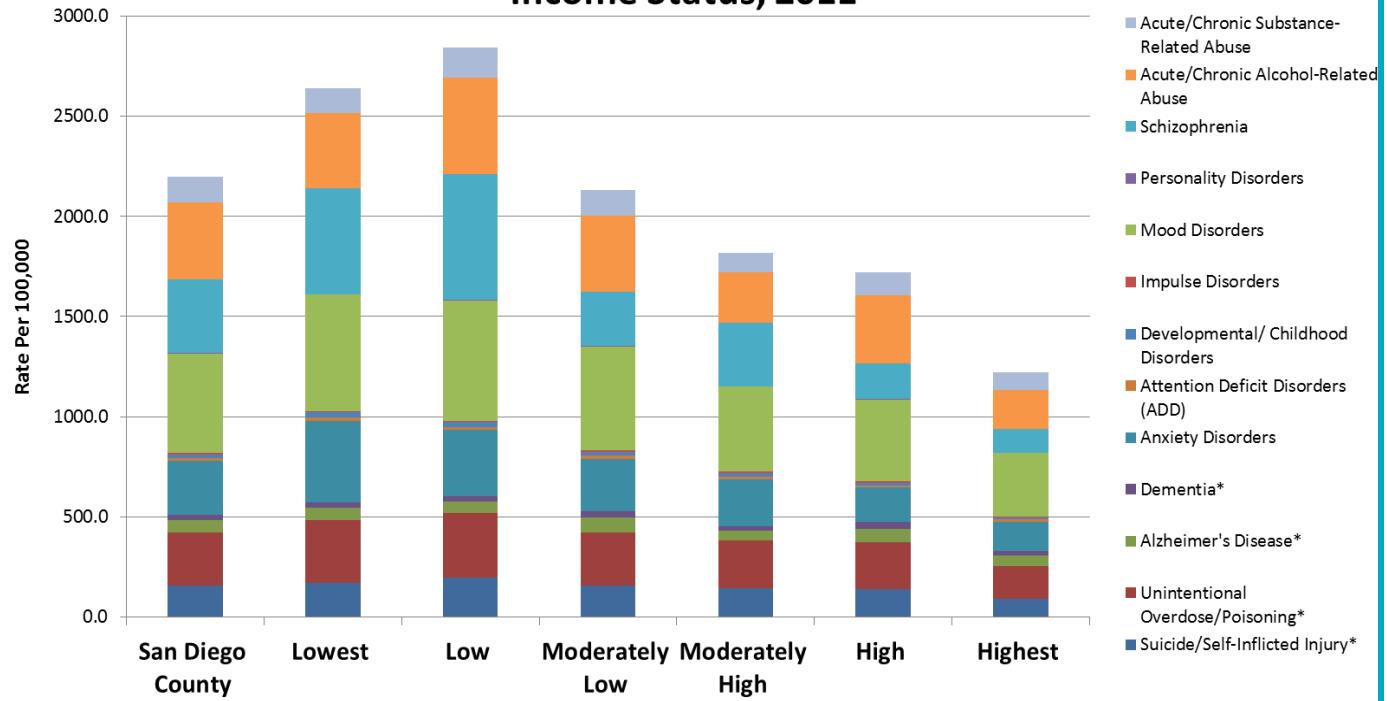
Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>15</sup>



## Behavioral Health Among Moderately Low Income Status Residents

**Figure 18**

### Overall Burden\* of Behavioral Health in San Diego County by Income Status, 2011



### Top Behavioral Health Disparities Among Moderately Low Income San Diego County Residents:

- The rate of emergency department discharges due to Alzheimer's disease was nearly 1.3 times higher than the county overall.
- The rate of impulse control disorder hospitalization was 1.2 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Behavioral Health

Poor behavioral health outcome rates were lower among the moderately low income communities compared to the county overall. However, certain conditions had higher rates in this population. Notably, rates for Alzheimer's disease and impulse control disorders were particularly higher among moderately low income communities in San Diego County.

### Alzheimer's Disease

In 2011, rates of Alzheimer's disease in the moderately low income communities were 24% higher compared to the county overall. Death and emergency department (ED) discharge were higher among the moderately low income communities compared to the county overall. Notably, the rates were 1.2 and 1.3 times higher, respectively, compared to the county.

- Among the moderately low income communities, Escondido had the highest rate of Alzheimer's disease deaths in 2011. In comparison, San Marcos and Oceanside had the highest rates of emergency ED discharge due to Alzheimer's disease.

**Rates of Alzheimer's disease in the moderately low income communities, on their own, were 24% higher compared to the county overall, in 2011.**



### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>16</sup>

- In 2011, 12.9% of moderately low income residents reported needing help for an emotional or mental health problem in San Diego County.<sup>11</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>16</sup>

### Impulse Control Disorders

Rates of impulse control disorders in the moderately low income communities were 20% higher compared to the county overall in 2011. Hospitalization rates were 1.2 times higher among the moderately low income communities compared to the county overall.

- Escondido had the highest rate of impulse control disorder hospitalizations among all the moderately low income communities in 2011.

### Moderately High Income Status

## Moderately High Income Status

The communities of San Diego County belonging to the moderately high income status category include Fallbrook, Santee, Spring Valley, and University. Residents belonging to these communities are characterized by an annual median household income between \$70,000 to \$80,000.

In 2011, the population of these communities was about 235,000, making up 7.6% of the county's total population.<sup>10</sup>

Between 2007 and 2011:

- The median household income of residents within the moderately high income communities was \$72,987 per year.<sup>12</sup>
- About 47% of the population spent less than 30% of their income on housing.<sup>12</sup>

During this same time period, 11% of the population within these communities was 65 years old and older, and 58% of the residents were white.<sup>12</sup>

Other characteristics of the moderately high income group, between 2007 and 2011 include:

- 11% of the moderately high income group had less than a high school diploma.<sup>12</sup>
- 9% of the moderately high income group was unemployed.<sup>12</sup>



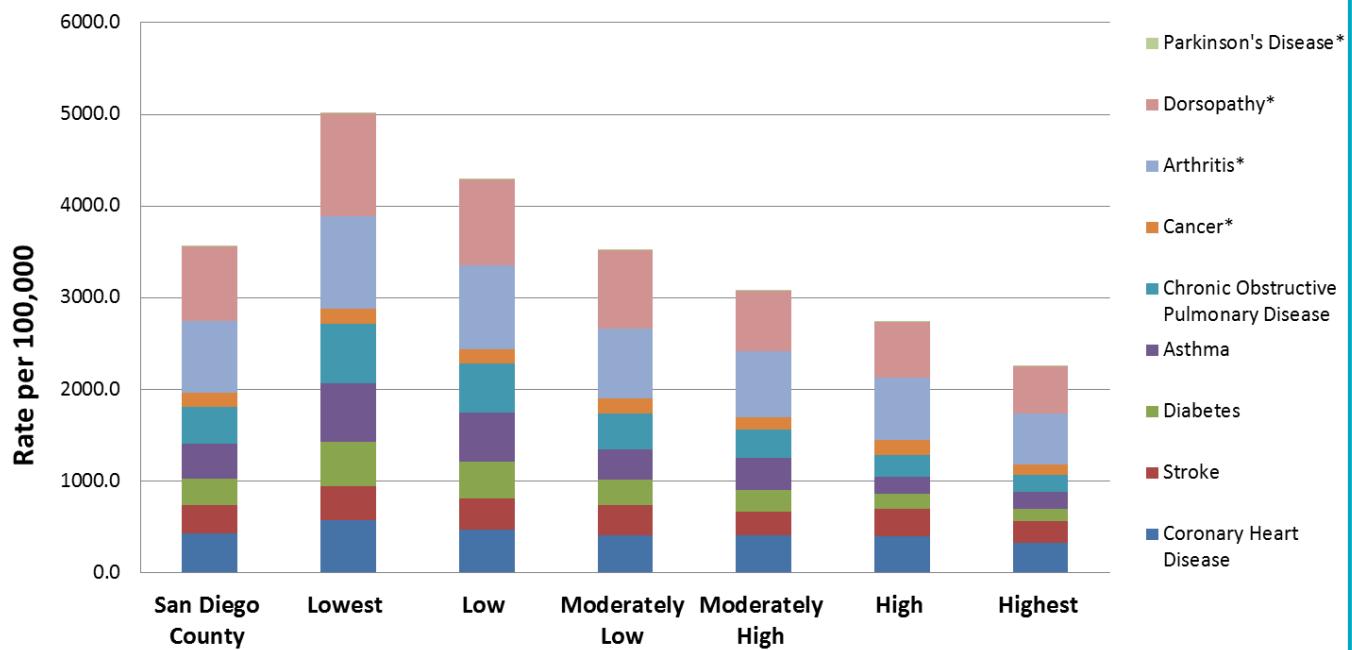
A series of health indicators are described in the following sections, which affect moderately high income communities more than other areas in San Diego County. Rates of death, hospitalization discharge, and emergency department discharge due to specific causes can provide insight to the severity of disease and injury occurring in the moderately high income communities.

**The median household income of residents within the moderately high income communities was \$72,987 in 2011.<sup>12</sup>**

## Non-Communicable (Chronic) Disease Among Moderately High Income Status Residents

Figure 19

### Overall Burden\* of Non-Communicable (Chronic) Disease in San Diego County by Income Status, 2011



\*Overall burden (except for cancer, arthritis, dorsopathy, and Parkinson's disease) includes death, hospitalization and emergency department (ED) discharge. Cancer includes death only. Arthritis, dorsopathy, and Parkinson's disease include hospitalization and emergency department discharge.

### Top Non-Communicable (Chronic) Disease Health Disparities Among Moderately High Income San Diego County Residents:

- The rate of Parkinson's disease hospitalization was 1.4 times higher than the county overall.
- The rate of dorsopathy hospitalization was 1.2 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### 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 and appealing parks and recreational facilities
- Increase the availability and affordability of fresh produce
- Adopt walkable communities



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### Non-Communicable (Chronic) Disease

Overall, non-communicable (chronic) disease rates were lower in moderately high income communities compared to the county overall. However, rates of Parkinson's disease and dorsopathies were notable non-communicable (chronic) diseases affecting moderately high income residents in San Diego County.

### Dorsopathy

Although moderately high income communities had a lower emergency department (ED) discharge rate compared to the county in 2011, these communities had a dorsopathy hospitalization rate 1.2 times higher compared to the county overall.

- Santee had the highest rates of dorsopathy hospitalizations and ED discharges at 267 per 100,000 population and 601.6 per 100,000 population, respectively, compared to the other moderately high income communities.

### Parkinson's Disease

Although moderately high income communities had lower ED discharge rates compared to the county in 2011, these communities had a Parkinson's disease hospitalization rate 1.4 times higher compared to the county overall.

- Fallbrook had the highest rate of Parkinson's disease hospitalizations at 12.5 per 100,000 population. Spring Valley had the highest ED discharge rate at 1.2 per 100,000 population compared to the other moderately high income communities.

**More than 38.8% of moderately high income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>**



### 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>13</sup>

#### Tobacco Use

- In 2011, 14.9% of moderately high income San Diego County residents were current smokers.<sup>11</sup>

#### Poor Diet

- More than 38.8% of moderately high income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>

#### Alcohol Abuse

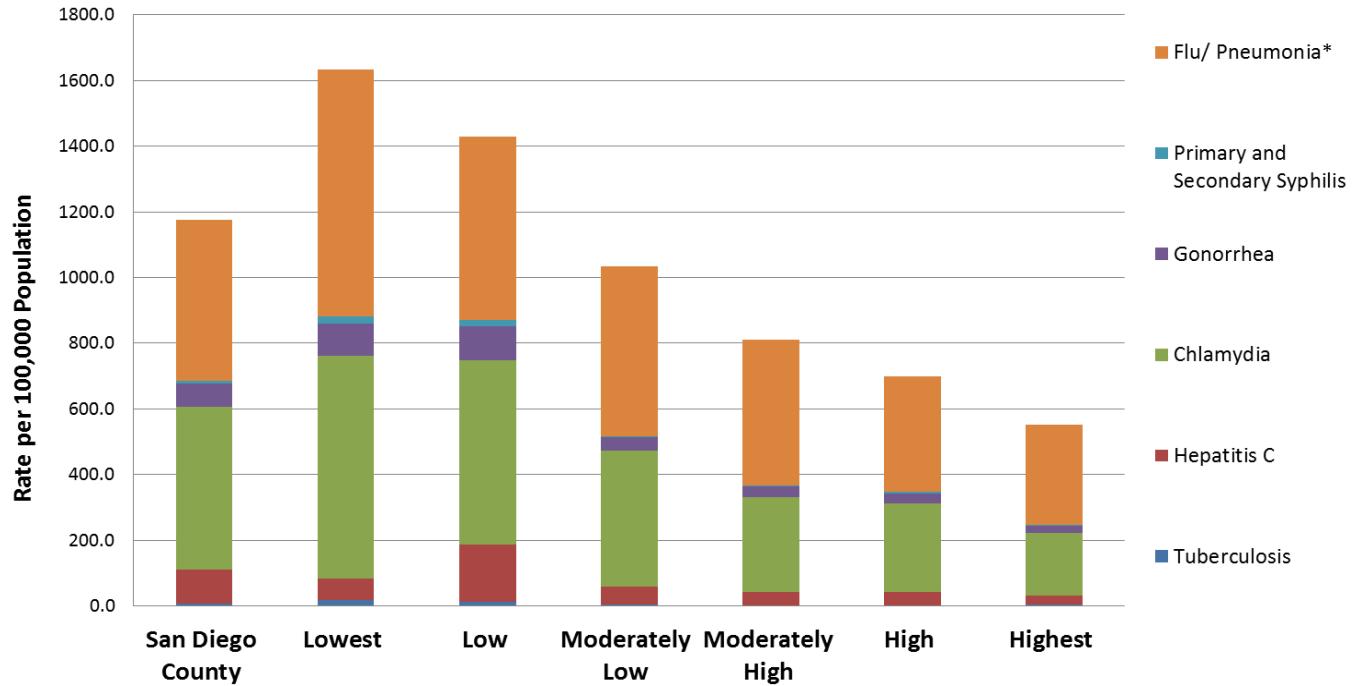
- In 2011, roughly 33.6% of moderately high income residents had engaged in binge drinking in the past year.<sup>11</sup>

Changes in modifiable risk factors such as tobacco use, lack of physical activity, poor diet, and abuse of alcohol, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among San Diego County residents.<sup>13</sup>

## Communicable Disease Among Moderately High Income Status Residents

Figure 20

### Overall Burden\* of Communicable Disease in San Diego County by Income Status, 2011



### Top Communicable Disease Health Disparities Among Moderately High Income San Diego County Residents:

- The rate of reported flu/pneumonia death was 1.2 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Communicable Disease

Overall, communicable disease rates were lower in moderately high income communities compared to the county overall. However, rates of reported flu/pneumonia were notably higher among moderately high income communities compared to the county overall.

### Flu/Pneumonia

In 2011, the rate of flu/pneumonia deaths was 1.2 times higher than the county overall.

- Among the moderately high income communities, Fallbrook had the highest pneumonia hospitalization rate, at 342.6 per 100,000 population.

### Risk Factors and Prevention Strategies

Prevention measures for communicable diseases, such as increased vaccination, condom usage, and frequent testing, are key ways to reduce the burden of these diseases.<sup>14</sup>

- In 2011, only 30% of moderately high income residents reported being vaccinated for the flu.<sup>11</sup>

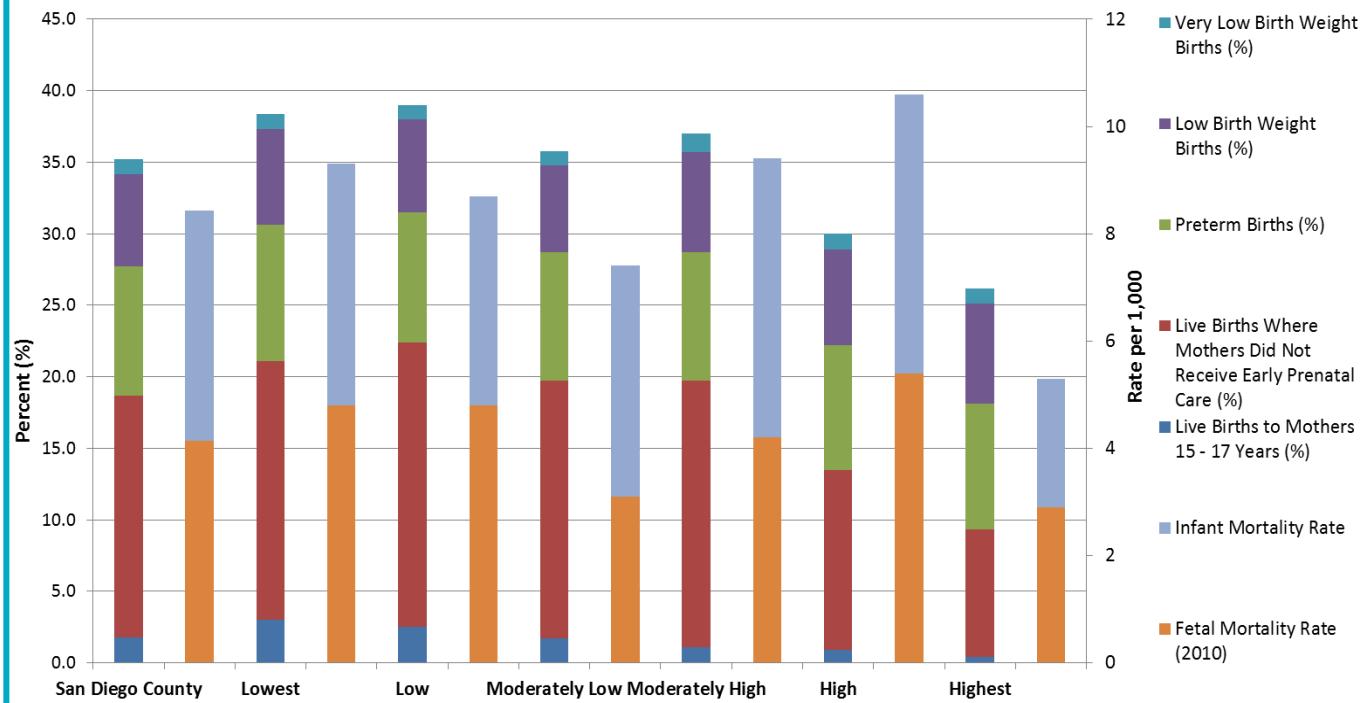
**Fallbrook had the highest pneumonia hospitalization rate, at 342.6 per 100,000 population, of the moderately high income communities.**



## Maternal and Child Health Among Moderately High Income Status Residents

**Figure 21**

### Overall Burden\* of Maternal and Child Health in San Diego County by Income Status, 2011



### Top Maternal & Child Health Outcome Health Disparities Among Moderately High Income San Diego County Residents:

- The percentage of very low birth weight babies among moderately high income women was 23.4% higher compared to the county.
- The infant mortality rate was 1.2 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### What You Can Do to Reduce Your Risk of Poor Maternal and 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 and 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



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# Identifying Health Disparities to Achieve Health Equity in San Diego County

## Moderately High Income Status

### Maternal and Child Health

The moderately high income communities of San Diego County had an overall burden of poor maternal and child health outcomes that were roughly comparable to the county. However, conditions such as very low birth weight babies and infant mortality had higher rates in this population.

### Infant Mortality

In 2011, the county had an infant mortality rate of 4.3 per 1,000 births. Moderately high income communities had an infant mortality rate that was 1.2 times higher compared to the county overall, at 5.2 per 1,000 births.

- University had the highest infant mortality rate in 2011, at 8.3 per 1,000 births, which was higher than the other moderately high communities and the county overall.

### Very Low Birth Weight Babies

In 2011, the percentage of live births that were very low birth weight was 23% higher in moderately high income communities compared to the county.

- Fallbrook had the highest percentage of very low birth weight babies, at 1.7%, which was higher than all the other moderately high communities and the county overall.



### Risk Factors and Prevention Strategies

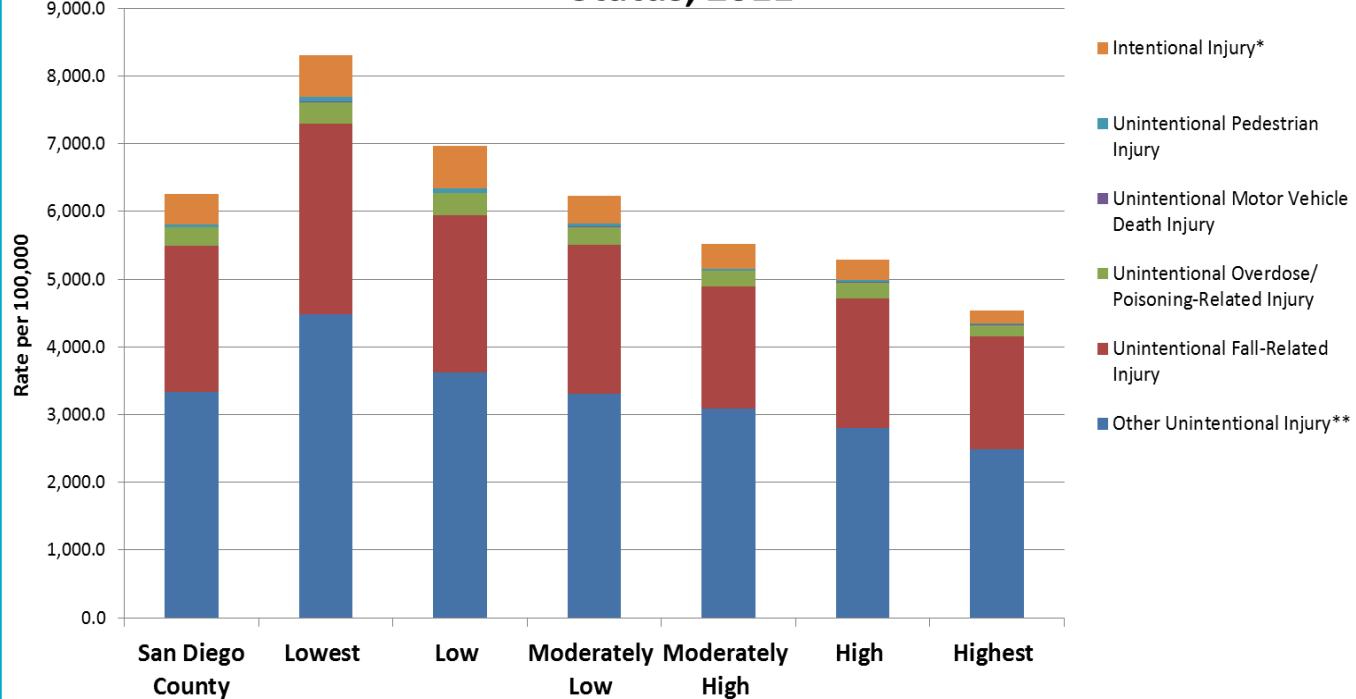
Maternal and child health outcomes are influenced by several factors including age, race/ethnicity, socioeconomic status, and a mother's health. Specifically, lack of prenatal care, poor nutrition, alcohol and tobacco use, and lack of physical activity are major lifestyle risk factors for adverse maternal and child health outcomes.<sup>14</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>14</sup>

## Injury Among Moderately High Income Status Residents

Figure 22

### Overall Burden\* of Injury in San Diego County by Income Status, 2011



\*Overall burden includes death, hospitalization, and emergency department (ED) discharge.

\*\*Intentional injury includes homicide, assault, suicide, and self-inflicted injury. Other unintentional injury include cut/pierce injury, struck by an object injury, suffocation, drowning, overexertion injury, fire-related/burn injury, and sport/recreational injury.

### Top Injury Health Disparities Among Moderately High Income San Diego County Residents:

- The rate of self-inflicted emergency department discharges was 1.1 times higher compared to the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Injury

Injury rates were lower among moderately high income communities compared to the county overall. However, rates of intentional injuries were higher among moderately high income communities.

### Intentional Injury

Intentional injury rates are represented by homicide, assault, suicide, and self-inflicted injuries. In 2011, the rate of self-inflicted injury emergency department discharge was 1.1 times higher among moderately high income communities compared to the county overall.

- Santee had the highest rate of self-inflicted injury emergency department discharges of all the moderately high income communities and the county overall.

### 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>15</sup>

**In 2011, the rate of self-inflicted injury emergency department discharge was 1.1 higher among moderately high income communities compared to the county overall.**

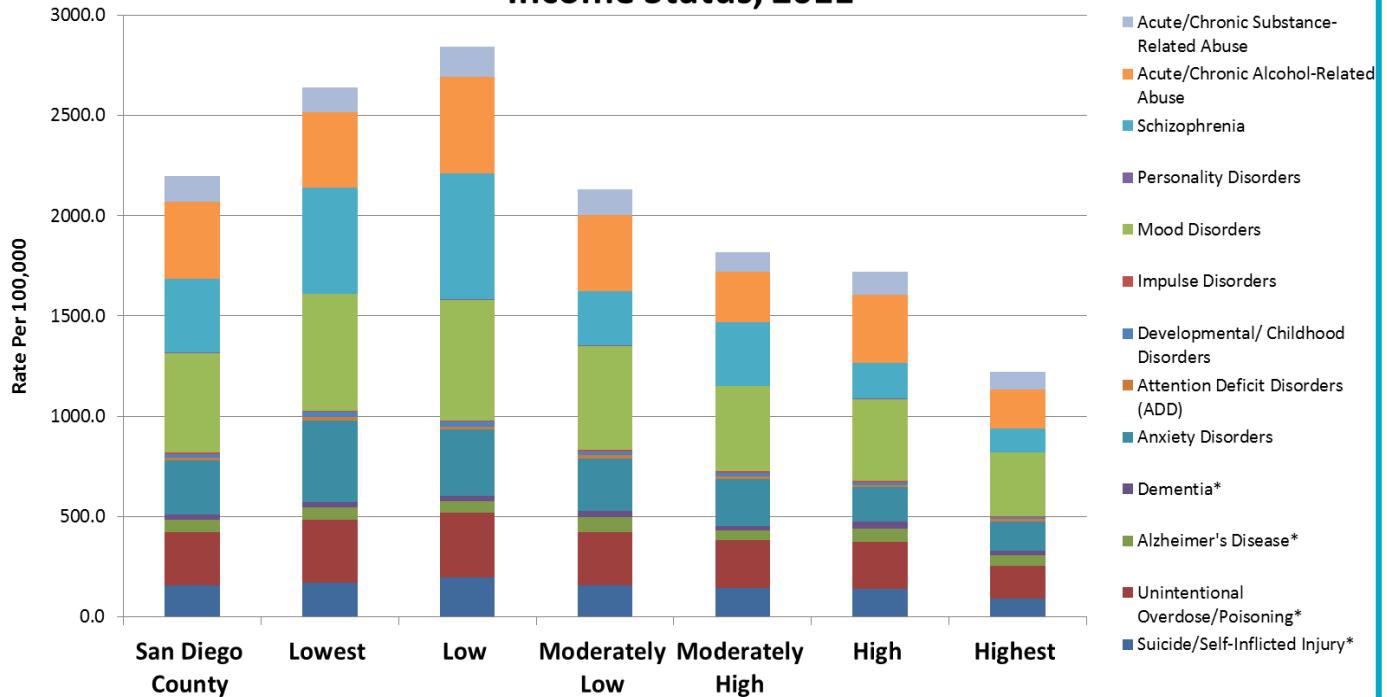
Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>15</sup>



## Behavioral Health Among Moderately High Income Status Residents

**Figure 23**

### Overall Burden\* of Behavioral Health in San Diego County by Income Status, 2011



\*Overall burden (except for suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia) includes hospitalization, and emergency department (ED) discharge. Suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia include death, hospitalization, and ED discharge.

### Top Behavioral Health Disparities Among Moderately High Income San Diego County Residents :

- The overall burden of impulse control disorders was 1.1 times higher in moderately high income communities compared to the county.
- The rate of impulse control disorder hospitalization was nearly 1.2 times higher compared to the county overall.

### Preventing Socioeconomic Health Disparities

#### 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



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### Behavioral Health

Poor behavioral health outcome rates were comparable, or lower, among the moderately high income communities compared to the county overall. However, certain conditions had higher rates in this population. Notably, rates of impulse control disorders were particularly high among moderately high income communities in San Diego County.

### Impulse Control Disorders

Rates of impulse control disorders in the moderately high income communities were 8% higher compared to the county overall in 2011. Hospitalization rates were nearly 1.2 times higher among the moderately high income communities compared to the county overall.

- Fallbrook had the highest rate of impulse control disorder hospitalizations, of all the moderately high income communities in 2011, followed by Santee.

### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>16</sup>

- In 2011, 19.4% of moderately high income residents reported needing help for an emotional or mental health problem in San Diego County.<sup>11</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>16</sup>



# High Income Status

The communities of San Diego County in the high income status include Alpine, Carlsbad, Coastal, Elliot-Navajo, Pauma, Ramona, and Valley Center. Residents belonging to these communities are characterized by an annual median household income between \$80,000 to \$90,000.

In 2011, the population of these communities was about 532,000, making up 17% of the County's total population.<sup>10</sup>

Between 2007 and 2011:

- The median household income of residents within the high income communities was \$84,476 per year.<sup>12</sup>
- Nearly 50% of the population spent less than 30% of their income on housing.<sup>12</sup>

During this same time period, 15% of the population within these communities was 65 years old and older, and 62% of the population was white.<sup>12</sup>

Other characteristics of the high income group, between 2007 and 2011 include:

- Nearly 6% of the high income group had less than a high school diploma.<sup>12</sup>
- Approximately 7.2% of the high income group was unemployed.<sup>12</sup>

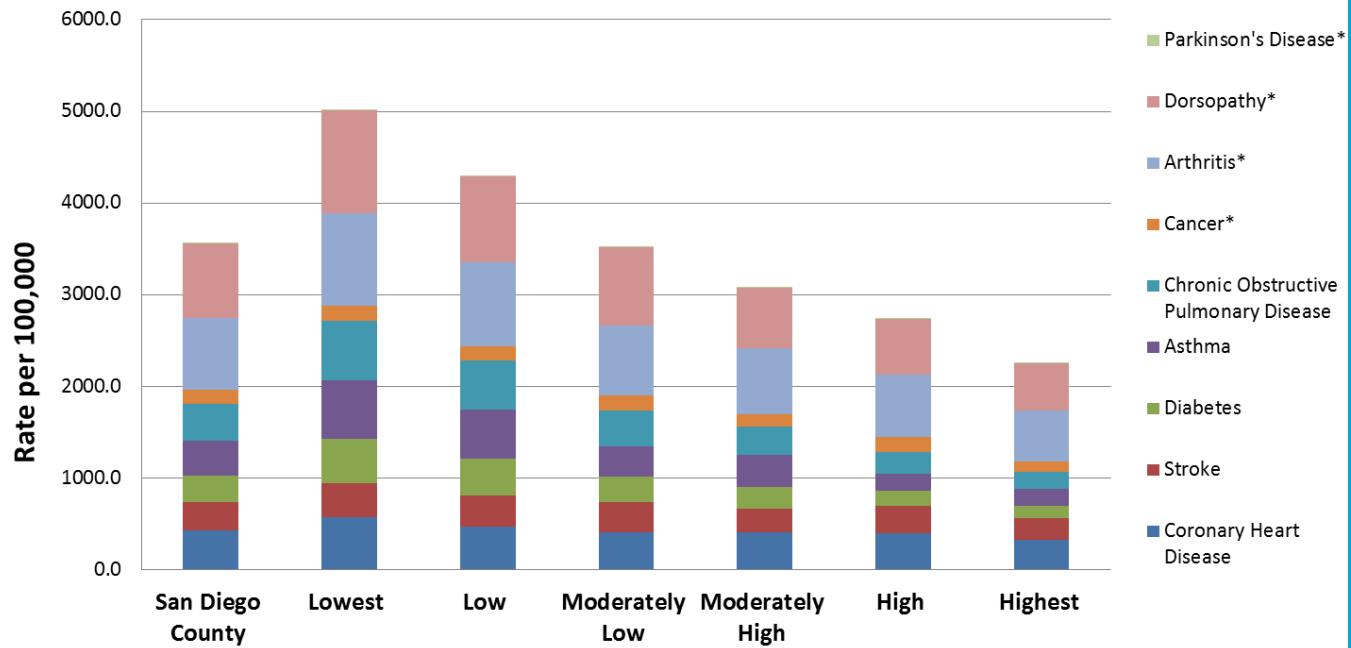
Compared to the county overall, the high income communities are disproportionately affected by injury, chronic disease, communicable disease, maternal and child health indicators, and behavioral health outcomes. A series of health indicators are described in the following sections, which affect high income communities more than other areas in San Diego County. Rates of death, hospitalization, and emergency department discharge due to specific causes can provide insight to the severity of disease and injury occurring in the high income communities.



## Non-Communicable (Chronic) Disease Among High Income Status Residents

Figure 24

### Overall Burden\* of Non-Communicable (Chronic) Disease in San Diego County by Income Status, 2011



\*Overall burden (except for cancer, arthritis, dorsopathy, and Parkinson's disease) includes death, hospitalization and emergency department (ED) discharge. Cancer includes death only. Arthritis, dorsopathy, and Parkinson's disease include hospitalization and emergency department discharge.

### Top Non-Communicable (Chronic) Disease Health Disparities Among High Income San Diego County Residents:

- The rate of emergency department discharge due to Parkinson's disease was 1.8 times higher than the county overall.
- The rate of hospitalizations due to arthritis was 1.2 times higher than the county overall.

### Preventing Socioeconomic Health Disparities

#### 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 and appealing parks and recreational facilities
- Increase the availability and affordability of fresh produce
- Adopt walkable communities



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### Non-Communicable (Chronic) Disease

Overall, non-communicable (chronic) disease rates were lower in high income communities compared to the county overall. However, rates of Parkinson's disease and cancer were notable non-communicable (chronic) diseases affecting high income residents in San Diego County.

### Cancer

In 2011, high income communities had a cancer death rate 1.1 times higher compared to the county overall.

- Coastal had the highest rate of deaths due to cancer at 198.5 per 100,000 population, while Pauma had the lowest death rate due to cancer at 90.1 per 100,000 population, compared to the other high income communities.

### Parkinson's Disease

In 2011, high income communities had an overall burden of Parkinson's disease that was 1.4 times higher than the county. High income communities had an emergency department (ED) discharge rate due to Parkinson's disease that was 1.8 times higher compared to the county in 2011, and had a hospitalization rate 1.1 times higher compared to the county overall.

- Coastal had the highest rates of Parkinson's disease hospitalizations and ED discharges of all the highest income communities and was greater than the county overall.

**High income communities had an emergency department discharge rate due to Parkinson's disease that was 1.8 times higher compared to the county in 2011.**



### 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>13</sup>

#### Tobacco Use

- In 2011, 11.1% of high income San Diego County residents were current smokers.<sup>11</sup>

#### Poor Diet

- More than 38% of high income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>

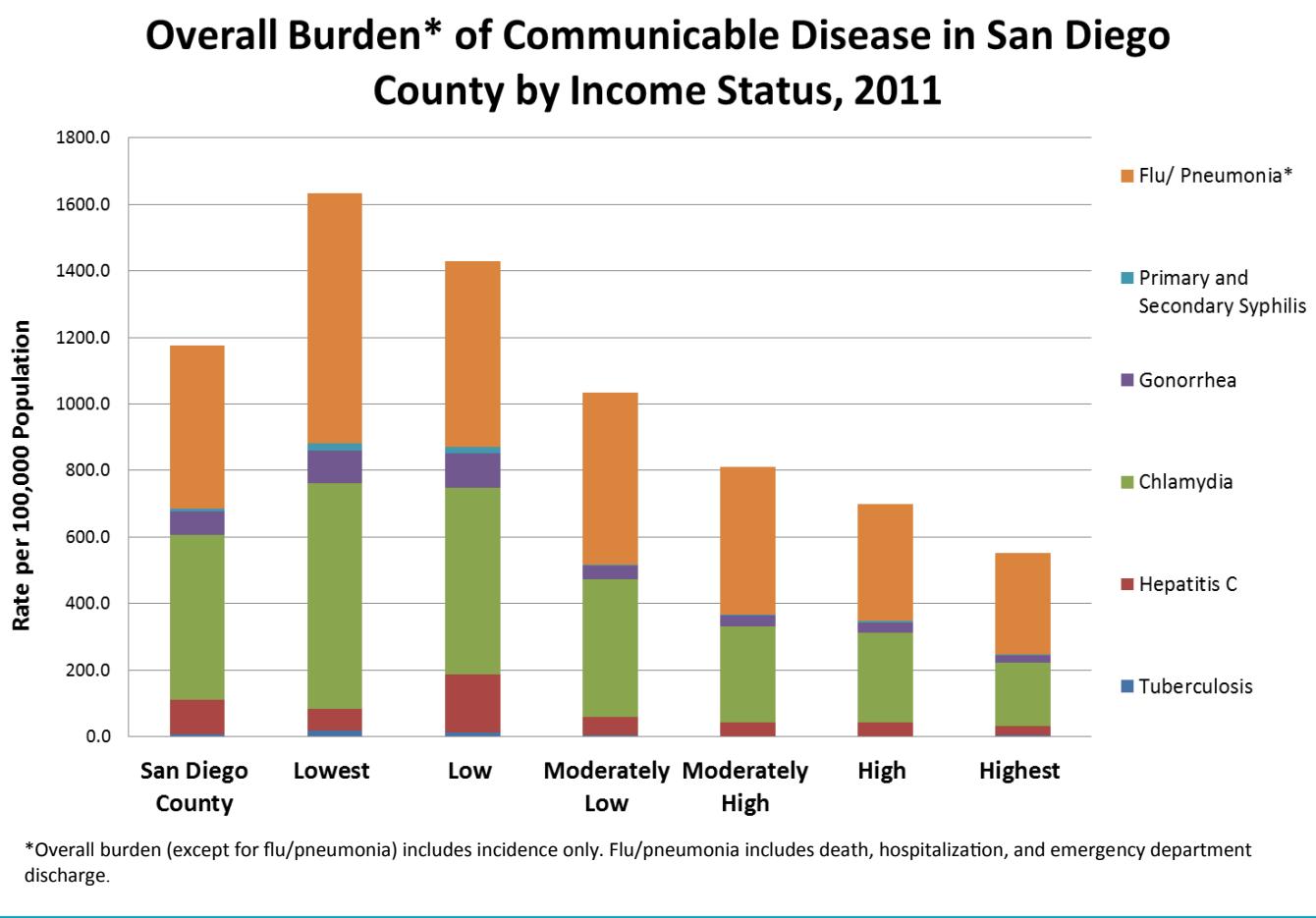
#### Alcohol Abuse

- In 2011, roughly 35.2% of high income residents had engaged in binge drinking in the past year.<sup>11</sup>

Changes in modifiable risk factors such as tobacco use, lack of physical activity, poor diet, and abuse of alcohol, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among San Diego County residents.<sup>13</sup>

## Communicable Disease Among High Income Status Residents

Figure 25



### Top Communicable Disease Health Disparities Among High Income San Diego County Residents:

- The rate of death due to flu/pneumonia was 1.04 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Communicable Disease

Overall, communicable disease rates were lower in high income communities compared to the county overall. However, rates of reported flu/pneumonia were notably higher among high income communities compared to the county overall. Chlamydia was also notably high amongst some of the high income communities.

#### Chlamydia

Although the overall rates of chlamydia were 45% lower in high income communities compared to the county, some individual communities had higher rates.

- In 2011, Coastal had a chlamydia rate of 509.6 per 100,000 population, which was higher than all other high income communities and greater than the county overall.

#### Flu/Pneumonia

As in the case of chlamydia, the overall 2011 rates of flu/pneumonia were 28% lower in high income communities compared to the county. However, the rate of flu/pneumonia deaths was 1.04 times higher than the county overall.



In 2011, Coastal had a chlamydia rate of 509.6 per 100,000 population, which was higher than all other high income communities and greater than the county overall.

- Carlsbad had one of the highest flu/pneumonia death rates, at 14.7 per 100,000 population, which was higher than all other high income communities and greater than the county overall.

#### Risk Factors and Prevention Strategies

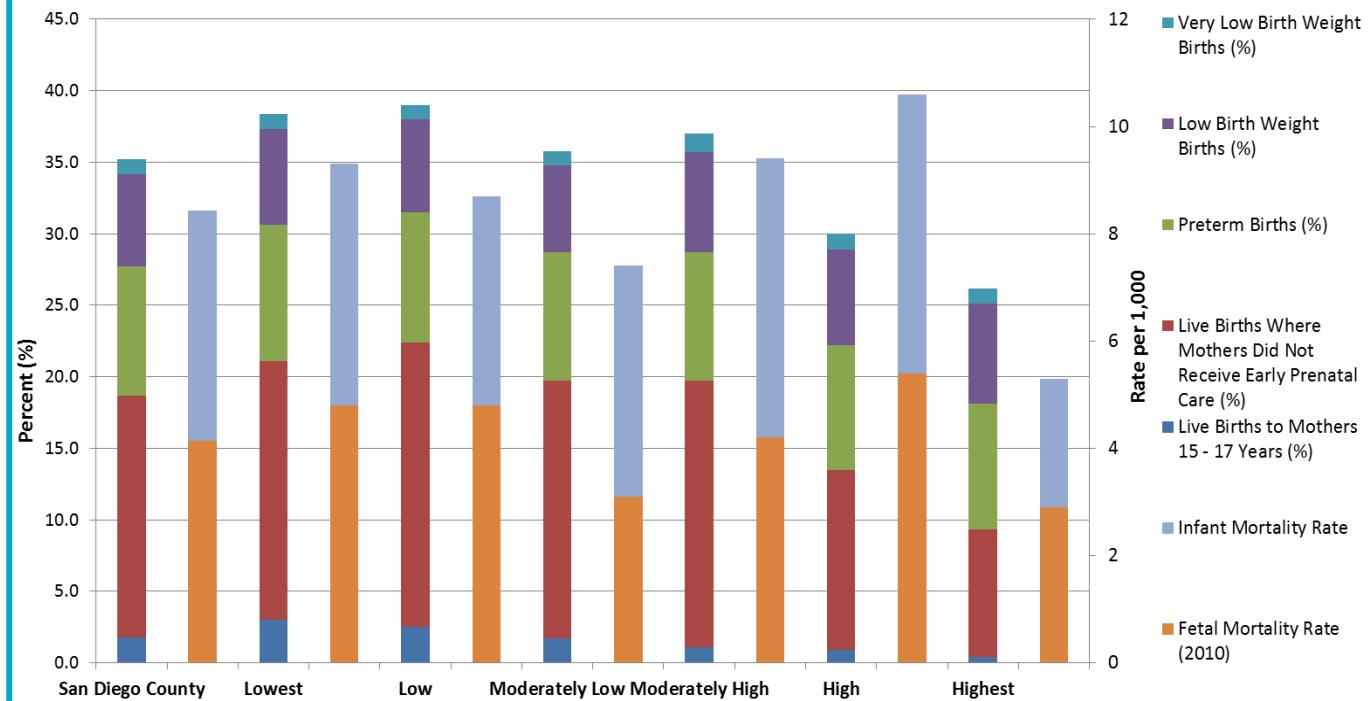
Prevention measures for communicable diseases, such as increased vaccination, condom usage, and frequent testing, are key ways to reduce the burden of these diseases.<sup>14</sup>

- In 2011, only 35.2% of high income residents reported being vaccinated for the flu.<sup>11</sup>

## Maternal and Child Health Among High Income Status Residents

**Figure 26**

### Overall Burden\* of Maternal and Child Health in San Diego County by Income Status, 2011



\*Overall burden includes percentages and rates.

### Top Maternal & Child Health Outcome Health Disparities Among High Income San Diego County Residents:

- The fetal and infant mortality rates were 1.3 and 1.2 times higher, respectively, compared to the county overall.

### Preventing Socioeconomic Health Disparities

#### What You Can Do to Reduce Your Risk of Poor Maternal and 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 and 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



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### Maternal and Child Health

The high income communities of San Diego County are disproportionately affected by many poor maternal and child health outcomes. Compared to the other populations in the county, high income communities have the highest and second highest rates of fetal and infant mortality. These communities also had a higher percentage of very low birth weight babies compared to the county overall.

#### Fetal and Infant Mortality

In 2010, the rate of fetal mortality countywide was 4.1 fetal deaths per 1,000 live births, meeting and exceeding the Healthy People 2020 goal of 5.6 fetal deaths per 1,000 live births.<sup>14</sup> However, there were notable differences among income populations. In 2010, high income communities had the highest rate of fetal mortality, at 5.4 fetal deaths per 1,000 live births, which was 1.3 times higher compared to the county overall.

- Pauma had the highest fetal mortality rate compared to the other high income communities and county overall, at 27.4 fetal deaths per 1,000 live births.

The infant mortality rate for San Diego County was 4.3 infant deaths per 1,000 live births in 2011. This rate met and exceeded the Healthy People 2020 goal of six infant deaths per 1,000 live births.<sup>14</sup> However, as with fetal mortality, there were notable differences across the income groups. In 2011, high income communities had the second highest rate of infant mortality, at 5.2 deaths per 1,000 live births, which was 1.2 times higher compared to the county overall.

- Pauma had the highest infant mortality rate compared to the other high income communities, at 14.1 deaths per 1,000 live births in 2011.

#### Very Low Birth Weight Babies

San Diego County had 458 very low birth weight babies in 2011, which made up 1.0% of all live births. Compared to the county overall, the percentage of very low birth weight babies was 6.3% higher among mothers in high income communities.

- Ramona had the highest percentage of very low birth weight babies at 1.9% of all live births compared to other high income communities.



#### Risk Factors and Prevention Strategies

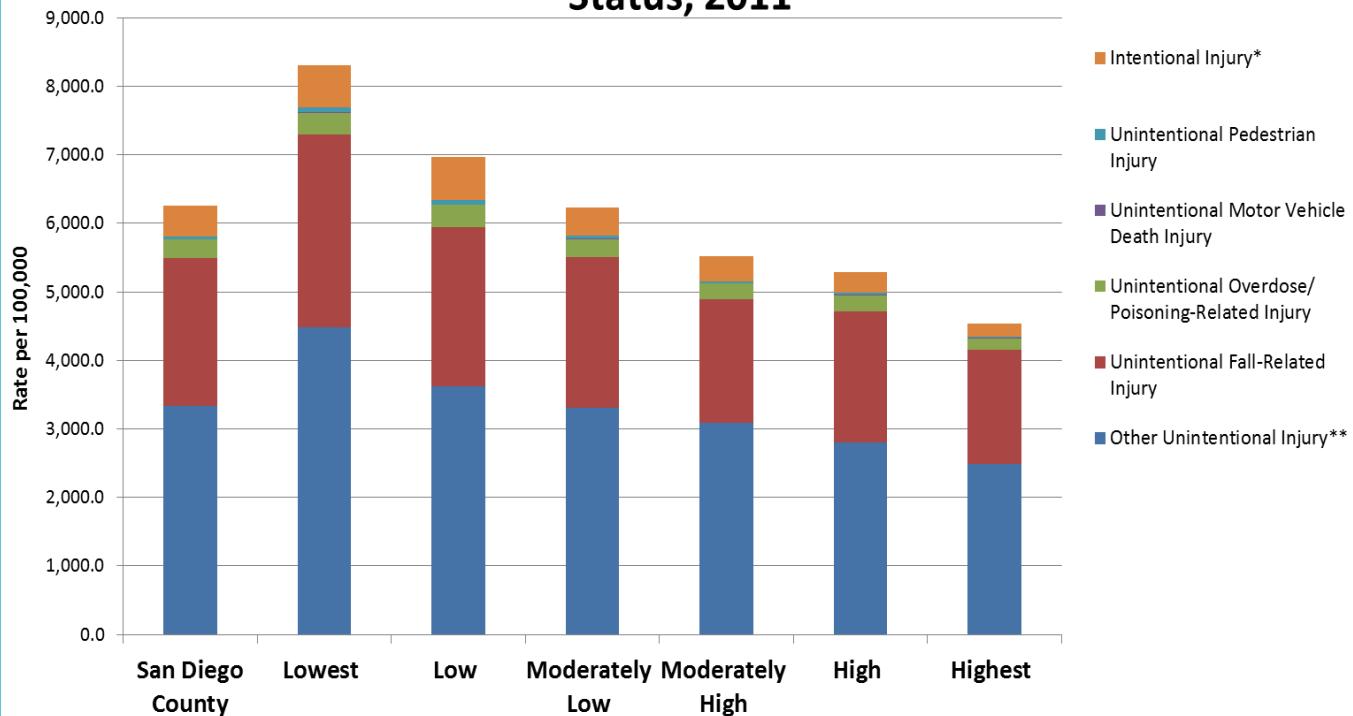
Maternal and child health outcomes are influenced by several factors including age, race/ethnicity, socioeconomic status, and a mother's health. Specifically, lack of prenatal care, poor nutrition, alcohol and tobacco use, and lack of physical activity are major lifestyle risk factors for adverse maternal and child health outcomes.<sup>14</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>14</sup>

## Injury Among High Income Status Residents

**Figure 27**

### Overall Burden\* of Injury in San Diego County by Income Status, 2011



\*Overall burden includes death, hospitalization, and emergency department (ED) discharge.

\*\*Intentional injury includes homicide, assault, suicide, and self-inflicted injury. Other unintentional injury include cut/pierce injury, struck by an object injury, suffocation, drowning, overexertion injury, fire-related/burn injury, and sport/recreational injury.

### Top Injury Health Disparities Among High Income San Diego County Residents:

- The rate of unintentional pedestrian deaths was 1.3 times higher than the county overall.
- The rate of death due to falls was 1.2 times higher than the county overall.
- The rate of suicide was 1.2 times higher compared to the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Injury

Overall, injury rates were lower among high income communities compared to the county overall. However, rates of unintentional motor vehicle death injuries were higher among high income communities compared to the county. Many of the rates of injury-related deaths, individually, were higher than the county overall as well.

### Individual Injury-Related Deaths

Overall, injury rates were lower than the county. However, individual injury-related deaths rates were notably higher in the high income communities in 2011.

- The death due to fall rate was 1.2 times higher than the county.
- The unintentional pedestrian death rate was 1.3 times higher than the county.
- The suicide rate was 1.2 times higher than the county.

### Unintentional Motor Vehicle Deaths

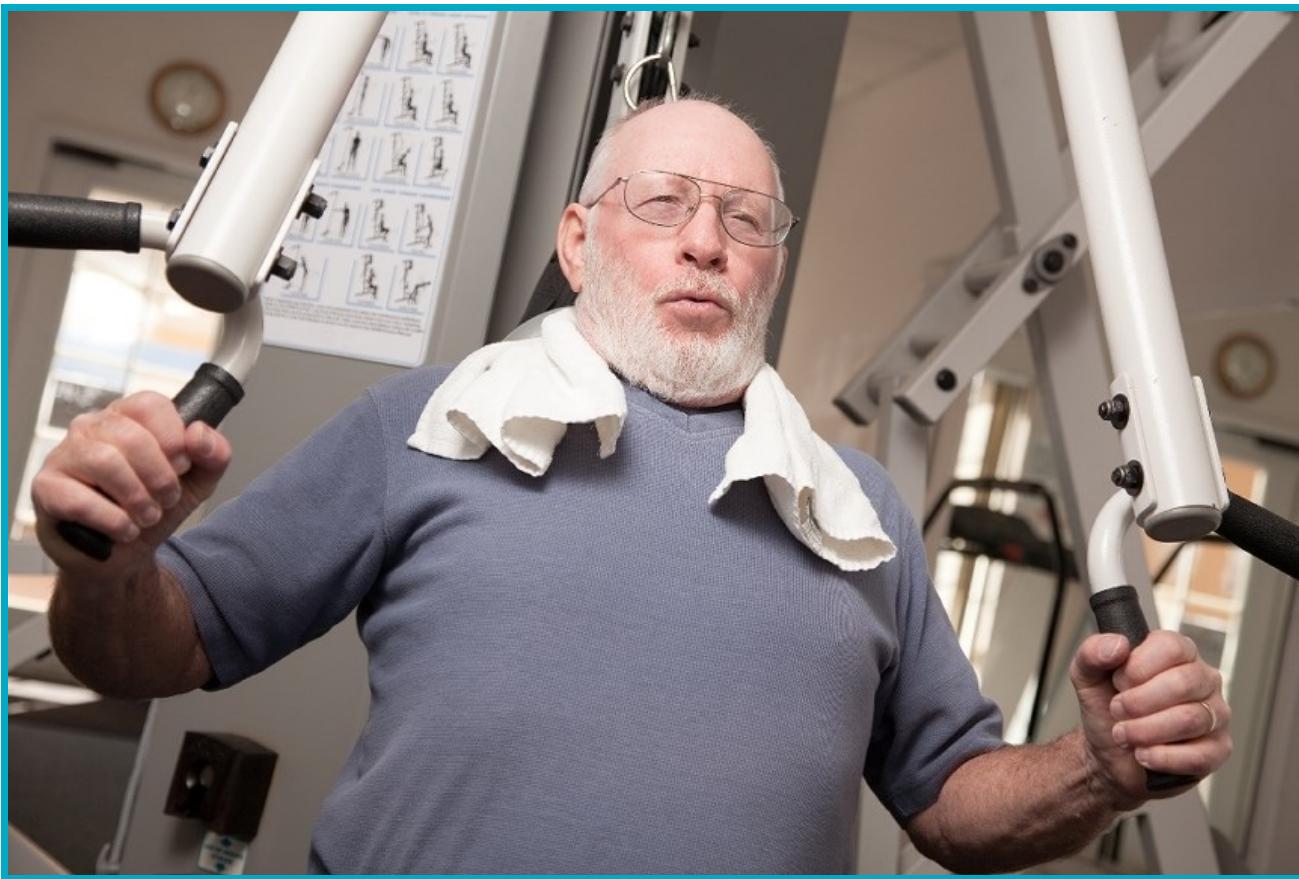
The rate of unintentional motor vehicle deaths was 1.04 times higher in high income communities compared to the county overall.

- Ramona had an unintentional motor vehicle death rate of 19.8 per 100,000, which was the highest of all the high income communities and was greater than the county overall.

### Risk Factors and Prevention Strategies

Failure to use protective equipment and active restraints, supervise children during play and other activities, and not being aware of safety hazards increase the risk of an injury.<sup>15</sup>

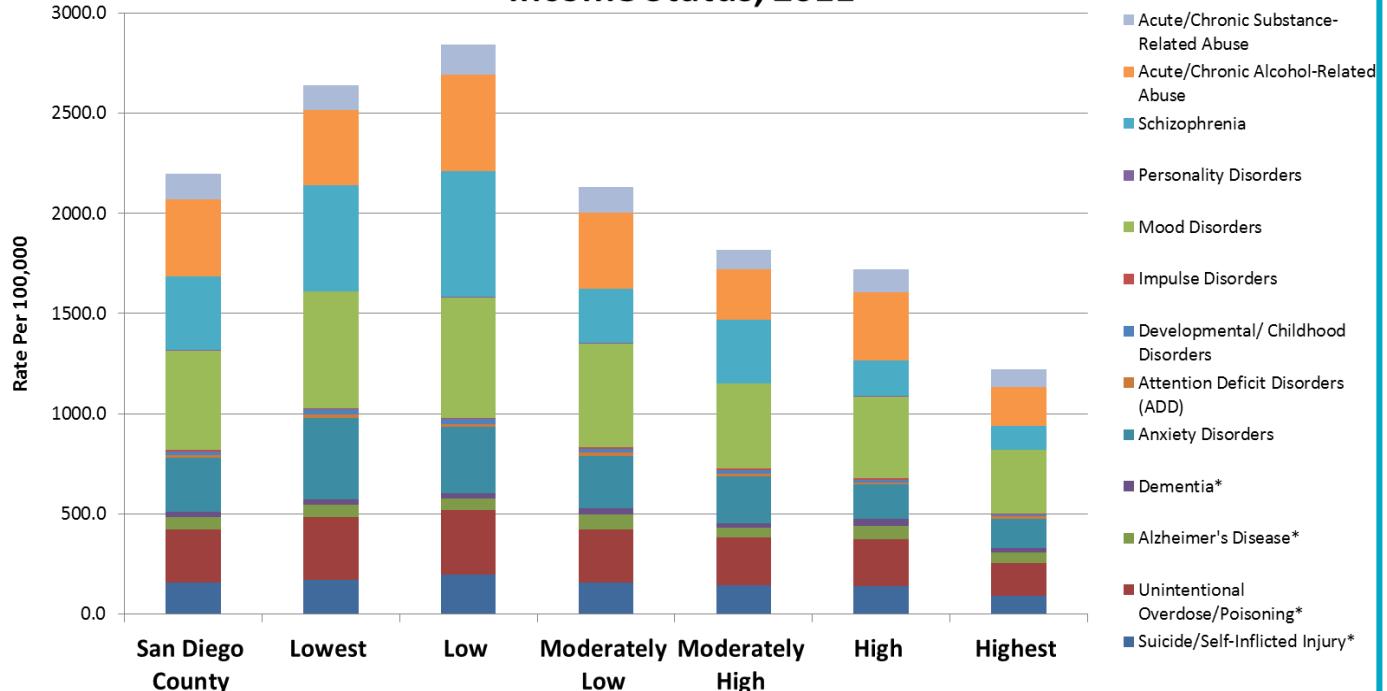
Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>15</sup>



## Behavioral Health Among High Income Status Residents

**Figure 28**

### Overall Burden\* of Behavioral Health in San Diego County by Income Status, 2011



\*Overall burden (except for suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia) includes hospitalization, and emergency department (ED) discharge. Suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia include death, hospitalization, and ED discharge.

### Top Behavioral Health Disparities Among High Income San Diego County Residents:

- The rate of emergency department discharges due to dementia was 1.9 times higher than the county overall.
- The rate of dementia hospitalizations was 1.4 times higher than the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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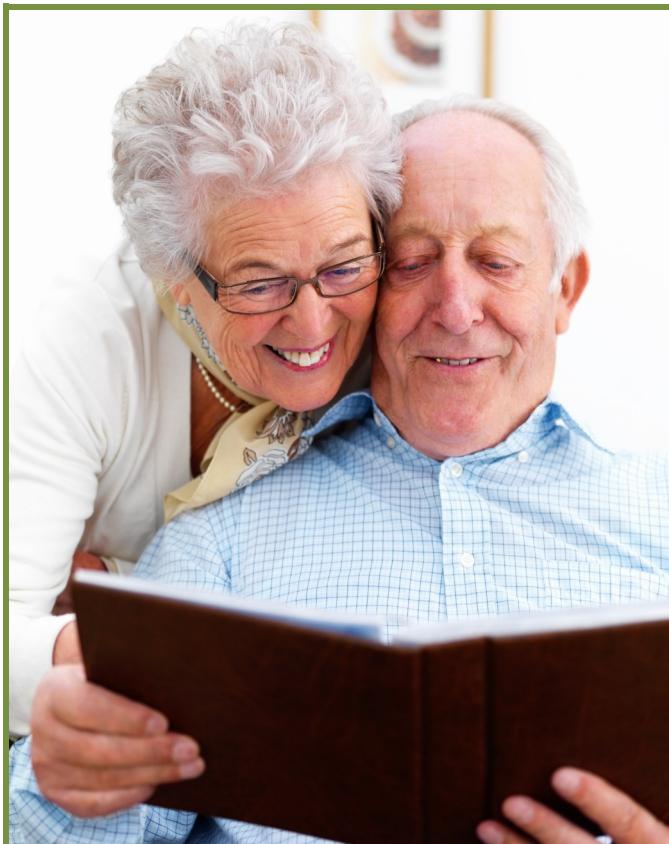
### Behavioral Health

Poor behavioral health outcome rates were lower among the high income communities compared to the county overall. However, certain conditions had higher rates in this population. Notably, rates of dementia and impulse control disorders were particularly higher among high income communities in San Diego County.

### Dementia

Rates of dementia in the high income communities were 35% higher compared to the county overall in 2011. Hospitalization and emergency department (ED) discharges were higher among the high income communities compared to the county overall. Notably the rates were 1.4 and 1.9 times higher, respectively, compared to the county.

- Compared to other high income communities, Pauma had the highest dementia hospitalization rate and Carlsbad had the highest rate of ED discharge due to dementia.



**Rates of dementia in the high income communities were 35% higher compared to the county overall, in 2011.**

### Impulse Control Disorders

Rates of impulse control disorders in the high income communities were 15% higher compared to the county overall in 2011. Hospitalization rates were 1.2 times higher among the high income communities compared to the county overall.

- Elliott-Navajo had the highest rates of impulse control disorder hospitalizations of all the high income communities in 2011.

### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>16</sup>

- In 2011, 13% of high income residents reported needing help for an emotional or mental health problem in San Diego County.<sup>11</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>16</sup>

## Highest Income Status

The communities of San Diego County with the highest income status include Coronado, Del Mar– Mira Mesa, Jamul, North San Diego, Poway, San Dieguito, and Sweetwater. Residents belonging to these communities are characterized by an annual median household income between \$90,000 or more.

In 2011, the population of these communities was about 538,000, making up 17% of the County's total population.<sup>10</sup>

Between 2007 and 2011:

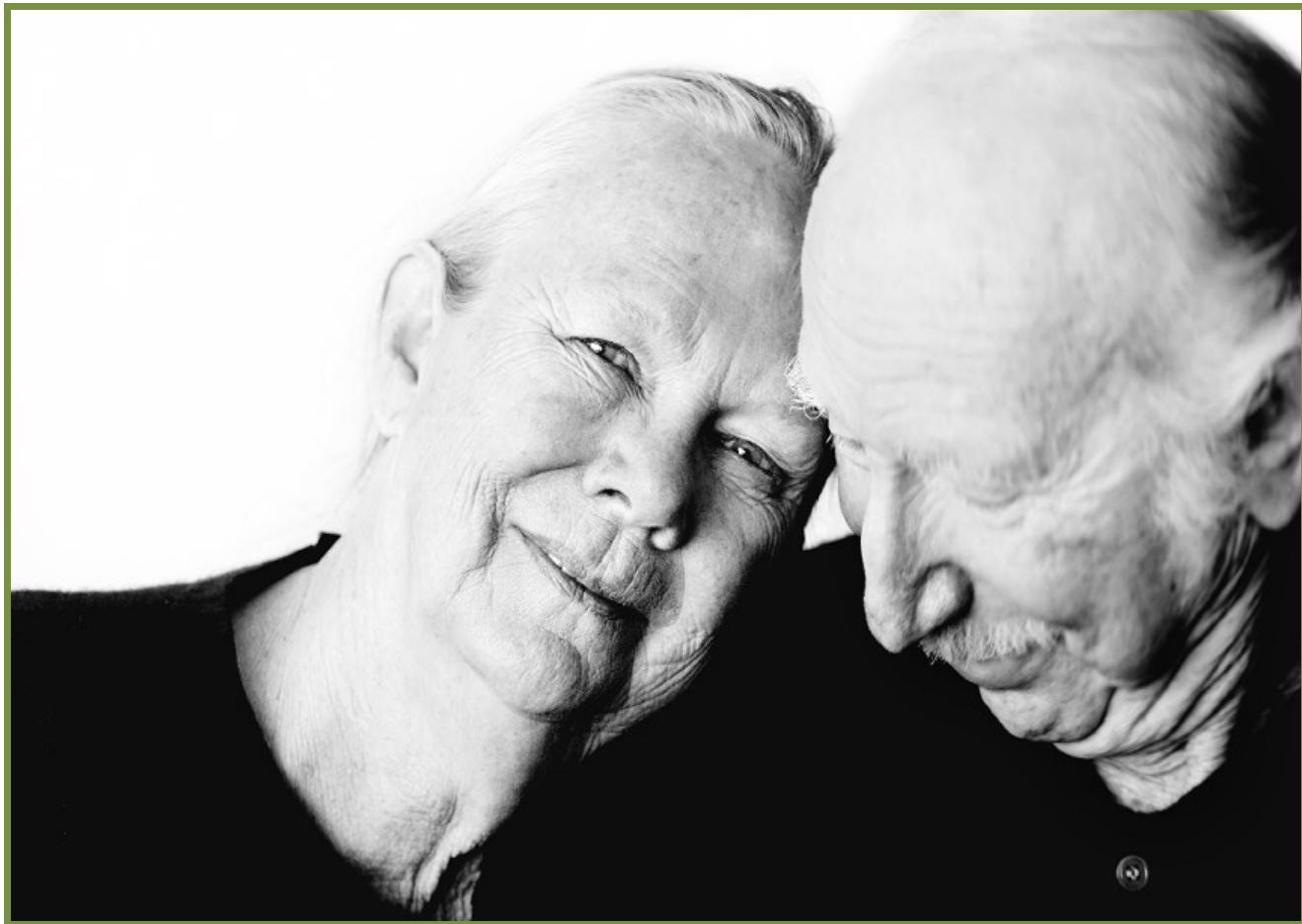
- The median household income of residents within the highest income communities was \$105,513 per year.<sup>12</sup>
- 42% of the population spends less than 30% of their income on housing.<sup>12</sup>

During this same time period, 11% of the population within these communities was 65 years old and older, and 50% of the population was white.<sup>12</sup>

Other characteristics of the highest income group, between 2007 and 2011 include:

- Nearly 6% of the highest income group had less than a high school diploma.<sup>12</sup>
- Seven percent of the highest income group was unemployed.<sup>12</sup>

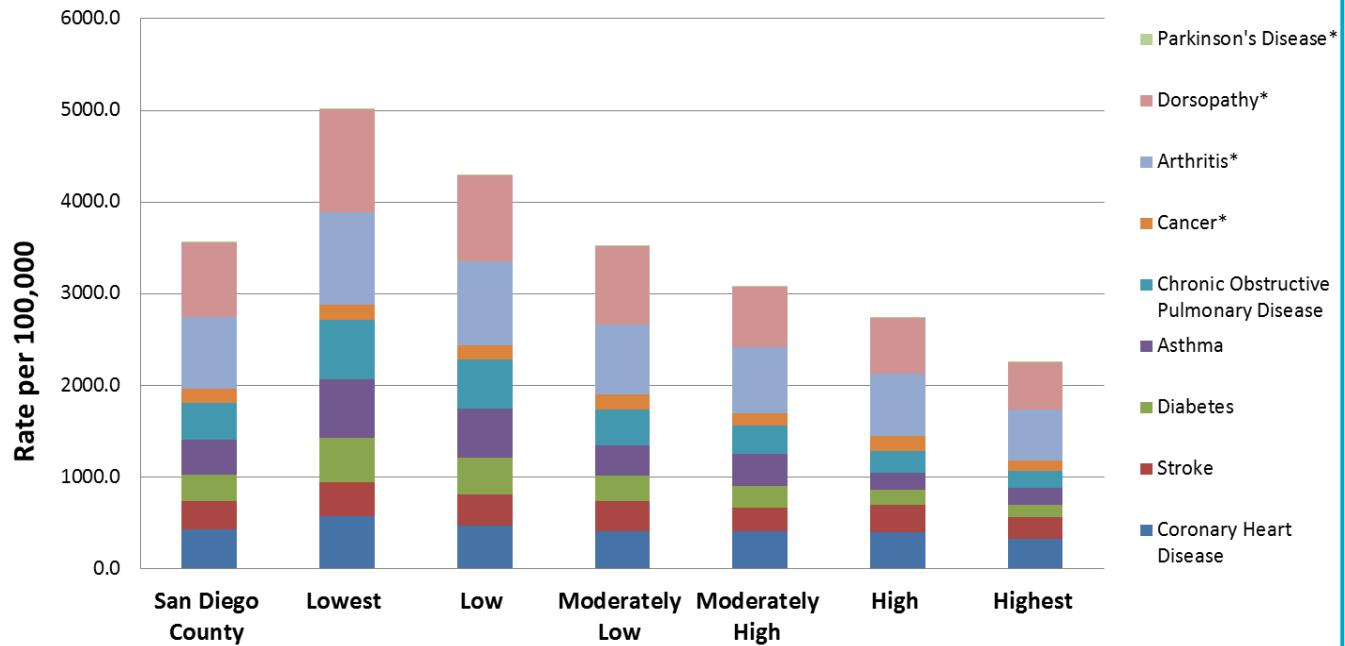
Compared to the county overall, the highest income communities are disproportionately affected by injury, chronic disease, communicable disease, maternal and child health indicators, and behavioral health outcomes. A series of health indicators are described in the following sections, which affect highest income communities more than other areas in San Diego County. Rates of death, hospitalization discharge, and emergency department discharge due to specific causes can provide insight to the severity of disease and injury occurring in



## Non-Communicable (Chronic) Disease Among Highest Income Status Residents

Figure 29

### Overall Burden\* of Non-Communicable (Chronic) Disease in San Diego County by Income Status, 2011



\*Overall burden (except for cancer, arthritis, dorsopathy, and Parkinson's disease) includes death, hospitalization and emergency department (ED) discharge. Cancer includes death only. Arthritis, dorsopathy, and Parkinson's disease include hospitalization and emergency department discharge.

### Top Non-Communicable (Chronic) Disease Health Disparities Among Highest Income San Diego County Residents:

- Overall, the burden of non-communicable (chronic) diseases was lower in the highest income communities compared to the county overall.

## Preventing Socioeconomic Health Disparities

### 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 and appealing parks and recreational facilities
- Increase the availability and affordability of fresh produce
- Adopt walkable communities



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# Identifying Health Disparities to Achieve Health Equity in San Diego County

## Highest Income Status

### Non-Communicable (Chronic) Disease

Overall, non-communicable (chronic) disease rates were lower in the highest income communities compared to the county overall. However, rates of arthritis, cancer, and dorsopathy were notable non-communicable (chronic) diseases affecting certain highest income communities in San Diego County.

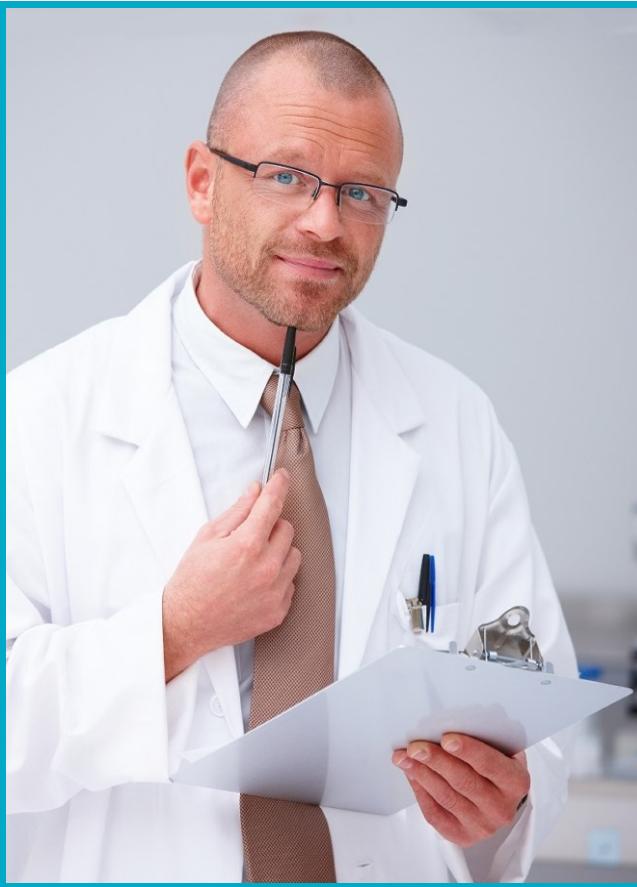
#### Arthritis

In 2011, San Diego County had an arthritis hospitalization rate of 306.6 per 100,000 population. Although the highest income communities overall had a lower rate of hospitalizations, Jamul had the highest rate, at 449.4 per 100,000, which was higher than the county overall. Jamul also had the highest arthritis emergency department discharge rate at 773.7 per 100,000 population.

This rate is greater than the county, at 480.2 per 100,000.

#### Cancer

In 2011, San Diego County had a cancer death rate of 154.4 deaths per 100,000 population. Although the highest income communities overall had a lower rate of cancer deaths, North San Diego had the highest cancer death rate at 182.1 deaths per 100,000 population.



### Dorsopathy

In 2011, San Diego County had a dorsopathy hospitalization rate of 150.9 per 100,000 population. Although the highest income communities overall had a lower rate of hospitalizations, Jamul had the highest rate, at 227.6 per 100,000, which was higher than the county overall. Jamul also had the highest dorsopathy emergency department discharge rate at 893.2 per 100,000 population. This rate is greater than the county, at 654.5 per 100,000.

### 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>13</sup>

#### Tobacco Use

- In 2011, 10.1% of highest income San Diego County residents were current smokers.<sup>11</sup>

#### Poor Diet

- More than 36% of highest income residents reported eating fast food at least twice in the past week in 2011.<sup>11</sup>

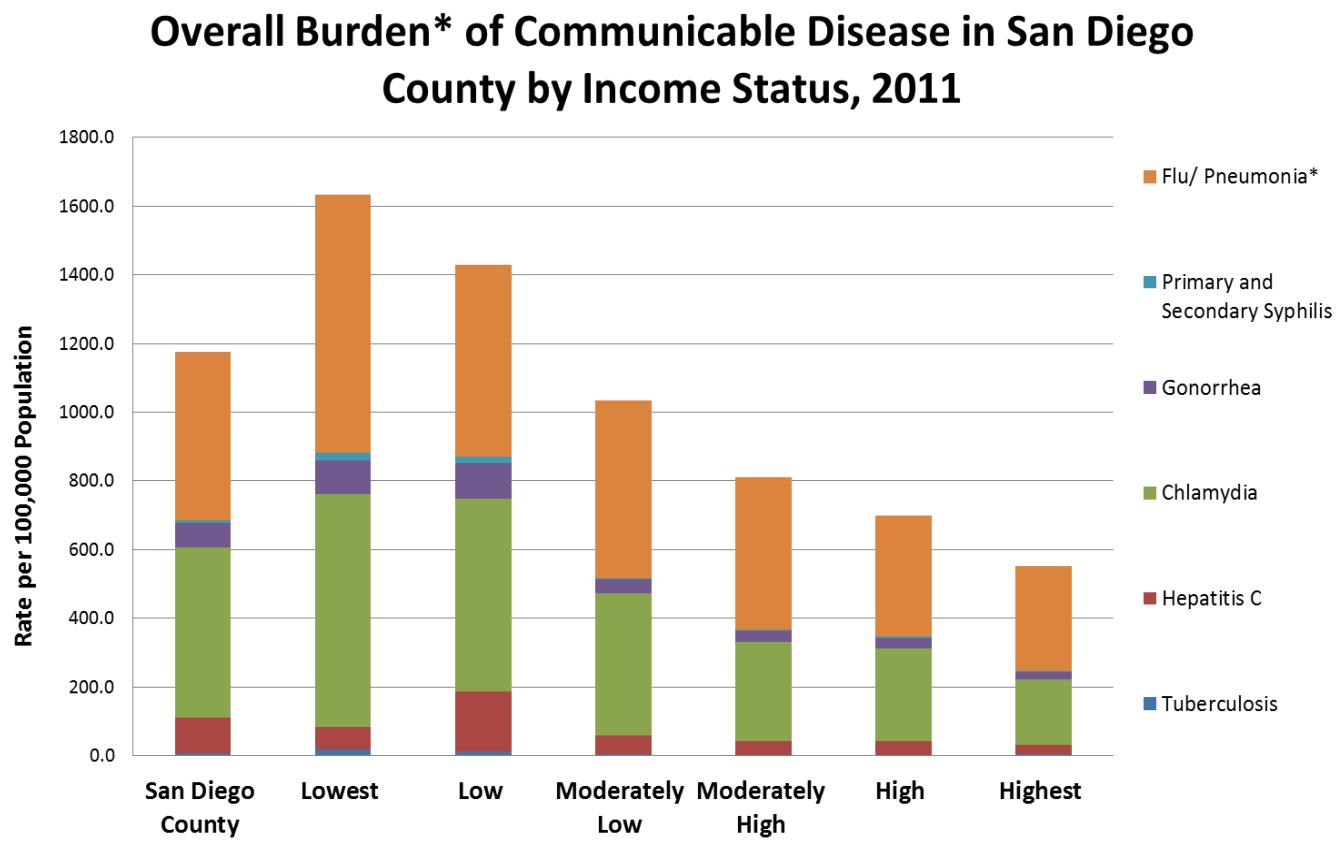
#### Alcohol Abuse

- In 2011, roughly 39.8% of highest income residents had engaged in binge drinking in the past year.<sup>11</sup>

Changes in modifiable risk factors such as tobacco use, lack of physical activity, poor diet, and abuse of alcohol, as well as increased access to and utilization of medical services, are key ways to reduce the burden of non-communicable (chronic) disease among San Diego County residents.<sup>13</sup>

## Communicable Disease Among Highest Income Status Residents

Figure 30



### Top Communicable Disease Health Disparities Among Highest Income San Diego County Residents:

- Overall, the burden of communicable diseases was lower in the highest income communities compared to the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Communicable Disease

Overall, communicable disease rates were lower in high income communities compared to the county overall. However, rates of flu/pneumonia, hepatitis C and chlamydia were notable communicable diseases affecting certain highest income communities in San Diego County.

#### Chlamydia

In 2011, San Diego County had a reported chlamydia rate of 495.8 per 100,000 population. Although the highest income communities overall had a lower rate of chlamydia, Jamul had the highest rate of reported chlamydia of all the highest income communities at 284.4 per 100,000 population.

#### Chronic Hepatitis C

In 2011, San Diego County had a rate of reported hepatitis C of 103.5 per 100,000 population. Although the highest income communities overall had a lower rate of hepatitis C, San Dieguito had the highest rate of reported hepatitis C of all the highest income communities at 46.4 per 100,000 population.

#### Flu/Pneumonia

In 2011, San Diego County had a flu hospitalization rate of 10.2 per 100,000 population. Although the highest income communities overall had a lower rate of flu hospitalizations, Poway had the highest rate at 11.5 per 100,000, which was higher than the county overall. San Diego County had a flu emergency department (ED) discharge rate of 57.7 per 100,000 population and a pneumonia ED rate of 210 per 100,000 population. Jamul had the highest flu and pneumonia ED rates at 136.5 per 100,000 population and 290.1 per 100,000 population, respectively. Both rates were greater than the county overall.

**In 2011, only 40.5% of highest income residents reported being vaccinated for the flu.<sup>11</sup>**



### Risk Factors and Prevention Strategies

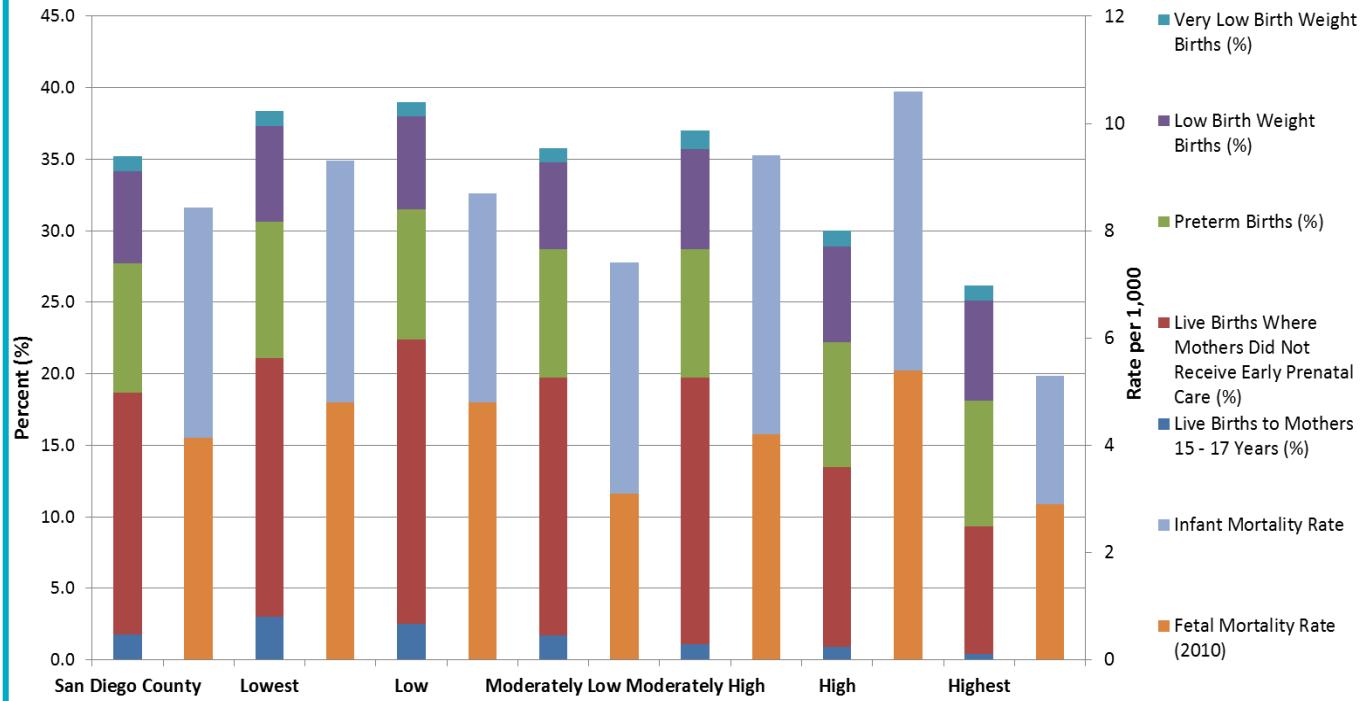
Prevention measures for communicable diseases, such as increased vaccination, condom usage, and frequent testing, are key ways to reduce the burden of these diseases.<sup>14</sup>

- In 2011, only 40.5% of highest income residents reported being vaccinated for the flu.<sup>11</sup>

## Maternal and Child Health Among Highest Income Status Residents

**Figure 31**

### Overall Burden\* of Maternal and Child Health in San Diego County by Income Status, 2011



\*Overall burden includes percentages and rates.

### Top Maternal & Child Health Outcome Health Disparities Among Highest Income San Diego County Residents:

- The percentage of low birth weight and very low birth weight babies was, respectively, 6.4% and 7% higher compared to the county.

### Preventing Socioeconomic Health Disparities

#### What You Can Do to Reduce Your Risk of Poor Maternal and 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 and 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



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# Identifying Health Disparities to Achieve Health Equity in San Diego County

## Highest Income Status

### Maternal and Child Health

The highest income communities of San Diego County are disproportionately affected by many poor maternal and child health outcomes. Compared to the other populations in the county, highest income communities had a higher percentage of low and very low birth weight babies.

#### Low Birth Weight Babies

In 2011, the percentage of live births that were low birth weight was 6.4% higher in highest income communities compared to the county.

- Jamul had the highest percentage of low birth weight babies at 8.9%, which was higher than all the other highest income communities and the county overall.

#### Very Low Birth Weight Babies

In 2011, the percentage of live births that were very low birth weight was 7% higher in highest income communities compared to the county.

- Jamul had the highest percentage of very low birth weight babies, at 3.1%, which was higher

than all the other highest income communities and the county overall.

### Risk Factors and Prevention Strategies

Maternal and child health outcomes are influenced by several factors including age, race/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>14</sup>

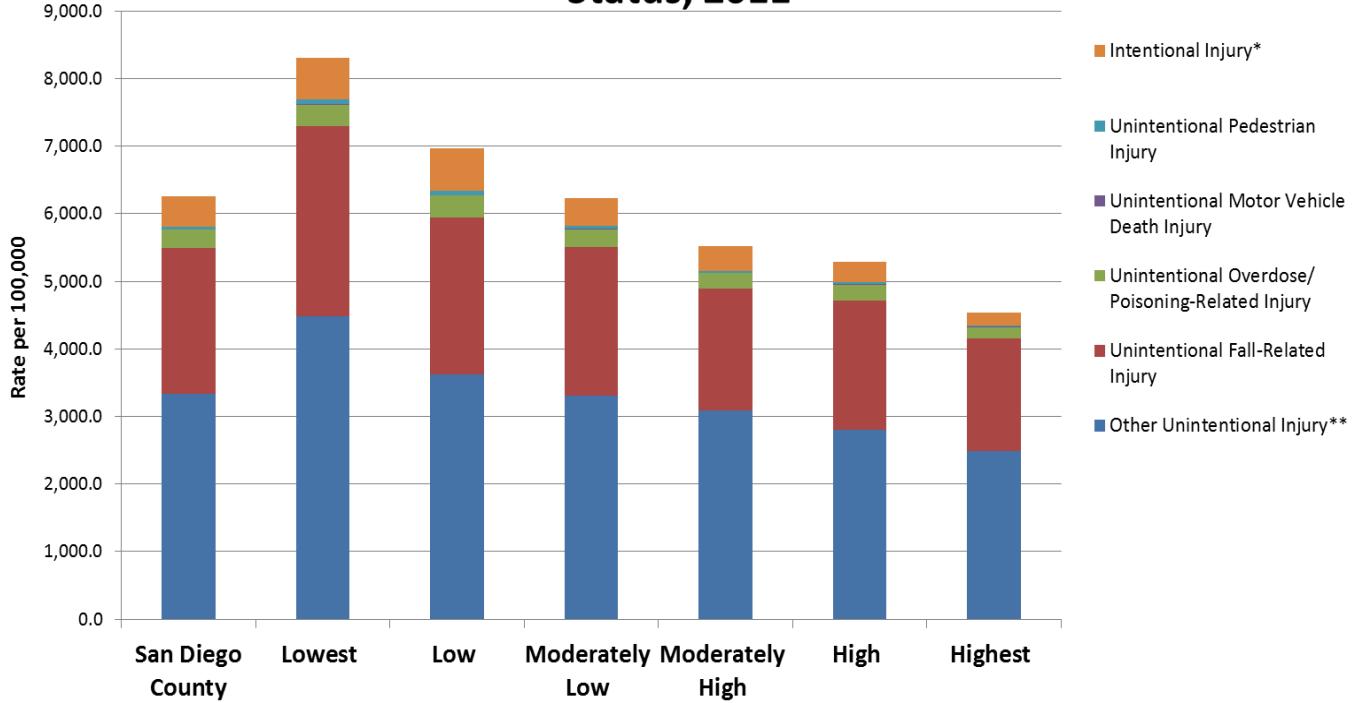
The health of mothers, infants, and children are key indicators of the health of a community overall. Their health outcomes often reflect the health of future generations, as well as emerging public health concerns. Therefore, engaging in healthy behaviors associated with favorable maternal and child health outcomes has the potential to positively impact the health of the county overall.<sup>14</sup>



## Injury Among Highest Income Status Residents

Figure 32

### Overall Burden\* of Injury in San Diego County by Income Status, 2011



\*Overall burden includes death, hospitalization, and emergency department (ED) discharge.

\*\*Intentional injury includes homicide, assault, suicide, and self-inflicted injury. Other unintentional injury include cut/pierce injury, struck by an object injury, suffocation, drowning, overexertion injury, fire-related/burn injury, and sport/recreational injury.

### Top Injury Health Disparities Among Highest Income San Diego County Residents:

- The rate of death due to falls was 1.1 times higher compared to the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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Better  
Health

Living  
Safely

Thriving

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

### Injury

Overall, injury rates were lower among highest income communities compared to the county overall. However, rates of fall-related and hip fracture-related injuries were higher among highest income communities compared to the county overall.

### Fall-Related Injury

Overall, fall-related injury rates were lower than the county. However, fall death rates were 1.1 times higher in the highest income communities compared to the county overall.

- Coronado had the highest fall death rate at 21.4 deaths per 100,000 population. This is higher than the county's rate at 9.5 deaths per 100,000 population.

### Hip Fracture-Related Injury

Overall, hip-fracture injury rates were lower than the county. However, San Dieguito had one of the highest emergency department discharges due to hip fracture rate at 17.9 discharges per 100,000 population. This is higher than the county, at 9.9 discharges per 100,000 population.

### 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>15</sup>

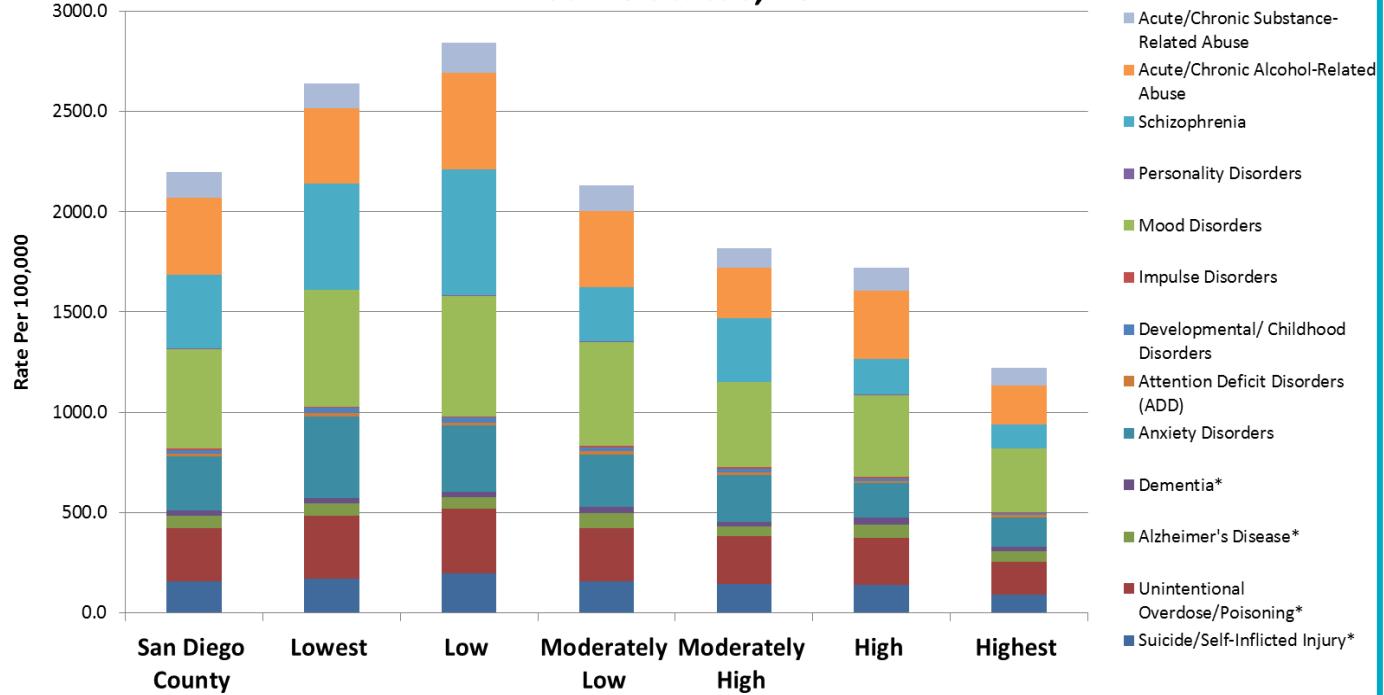
Of the major causes of disability and death, injuries are among the most preventable. Often, modifiable behaviors such as the use of protective equipment and active restraints, addressing and working to eliminate bullying, as well as awareness, reduce the likelihood of injury.<sup>15</sup>



## Behavioral Health Among Highest Income Status Residents

**Figure 33**

### Overall Burden\* of Behavioral Health in San Diego County by Income Status, 2011



\*Overall burden (except for suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia) includes hospitalization, and emergency department (ED) discharge. Suicide/self-inflicted injury, unintentional overdose/poisoning, Alzheimer's disease, and dementia include death, hospitalization, and ED discharge.

### Top Behavioral Health Disparities Among Highest Income San Diego County Residents:

- Overall, the burden of poor behavioral health outcomes was lower in the highest income communities compared to the county overall.

## Preventing Socioeconomic Health Disparities

### 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



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### Behavioral Health

Poor behavioral health outcome rates were lower among the highest income communities compared to the county overall. Some of the lowest rates were for schizophrenia and acute substance-related disorders. However, there were notable differences between communities within each disorder.

### Acute Substance-Related Disorders

In 2011, rates of acute substance-related disorders in the highest income communities were 71% lower compared to the county overall. However, Jamul had the highest acute substance-related hospitalization rate at 45.5 per 100,000 population, which was higher among the highest income communities and county overall. Jamul also had the highest emergency department discharge rate at 79.6 per 100,000 population, which was also higher among the highest income communities and county overall.

### Schizophrenia

Rates of schizophrenia in the highest income communities were 68% lower compared to the county overall in 2011. However, Jamul had the highest schizophrenia hospitalization rate at 216.2 per 100,000 population, which was higher among the highest income communities overall. Jamul also had the highest emergency department discharge rate at 62.6 per 100,000 population, which was also higher among the highest income communities overall.

### Risk Factors and Prevention Strategies

Risk factors for poor behavioral health outcomes include genetics, stress, experiencing a traumatic event, and social isolation.<sup>16</sup>

- In 2011, 14.2% of highest income communities reported needing help for an emotional or mental health problem in San Diego County.<sup>11</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>16</sup>



## Socioeconomic Health Disparities

In this report socioeconomic status was discussed using the 41 sub-regional areas defined by the San Diego Association of Governments.<sup>10</sup> Based on median household income, these areas were divided into six major community groups—lowest, low, moderately low, moderately high, high, and highest incomes. The communities included in these groupings, and select characteristics of each group, are shown in the table on page 8. Substantial differences in health indicators and health-related behaviors exist in the different socioeconomic groups of the county.

Compared to the other populations in the county, the low and lowest income communities had the highest rates of nearly all non-communicable (chronic) disease, communicable disease, injury, poor maternal and child health outcomes, and poor behavioral health outcomes in 2011.

In 2011:

### Lowest income communities

- Diabetes death, hospitalization, and emergency department (ED) discharge rates were higher among the lowest income communities than any other income group in San Diego County in 2011. The rates of hospitalization and ED discharge were 74% and 55% times higher, respectively, among the lowest income communities compared to the county overall.
- The lowest income communities had primary/secondary syphilis rates that were 2.3 times higher compared to the county overall.
- The rates of unintentional pedestrian injuries were 63% higher in the lowest income communities than the county overall.

### Low income communities

- Rates due to asthma were 1.7 times higher among low income residents compared to the county overall.
- Compared to the county overall, the lowest income communities had primary/secondary syphilis rates that were 1.9 times higher and 1.7 times higher reported chronic hepatitis C.
- Teen births were 40% higher among low income women than the county overall.
- The rate of hospitalization due to assault was 1.7 times higher than the county overall.
- Rates of schizophrenia hospitalization were 1.8 times higher than the county overall.



## Actions to Live Well San Diego

Creating an environment that encourages 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 [www.LiveWellSD.org](http://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.<sup>14</sup>

For more local data and statistics on non-communicable (chronic) disease, visit the [San Diego County Community Profiles—Non-Communicable Disease Profile](#).

For information on non-communicable (chronic) disease, visit the County of San Diego's Community Health Statistics website at [www.SDHealthStatistics.com](http://www.SDHealthStatistics.com) and view the *Disease Information* section.

### 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.<sup>17</sup>

For more local data and statistics on communicable disease, please go to the [San Diego County Community Profiles—Communicable Disease Profile](#).

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, as well as 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 outcomes, visit the [San Diego County Community Profiles—Maternal and Child Health Profile](#).

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 [San Diego County Community Profiles—Injury Profile](#).

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, visit the [San Diego County Community Profiles—Behavioral Health Profile](#).

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

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# County of San Diego Board of Supervisors



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