

**CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
OFFICE OF BINATIONAL BORDER HEALTH**

BORDER HEALTH STATUS REPORT TO THE LEGISLATURE 2010

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EXECUTIVE SUMMARY

California and Mexico border communities' health are linked in a variety of ways; through similar population characteristics and cultural practices, through trade, business, and transportation. All of these characteristics are fluid throughout the border region. The U.S.-Mexico border community is unique, due to this fluidity, which results in a mixture of cultures and traditions. Due to the high volume of individuals crossing the border every day for work, education, shopping, tourism, social visits, and other reasons, the border communities are closely interconnected.

The border experiences public health challenges and issues that are distinctive to the region, due to the complexities of the relationship between the U.S. and Mexico. Often, there are challenges providing health care services, especially in disease prevention, surveillance, and control. Cross border collaboration is essential for these services to be accurate and effective. The California Office of Binational Border Health (COBBH) was created to help identify health successes and challenges that are specific to the border region and its Hispanic population. In order to do this, COBBH works in partnership with state and local agencies to produce Border Health Status Reports, which compile and analyze data from numerous sources. These legislatively mandated reports present important health indicators for border and binational communities in California. The 2010 Border Health Status Report covers demographics, overall health, maternal and child health, environmental health, infectious diseases, mental health, and diabetes and risk factors.

HIGHLIGHTS OF THE BORDER HEALTH STATUS REPORT

DEMOGRAPHICS

In 2010 the total estimated population of the two California border counties was 3,353,830 (189,675 in Imperial County and 3,169,126 in San Diego County), representing nine percent of California's population. From 2000 to 2010, the border region experienced steady population growth. Imperial County's population increased by 31.9 percent, more than double the rate of increase in San Diego County (12.8%) and in California overall (14.7%) during the same period. California and especially the border region are racially and ethnically diverse. In Imperial County, Hispanics make up 77.0 percent of the entire population and non-Hispanic Whites make up 15.0 percent of the population. In San Diego County there is a non-Hispanic White majority (53.1%) followed by the Hispanic population as the largest minority (29.4%). In California, Hispanics make up the largest minority (37.1%), while the non-Hispanic White majority makes up 42.0 percent of the population.

In each region examined the Hispanic population is less likely to speak English well or very well compared with the population as a whole. In San Diego County, Imperial County, and California as a whole, Hispanic populations are less likely to receive a

college level education or higher when compared to non-Hispanic Whites and all ethnicities combined. In San Diego County and in California, non-Hispanic Whites are more than 3 times as likely to graduate from college when compared to the Hispanic population. The Hispanic population is also less likely to graduate from high school.

Approximately half (48.9%) of Imperial County is living below 200% Federal Poverty Level (FPL), compared with 29.0 percent in San Diego County and 36.4 percent in California statewide. In San Diego County and California a significantly higher percent of the Hispanic population is living below 200% FPL compared with the population as a whole. In 2009 California reported that 11.4 percent of the population was unemployed and looking for employment. For all years examined (2000-2009), Imperial County has reported higher rates of unemployment than California and San Diego County. In 2009, Imperial County (28.2%) had the highest unemployment rate in the state.

OVERALL HEALTH

Tracking health status indicators in different populations can identify subgroups with poor physical or mental health. Imperial County (48.6%) reported statistically significantly lower rates of people who considered themselves as being in either very good or excellent health compared to San Diego County (62.9%) and California (56.7%). Additionally, in San Diego County and California statewide, Hispanics reported statistically significantly lower rates of people who considered themselves as being in either very good or excellent health compared to the White population and all ethnicities combined.

ACCESS TO HEALTHCARE

In San Diego County, non-Hispanic Whites report 94.5 percent health insurance coverage vs. 82.1 percent of Hispanics. Non-Hispanic Whites also have statistically significantly higher rates of insurance coverage than all races combined in San Diego County and California statewide (94.6% vs. 87.6; 91.0% vs. 85.5%, respectively). From 2001 to 2009, there was no significant change in the percent of health insurance coverage in California statewide. In Imperial County the percent of insurance coverage has increased seven percent from 2001 to 2009 (81.0% to 87.8%).

MATERNAL AND CHILD HEALTH

Maternal, infant, and child health is considered an index of overall health within a community. The health of mothers, infants, and children is of vital importance, both as a reflection of the current health status of a large segment of the U.S. population and as a predictor of the health for the next generation (HHS, 2000). Maternal and child health encompasses a large variety of issues. This report focuses on the following; teen pregnancy, infant mortality, low and very low birth weight, breast-feeding, and childhood immunization.

TEEN PREGNANCY

In San Diego County, Imperial County, and California statewide, the rate of birth to teen mothers is significantly higher among Hispanics than non-Hispanic Whites (33.4 vs. 4.2; 39.6 vs. 13.3; 28.6 vs. 17.5, per 1,000 females, respectively). In California and in San Diego County the rate of birth to teen mothers in the Hispanic population is significantly greater than the rate of birth to teen mothers in each region as a whole. In California, the rate of births to teen mothers is more than fivefold greater among Hispanics compared with non-Hispanic Whites. This disparity is inflated in San Diego County where the rate in the Hispanic population is approximately 8 times greater than the non-Hispanic White population (33.4 vs. 4.2 per 1000 females). Imperial County reports one of the highest rates of birth to teenage mothers in the state (35.0 per 1,000 females).

INFANT MORTALITY

Healthy People 2010 Objective 16-1 is to reduce the infant mortality rate to 4.5 deaths, neonatal mortality rate to 2.9 deaths, and post-neonatal mortality rate to 1.2 deaths per 1,000 live births. Aggregated data from 2005-2008 show that Imperial County achieved the Healthy People 2010 objective with an overall infant mortality rate of 4.5 per 1000 live births. San Diego County has an infant mortality rate of 4.9 per 1000 live births which is lower than the statewide rate of 5.2. In San Diego County and California statewide non-Hispanic Whites report a lower infant mortality rate than their Hispanic counterparts and in San Diego County the Hispanic population reported a higher rate than the county wide rate.

LOW BIRTH WEIGHT (LBW)

In 2009, California and San Diego County, Hispanics had a lower rate of LBW than non-Hispanic Whites and all ethnicities combined (6.0% vs. 6.5%; 6.2% vs. 6.4%, respectively). All ethnicities and regions examined exceed Health People 2010 goals for low birth weight and very low birth weight. There is no indication that any of the populations examined were approaching the Healthy People 2010 objectives. On the contrary, the rate of LBW in all regions examined had increased from 2003 to 2009.

BREAST FEEDING

The U.S. surgeon general recommends that babies be fed with only breast milk for the first six months (early postpartum) of life and partially fed breast milk through 12 months (HHS, 2011). In 2009, in San Diego and Imperial Counties, and California Statewide all ethnicities examined met Healthy People 2010 Goals of 75% for initiating breastfeeding in the hospital. For all regions and ethnicities examined, far fewer mothers breast fed exclusively. Fewer than 10% of Hispanic women in Imperial County continued with exclusive breastfeeding until they left the hospital. In San Diego County, a statistically significant percent more women exclusively breast fed while at the hospital than in Imperial County and in California statewide. In all regions examined non-Hispanic White women breastfed exclusively at the hospital significantly more than their Hispanic

counterparts and all ethnicities combined (76.4 vs. 56.7; 23.6 vs. 9.4; 70.8 vs. 43.0, respectively).

IMMUNIZATIONS

In California, in 2009, all ethnicities examined failed to meet Healthy People 2010 goals for complete vaccination coverage for children 19-35 months of age. There is not a persistent disparity between ethnicities and vaccination coverage. Though California children did not meet HP2010 goals for complete coverage for 19-35 months old, by the time the children reach kindergarten, complete coverage, and coverage for each individual vaccination is over 90 percent.

ENVIRONMENTAL HEALTH

AIR QUALITY

Air pollutants that are frequently present in unhealthy concentrations in California are two sizes of particulate matter (PM₁₀ and PM_{2.5}) and ground-level ozone. Sources of particulate matter may be natural, such as windblown dust, or caused by humans. Human-caused sources include industrial operations, farming, and combustion sources such as vehicle engines (US EPA, 2010a). Ozone is created in the air when chemicals from vehicles and other sources react in sunlight. During 2009, California PM₁₀ standards were exceeded on 146 days in the San Diego Air Basin and on 207 days in the Imperial Valley Air Basin (CARB, 2010a). During the same year, state ozone standards were exceeded during 47 days in San Diego County and 41 days in Imperial County (CARB, 2010d).

ASTHMA

Though asthma symptoms may be life-threatening, the disease can be controlled and prevented through clinical management and by controlling exposures to environmental triggers such as secondhand smoke, air pollutants, animal dander, pollen and mold (Millet, Tran, Eatherton, Flattery, Kreutzer, 2007; California Breathing, 2007). Asthma is one of the most common chronic diseases in the United States, contributing to significant reductions in quality of life, school attendance, and work productivity (Meng, Babey, Malcolm, Brown, & Chawla, 2003). Asthma is the primary cause of hospitalizations among children in the United States (Kreger, Mohre, Standish, & Brindis, 2010). In California, Imperial County, and San Diego County, asthma prevalence is over 10 percent (EHIB, 2011). With a rate of 167.7 cases per 10,000 population, Imperial County had asthma emergency department visit rates among children younger than 5 years that did not reach the Healthy People 2010 goal of 150 or fewer cases per 10,000 population. (EHIB, 2011, Healthy People 2010, 2000).

PESTICIDE ILLNESS

The term pesticide refers to insecticides, herbicides, fungicides and various other substances used to control pests (US EPA, 2011). Depending on their chemical makeup and the amount of exposure, pesticides may pose varying degrees of risk to humans and the environment. The health effects of pesticide exposure range from skin and eye irritation, to more severe effects such as hormone and endocrine disruption, cancer, reproductive harm and death. In Imperial County, in 2008, agriculture was the source of pesticide exposure in 93 percent of 42 investigated pesticide illnesses. In San Diego County, 52 pesticide illness cases were investigated in 2008; 96 percent of these are due to non-agricultural exposures.

LEAD POISONING

People are exposed to lead when they come into contact with products that are contaminated with lead, or through lead-containing soil or dust in the environment. Though environmental lead concentrations have been greatly reduced due to the removal of the metal from gasoline and paint, Childhood lead poisoning is currently considered the most common environmental illness in California (California Environmental Health Investigations Branch, 2011). Children who live in older houses, are of low socioeconomic status and have reduced nutrition are at higher risk of being exposed to lead (ATSDR, 2007a; US EPA, 2010d). Also, certain traditional pottery glazes, candies, and home remedies present a risk for lead exposure among children. Children who ingest lead may develop neurological damage, behavioral problems, anemia, gastrointestinal problems, and reduced physical and mental growth (ATSDR, 2007). The US CDC and the World Health Organization (WHO) state that a blood lead level of 10 µg/dL or above is a cause for concern; however, lead may impair development and have harmful health effects even at lower levels, and there is no known safe exposure level. In Imperial County, almost 12 percent of children up to 6 years old have blood lead levels of 4.5 micrograms per deciliter (µg/dL) or more. This percentage is significantly higher than that of San Diego County (4.1%) and California (4.0%) (EHIB, 2011).

INFECTIOUS DISEASE

TUBERCULOSIS (TB)

Tuberculosis (TB) is one of the leading causes of death from infectious diseases worldwide. California's border counties are major contributors to the state's TB burden. San Diego County reported 9 percent (223 cases) of the state's TB cases in 2009 (7.0 per 100,000 population). Like California, San Diego County has experienced a decrease in cases and case rates during the past decade. While Imperial County has a lower TB case count (35 cases), this county reported the highest case rate per capita of all the California counties in 2009 (18.9 per 100,000) and has consistently had a rate higher than the state average. A large proportion of California cases are of Hispanic ethnicity (38 percent from 2007-2009). The proportions of Hispanic TB cases were

much higher in Imperial (93%) and San Diego (51%) Counties than the rest of the state. Additionally, the TB case rate among Hispanics was much higher than that of Whites statewide and in the border counties. From 2007-2009, 76 percent of California's TB cases were born outside of the U.S. The most common birth country was Mexico, which accounted for 23 percent of all TB cases.

FOOD BORNE ILLNESS

Foodborne disease is caused by consuming contaminated foods or beverages. Because many different disease-causing microbes, or pathogens, can contaminate foods, there are many different foodborne infections. The Centers for Disease Control and Prevention (CDC) estimates that foodborne diseases cause 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year. The great majority of cases are mild, and cause symptoms for only a day or two. The most severe cases tend to occur in the very old, the very young, those who already have an illness that reduces their immune system function and healthy people exposed to a very high dose of an organism.

SEXUALLY TRANSMITTED INFECTIONS

For the first time in more than a decade, rates of chlamydia, gonorrhea, and primary and secondary syphilis all decreased in California in 2009 compared to rates in 2008. Large numbers of combined reported cases of STDs made them by far the most commonly reported communicable diseases in California (and in the United States). Furthermore, because STDs are often asymptomatic, the true burden of these diseases is many times greater than the number of reported cases (CDPH, STD Branch 2009 Annual Report).

HIV/AIDS

Human immunodeficiency virus (HIV) is the virus that can lead to acquired immune deficiency syndrome (AIDS). HIV is primarily found in the blood, semen and vaginal fluids and is transmitted in 3 main ways; having unprotected sex with someone who has HIV, sharing paraphernalia for injecting drugs, and being born to or breastfeeding from an infected mother. There are many risk factors that increase a person's likelihood of getting infected with HIV including having multiple sex partners, having other sexually transmitted diseases, or having been diagnosed with tuberculosis or Hepatitis A (CDC, 2010). California has the second highest number of AIDS cases in the US and San Diego County has the third highest number in California. The majority of cases were White and between the ages of 30-39, and Hispanics have the second highest rate of HIV in San Diego County. Compared to the US, San Diego County and California as a whole had lower rate of HIV among Blacks and a higher rate among Whites and Hispanics.

MENTAL HEALTH

Mental health according to Healthy People 2010 is the state of successful performance of mental function resulting in productive activities, fulfilling relationships with other people and the ability to adapt to change and to cope with challenges. Mental health disorders are among the most common causes of disability and affect as many 1 in 5 Californians yearly.

SUICIDE

Suicide occurs when an individual intentionally ends his or her own life. There were approximately one suicide for every 25 attempted suicides. In 2008, 376,306 people treated in emergency rooms for self-inflicted injuries; 163,489 were hospitalized in the US. Suicide is the eleventh leading cause of death in the United States (7th among males and 15th among females). In 2008, in San Diego County and California statewide suicide rates failed to meet Healthy People 2010 objectives. In all three regions the White population reported a higher rate than the population as a whole, while Hispanics reported a lesser rate. In all regions examined, for all age groups and ethnicities examined, males reported higher rates of suicides than females. Of all regions, ethnicities and age groups examined in California, White males, 65 years and older were the most likely to have committed suicide in 2008 (39.6 suicides per 100,000 population).

DEPRESSION

Depression is used to describe several forms of depressive disorders that can interfere with a person's daily life, change how they interact with those around them and alter their normal functioning. Depression is a major cause of illness and death in the United States and is associated with reduced quality of life and social functioning. In 2006, the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System found that persons with depression were more likely to have cardiovascular disease, diabetes, asthma, obesity, be a current smoker, be physically inactive, and to drink heavily. In 2009 close to 10 percent of Imperial County residents were likely to have had psychological distress during the last year compared to 5.3 percent in San Diego County and 6.5 percent statewide. In all regions examined there was a gap between those that needed help for psychological distress and those that received help. In San Diego County and California statewide the White population had the smallest percent difference between needing mental health services and receiving mental health services and the Hispanic population had the highest.

BULLYING

Bullying is a form of abuse that involves aggressive behavior and negative actions that are unwanted over a period of time involving an imbalance of power or strength. There are many different forms of bullying that can affect someone emotionally, physically or verbally. The forms of bullying include but are not limited to derogatory comments,

name calling, social exclusion, hitting, kicking, shoving, starting false rumors, threatening, racial bullying, sexual bullying, and cyber bullying using the internet and cell phones. Bullying can have a wide range of impact on students who are bullied, school environments and others who observe another student getting bullied. Students who are bullied are more likely to have depression, low self-esteem, low self-worth, health problems, poor grades and suicidal thoughts. Students who are bullied may experience negative emotions. Feelings of discrimination prevail over feelings of safety and confidence. Fear, anger, frustration, and anxiety may lead to ongoing illness, mood swings, withdrawal from friends and family, an inability to concentrate, and loss of interest in school. If left unattended, the targeted student may develop attendance and/or discipline problems, fail at school altogether or, in the worst cases, become suicidal or retaliatory and/or violent.

DIABETES AND RISK FACTORS

DIABETES

Diabetes is a chronic medical condition marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. The number people diagnosed with diabetes in California continues to rise. In 2008, 2.3 million people, or 1 out of every 7 Californians, had been diagnosed with diabetes, up from 1.5 million in 2001. Apart from the 2.3 million diagnosed cases, 1.4 million Californians had diabetes but were not aware that they did (California Diabetes Program, Diabetes Information Resource Center, 2010). Diabetes prevalence among adults along the U.S./Mexico border region is 2-3 times higher than that in the United States (PAHO, 2010). In 2009, 9.6 percent of all adults in Imperial County had diagnosed diabetes. This appears to be higher than San Diego County (7.8%) and statewide (8.5%), though the differences are not significant. In all regions examined, Hispanic adults have a higher prevalence of diabetes than non-Hispanic Whites and all ethnicities combined. In California, from 2005 to 2009, there was a significant increase in adults who have been diagnosed with diabetes for all ethnicities combined and for Hispanics. Between 2002 and 2008, the age-adjusted death rate due to diabetes has showed no sign of improvement in any of the regions examined. In San Diego County and California statewide the Hispanic population reports a 50 percent higher diabetes age adjusted death rate than the rates for all ethnicities combined and double the rate of the White population.

OBESITY AND OVERWEIGHT

Obesity and overweight are terms used to define ranges of weight that are greater than what is considered healthy for a given height. For adults, obesity and overweight are most commonly measured in terms of a number called the body mass index (BMI). This is a calculated measure of weight in relation to height. Adults are considered obese when they have a BMI greater than 30 kg/m² and overweight when their BMI is between 25 and 29.9 kg/m². Adults are considered obese when they have a BMI greater than 30 kg/m² and overweight when their BMI is between 25 and 29.9 kg/m². Overweight and obese people are at increased risk for disability, premature death, and many health

conditions, including type 2 diabetes, hypertension, coronary heart disease, cardiovascular disease, and some cancers. In 2009, the majority of the population in San Diego County, Imperial County, and California were obese or overweight (57.7%, 69.8%, and 59.4% respectively). In all regions examined, the Hispanic population reported a higher rate of obesity and overweight than their non-Hispanic White counterparts, and all ethnicities combined. Hispanic teenagers in all three regions (17.2% and 20.6% in Imperial and San Diego Counties, and 16.4% in California) were significantly more overweight or obese than their White counterparts (6.6% in San Diego County and 7.7% in California).

NUTRITION

Poor diet or nutrition is one of the leading factors to the overweight and obesity epidemic in the United States. Even in the absence of overweight and obesity poor diet is associated with cardiovascular disease, hypertension, type 2 diabetes, osteoporosis, and some types of cancer. Poor nutrition significantly contributes to the burden of preventable illnesses and premature deaths in the United States (U.S. HHS & U.S. Department of Agriculture, 2011). In 2009, in San Diego County, Imperial County and California statewide, children ages 2-11 were significantly more likely to eat five or more servings of fruits and vegetables compared to teens age 13-17. In San Diego and Imperial Counties the percent of White children who ate 5 or more fruits and vegetables was higher than Hispanics or all races combined but this difference was not significant. In California as a whole Hispanic children age 2-11 appeared more likely to eat 5 or more fruits and vegetables but, again, the difference was not statistically significant. In California, in 2009, 19.6 percent of the population reported eating fast-food 3 or more times per week. In all regions observed Hispanics reported eating fast food 3 or more times per week more often than Whites and all races combined, however, this finding was not statistically significant. There are no significant differences between ethnicities in all regions observed. In all regions examined, in 2009, Hispanics were more likely to consume two or more glasses of sugary drink during the previous day compared to Whites and all races combined but this finding was only significant for California statewide.

PHYSICAL ACTIVITY

Regular physical activity throughout life is important for maintaining a healthy body, enhancing psychological well-being, and preventing premature death (USDA, 2011). Physical activity reduces risks associated with cardiovascular disease and diabetes, beyond the reduction provided by weight reduction alone. In Imperial County, 63.5 percent of children between 5 and 11 years of age report being physically active for at least 1 hour on at least 5 days in the previous week. Among Hispanic children, the percentage is higher (70.7%). There is no significant difference in physical activity rates among White children in Imperial County (42.8%), San Diego County (45.2%) and California (51.4%). In California a significantly higher percentage of White teens (51.4%) compared with Hispanic teens (34.1%) report at least 5 days of at least 1 hour of physical activity. In California, 56.6 percent of Hispanic teens reported walking,

biking or skating from school at least once per week. This percentage is significantly higher than that of White teens (39.1%) and all teens (48.5%). This trend is also seen in San Diego County, where 50.9 percent of Hispanic teens, 40.4 percent of White teens, and 44.0 percent of all teens report actively commuting to school.

DRAFT

INTRODUCTION

California has a unique relationship with Mexico. Both share a long, rich history, which has resulted in a unique relationship between the two countries. The border is home to a distinctive mixed heritage of culture and commerce. Mexico has a huge fiscal impact on the economy of California, its principal trading partner. Billions of dollars are exchanged through trade between the two countries, which creates and sustains thousands of jobs. Greater than one-third of the population in California self-identifies as Latino or Hispanic, of these, more than eight million are of Mexican origin. The border region is a fusion of California and Mexico, both culturally as well as demographically.

Every day, numerous individuals cross the U.S.-Mexico border for work, school, shopping, tourism, social occasions, and other reasons. The border communities experience an ebb and flow within their populations every day, resulting in a fluid connection. With the large number of individuals crossing the border, there are public health challenges that must be addressed from providing health care, to disease prevention, surveillance, and control. The highly mobile border population makes it imperative for health agencies in both California and Mexico to work together effectively. It is important to keep in mind that binational and border-related health issues are not singular and isolated; these problems extend beyond the communities residing along the U.S.-Mexico border and affect the health and well-being of California's population in general.

In 1983, the La Paz Agreement defined a binationally agreed upon border region as the area within 62 miles (100 km) on either side of the border, an area that encompasses approximately 250,000 square miles.¹ Of the 1,952-mile boundary between the United States and Mexico, California's border region spans 140-miles, including San Diego County and Imperial Counties, the state's southernmost counties. This area is remarkable because of its assorted geography, highly mobile, culturally and linguistically diverse population.

In the first six months of 2009, there were over 34 million total border crossings for all ports of entry into San Diego County (Bureau of Transportation Statistics). In that same time period, there were over 3 million pedestrians crossing the border at San Ysidro. This data is evidence of the mobility of the border communities and also illustrates how the border has unique challenges when it comes to health care.

Recognizing the distinctiveness of the border region, in 1999 Assembly Bill 63 (Chapter 765, Ducheny, Division One, Part Three, Health and Safety Code) established the California Office of Binational Border Health (COBBH) within the California Department of Health Services (CDHS), "to facilitate cooperation between health officials and health

¹ Agreement signed by the United States of America and the United Mexican States on cooperation for the protection and improvement of the environment in the border area. The agreement was signed in La Paz, Baja California, on August 14, 1983, and took effect on February 16, 1984.

professionals in California and Mexico, to reduce the risk of disease in the California border region and in those areas directly affected by border health conditions” (Appendix C). COBBH began operating in January 2000 and was located organizationally within CDHS Prevention Services. In July 2007, following the reorganization of CDHS and the establishment of the California Department of Public Health (CDPH), COBBH was placed organizationally within CDPH External Affairs.

To fulfill its mission, COBBH works directly with many groups and organizations, including the COBBH Advisory Group; local health departments in San Diego, and Imperial Counties; California Environmental Protection Agency (Cal/EPA), Baja California Secretariat of Health, Offices of Border Health in Arizona, New Mexico, and Texas, U.S. Department of Health and Human Services (DHHS), U.S. Environmental Protection Agency (EPA), U.S.-Mexico Border Health Commission (USMBHC), Pan American Health Organization (PAHO), and Project Concern International.

COBBH collaborates with state and local partner agencies to create Border Health Status Reports that enable monitoring of priority health indicators for border and binational communities in California. The main purpose of this legislatively mandated report is to inform policy makers, health department personnel, and the public regarding priority border health issues.

“Report to the Legislature: Annual Border Health Status Report, 2009” was prepared by the California Department of Public Health, in compliance with the requirement set forth in Assembly Bill 63, Chapter 765, Statutes of 1999 (Section 475 of the Health and Safety Code) in consultation with the California Office of Binational Border Health (COBBH). The Border Health Status Report 2009 covers demographics, maternal and child health, mental health, infectious disease, environmental health, diabetes and risk factors, and overall health. These reports are not and do not intend to be comprehensive of all health issues of the border. In order to avoid repeating information, issues that are presented in previous reports that do not have new data available are not presented. Because of the Caucasian majority and overwhelming Hispanic minority in the border region, statistics are generally only reported for non-Hispanic White, Hispanic, and the total population.

Healthy People Goals and Objectives

In 2000, the U.S. Department of Health and Human Services (DHHS) released the Healthy People 2010 program, a comprehensive prevention agenda with two overarching goals: increase quality and years of healthy life, and eliminate health disparities (HHS, 2000). The U.S. Department of Health and Human Services (DHHS) has released the Healthy People 2020 goals and objectives. The 2020 goal and objectives are available at <http://www.healthypeople.gov/2020/default.aspx>.

This report uses the Healthy People 2010 objectives as a framework for presenting the health status of the California border region. Future reports will utilize the Healthy

People 2020 objectives. Throughout the report, border county and state statistics are presented. In addition to using the Healthy People 2010 objectives, this report focuses on other health issues of importance to the California border region. Because COBBH's charge is to facilitate cooperation with Mexico to improve health in border and binational communities, the data focuses on border county's health measures.

DRAFT

CHAPTER 1

DEMOGRAPHIC CHARACTERISTICS

What Is It?

Every community has unique health outcomes that are influenced by and reflected in many different factors, including birth rates, death rates, hospitalization rates, and disease incidence. Demographic characteristics are also important variables in a community's health outcome; these include population size, education, and poverty rates.

Why Is It Important?

Age, race or ethnicity, education, and poverty all are important determinants of health status. Poverty is an important predictor of poor health. Inequalities in income and education underlie many health disparities. Income and education are intrinsically related and often serve as proxy measures for each other. In general, population groups that have the worst health status are also those with the highest poverty rates and low levels of higher education. Disparities in income and education levels are associated with differences in the occurrence of illness and death, diabetes, obesity, heart disease, and low birth weight. Higher incomes permit increased access to medical care, enable people to afford better housing, live in safer neighborhoods, and have increased opportunities to engage in health-promoting behaviors (HHS, 2000).

What is the status in the border region?

GENERAL POPULATION CHARACTERISTICS

In 2010 the total estimated population of the two California border counties was 3,353,830 (189,675 in Imperial County and 3,169,126 in San Diego County), representing 9 percent of California's population. From 2000 to 2010, the border region experienced steady population growth. Imperial County's population increased by 31.9 percent, more than double the rate of increase in San Diego County (12.8%) and in California overall (14.7%) during the same period (Table 1.1).

2010 Border Health Status Report
 Chapter 1: Demographic Characteristics

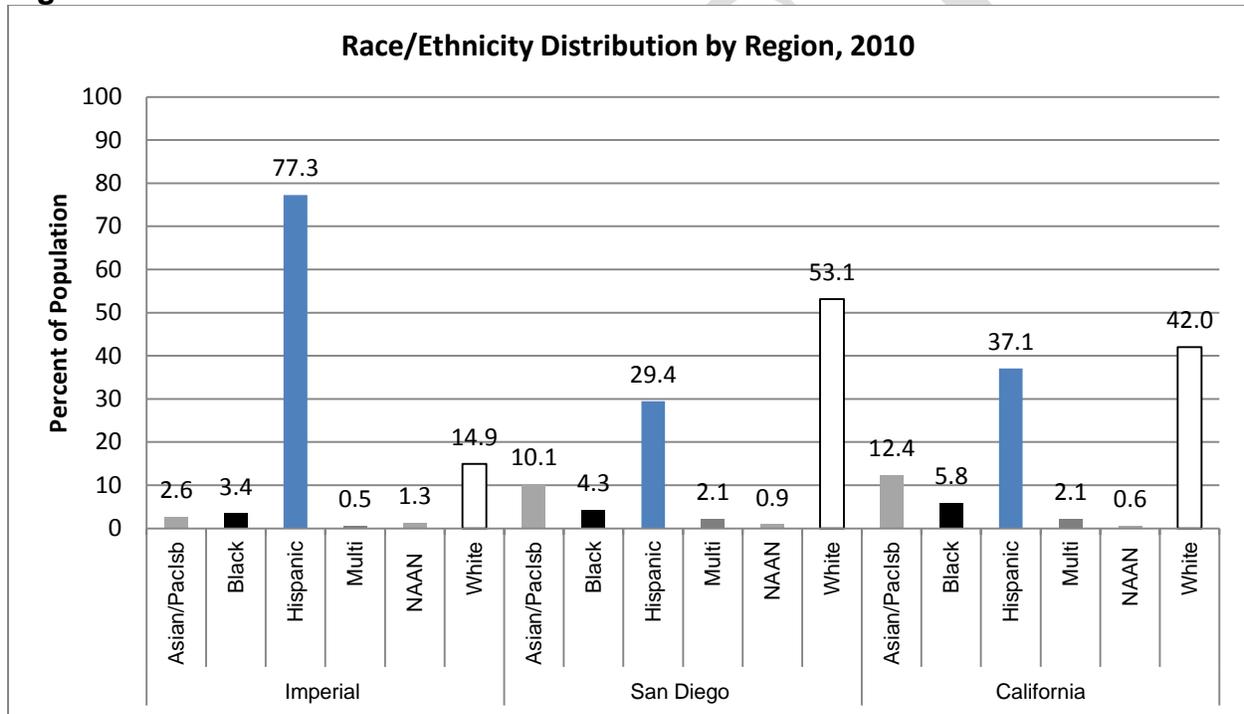
Table 1.1

Percent Change in California and Border Counties by Ethnicity 2000-2010			
Population	2000	2010	% Change
Imperial			
<i>Asian/Pacific Islander</i>	2746	4840	76.3
<i>Black</i>	5214	6511	24.9
<i>Hispanic</i>	104267	146600	40.6
<i>Multi</i>	754	990	31.3
<i>Native Amer/Alaskan</i>	1817	2412	32.7
<i>White</i>	28965	28322	-2.2
<i>All</i>	143763	189675	31.9
San Diego			
<i>Asian/Pacific Islander</i>	263964	324208	22.8
<i>Black</i>	159068	136769	-14.0
<i>Hispanic</i>	757055	941997	24.4
<i>Multi</i>	62195	67950	9.3
<i>Native Amer/Alaskan</i>	15713	28776	83.1
<i>White</i>	1578308	1700006	7.7
<i>All</i>	2836303	3199706	12.8
California			
<i>Asian/Pacific Islander</i>	3872349	4833883	24.8
<i>Black</i>	2218281	2287190	3.1
<i>Hispanic</i>	11057467	14512817	31.2
<i>Multi</i>	637010	822281	29.1
<i>Native Amer/Alaskan</i>	185996	240721	29.4
<i>White</i>	16134334	16438784	1.9
<i>All</i>	34105437	39135676	14.7

Source: California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

California and especially the border region are racially and ethnically diverse. Table 1.1 and Figure 1.1 display ethnicity by percent of the total population within San Diego County, Imperial County, and California as a whole in 2010. Residents of Hispanic origin and non-Hispanic White origin make up either the majority or the largest minority in all regions examined. In Imperial County, Hispanics make up 77.0 percent of the entire population and non-Hispanic Whites make up 15.0 percent of the population. In San Diego County there is a non-Hispanic White majority (53.1%) followed by the Hispanic population as the largest minority (29.4%). In California, Hispanics make up the largest minority (37.1%), while the non-Hispanic White majority makes up 42.0 percent of the population. From 2000 to 2010, the Hispanic population increased by 31.2 percent, while the non-Hispanic White population increased 1.9 percent (Table 1.1 & Figure 1.1, Appendix F; Table 1.2)

Figure 1.1

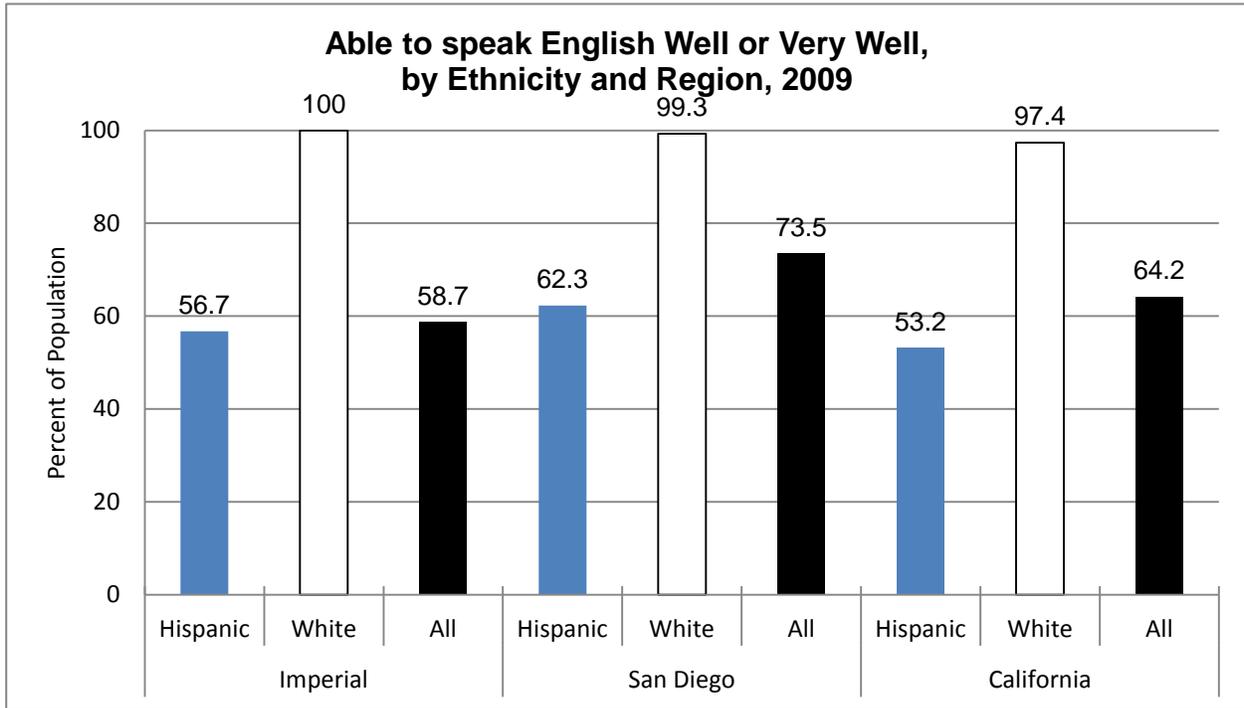


Source: State of California, Department of Finance, 2007, *Race/Ethnic Population with Age and Sex Detail, 2000–2050*.

ENGLISH SPEAKING ABILITY

Limited ability to speak and write English can be a major barrier to primary and secondary disease prevention. This can lead to diminished comprehension, misinformation, noncompliance, and eventually poorer health outcomes in the U.S. (Calderon & Beltran, 2004). In California, as a whole, 64 percent of the population is able to speak English well or very well. In each region examined the Hispanic population is less likely to speak English well or very well compared with the population as a whole (Figure 1.2, Appendix F; Table 1.2).

Figure 1.2



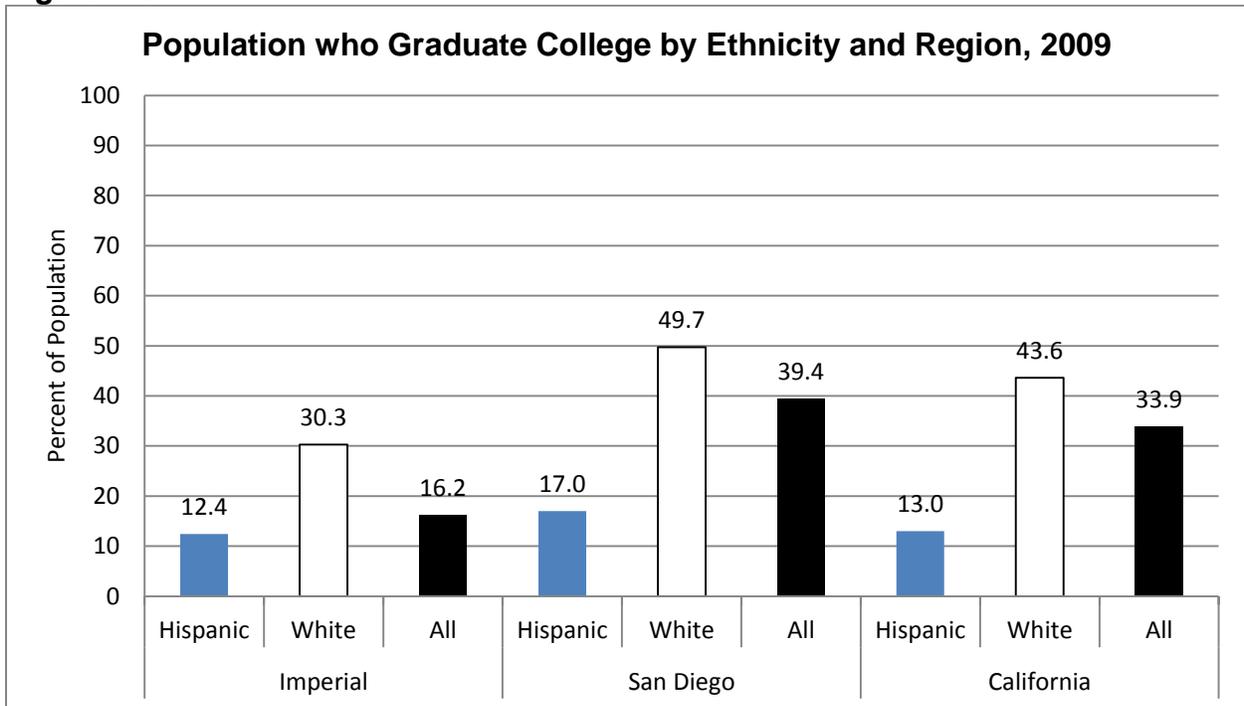
Source: 2009 California Health Interview Survey

EDUCATION

Education is an important predictor of health outcomes, even though it does not act directly on health outcomes. Studies have shown that populations with more years of schooling tend to have better health and practice healthier lifestyles (OECD, 2006).

Disparities in education attainment are evident in the California border counties and in California. In San Diego County, Imperial County, and California as a whole, Hispanic populations are less likely to receive a college level education or higher when compared to non-Hispanic Whites and all ethnicities combined. In San Diego County and in California, non-Hispanic Whites are more than three times as likely to graduate from college when compared to the Hispanic population. The Hispanic population is also less likely to graduate from high school. In California the percent of Hispanics who have less than a high school education (37.3%) is more than eight times greater than the rate in the non-Hispanic White population (4.5%). In San Diego County the disparity is wider, where the percent of Hispanics who have less than a high school education (27.1%) is more than 12 times greater than the rate in the non-Hispanic White population (2.2%) (Figure 1.4, Appendix F; Table 1.4).

Figure 1.3

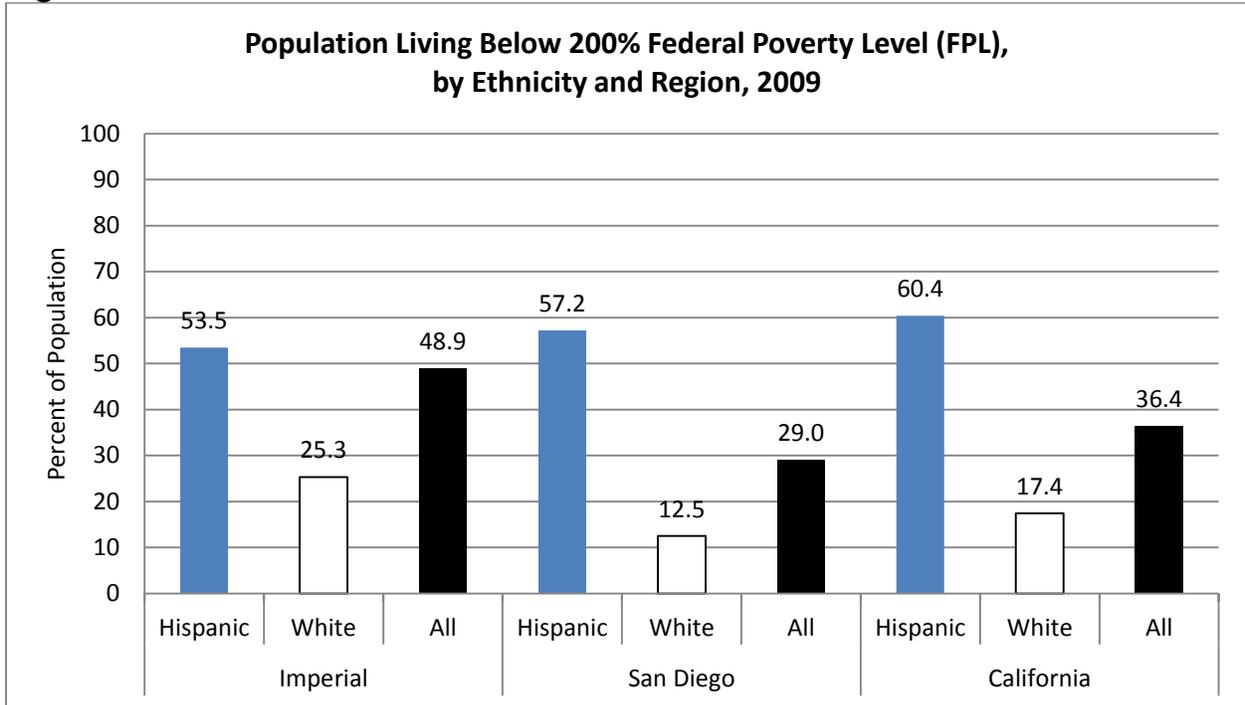


Source: 2009 California Health Interview Survey

SOCIOECONOMIC STATUS

A significantly higher proportion of Imperial County's population is living below 200% Federal Poverty Level (FPL) than San Diego County and California statewide. Approximately half (48.9%) of Imperial County is living below 200% FPL, compared with 29.0 percent in San Diego County and 36.4 percent in California statewide. In San Diego County and California a significantly higher percent of the Hispanic population is living below 200% FPL compared with the population as a whole. Trends are as expected on the other end of the scale. The non-Hispanic White population has a significantly lower percent of population living below 200% FPL than the population as a whole in San Diego and California. There is a significantly higher percent of the population living at or above 300 percent FPL in San Diego County (56.9%) and California (49.7%) compared to Imperial County (30.0%). Additionally, in each region, the percent of non-Hispanic Whites living at or above 300 percent FPL is at least twice as high as the Hispanic population living at or above 300% FPL (Figure 1.4, Appendix F; Table 1.5).

Figure 1.4

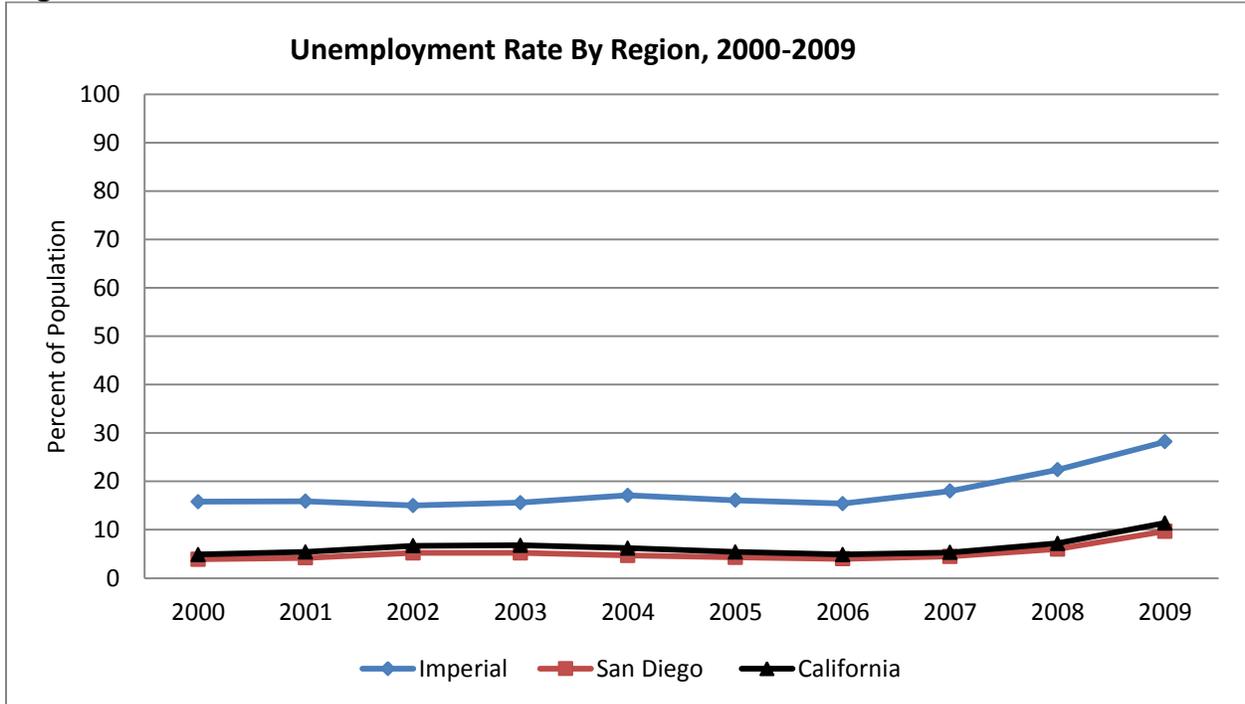


Source: 2009 California Health Interview Survey

UNEMPLOYMENT

In 2009 California reported that 11.4 percent of the population was unemployed and looking for employment. Consistently, Imperial County has reported higher rates of unemployment than California and San Diego County. In 2009, Imperial County (28.2%) had the highest unemployment rate in the state (the second highest rate in the state was Colusa County with 18.4%) (Figure 1.5, Appendix F; Table 1.6).

Figure 1.5



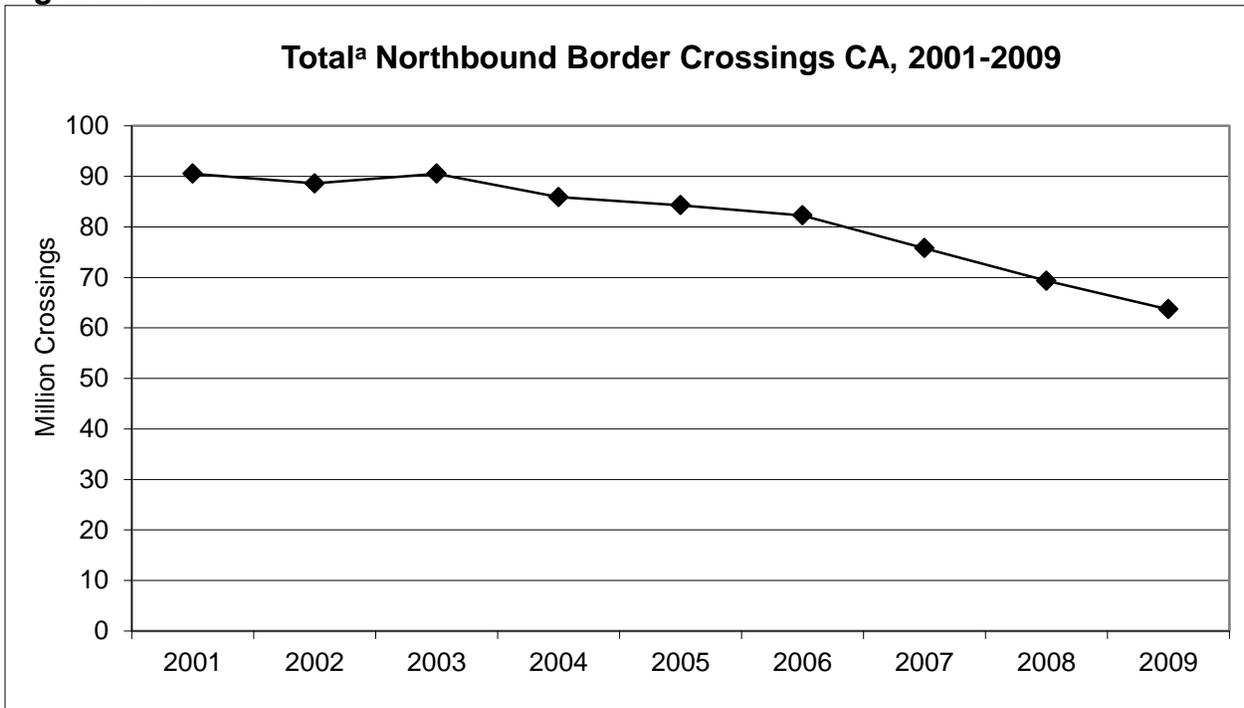
Source: Local Area Unemployment Statistics (LAUS), Labor Market Information Division, California Employment Development Department, Labor Force Data Search Tool, Accessed April 7, 2011

BORDER CROSSINGS

The international boundary between California and Baja California is one of the busiest borders in the world. People cross the border for various reasons, including social, work, shopping, tourism and education. The amount of crossings fluctuates by time of day, day of the week, and time of the year.

Border Crossings have been declining steadily since 2001, when there were more than 90 million border crossings. This includes persons crossing by foot, personal vehicle, bus, and train. The data have some limitations; they do not measure the number of unique vehicles and persons that cross into the United States, but rather the total number of crossings. Also, no southbound border crossings are recorded (Bureau of Transportation Statistics, 2008). From 2001 to 2010, there was a 30 percent decrease in total border crossings. Additional security and documentation requirements, and economic decline might be partly responsible for the decrease in border crossing in recent years (Figure 1.6, Appendix F; Table 1.7).

Figure 1.6



^aTotal is the sum of pedestrian, bus, train, and personal vehicle individual crossings.

Source: California Department of Finance, <http://ca.rand.org/stats/popdemo/popdemo.html>, accessed April 7, 2011

DRAFT

CHAPTER 2

HEALTH STATUS AT THE BORDER

This section describes the overall health status of communities in the California border region and presents data related to access to healthcare. The overall health of the California population is the primary goal of the California Department of Public Health, stating its mission as, “The California Department of Public Health is dedicated to optimizing the health and well-being of the people in California (CDPH, 2008)”

OVERALL HEALTH STATUS

What Is It?

Global assessments, in which a person rates his or her health as poor, fair, good, very good or excellent, can be reliable indicators of one’s perceived health. Health status can be defined by an individual’s own perception of wellness and well-being, which is influenced by outside determinants such as income, education, access to health insurance and healthcare, and other disparities associated with race and ethnicity. Overall health status is a measure of general health, both physical and mental. In this section, health status is measured by a self-assessment survey, which focuses on how people view their own health.

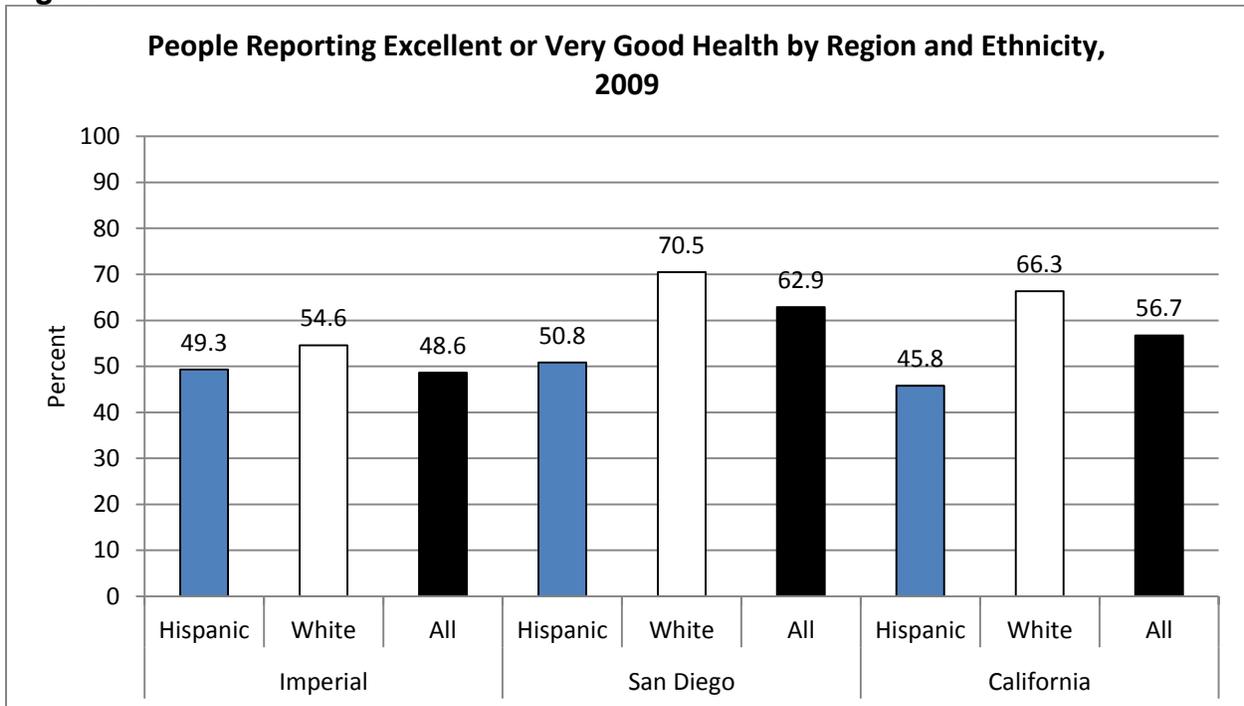
Why Is It Important?

It is essential to monitor and evaluate the consequences of the determinants of health to understand the health status of a population. Tracking health status indicators in different populations can identify subgroups with poor physical or mental health. This information can be used to determine areas to target resources to prevent illness and other health problems, as well as improve the overall health in the community.

What Is the Status in the Border Region?

In the 2009 California Health Interview Survey (CHIS), respondents were asked to classify their overall health status as excellent, very good, good, fair or poor. In general, disparities in perceived health status were present among the ethnicities and regions examined. Imperial County (48.6%) reported significantly lower rates of people who considered themselves as being in either very good or excellent health compared to San Diego County (62.9%) and California (56.7%). Additionally, in San Diego County and California statewide, Hispanics reported significantly lower rates of people who considered themselves as being in either very good or excellent health compared to the White population and all ethnicities combined. (Figure 2.1, Appendix F; Table 2.1).

Figure 2.1



Source: 2009 California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

What Is Being Done?

The goal of the California Department of Public Health (CDPH) is to improve the overall health of all Californians. The California Legislature established the California Office of Binational Border Health (COBBH) in 1999 (AB 63) to coordinate programs and interventions focused on border communities and binational health issues and to collaborate with Mexico to improve the overall health in the border region (Appendix D: Attachment A).

One effort to improve border health is conducted by the University of California at Berkeley-Health Initiative of the Americas (HIA), which is made up of representatives from government, academia, the private sector, and community-based organizations of both countries. This collaborative works to improve the health of Mexican immigrants and their families by coordinating and optimizing the availability of health resources for that population through training, research, and health promotion activities. HIA's efforts have focused on the Mexican states with the highest international mobility and selected California counties with high proportions of immigrant populations. COBBH and HIA have worked together on several activities, including Binational Health Week, which offered health education and promotion activities, a media campaign, and a Binational Public Policy Forum on Migrant Health.

ACCESS TO HEALTHCARE

What Is It?

Access to healthcare includes, but is not limited to, availability of the following: clinical preventive care, primary care, emergency services, and long-term and rehabilitative care. Out-of-pocket medical expenses have been identified as a barrier to healthcare. Having health insurance is a significant measure of a population's access to healthcare.

Why Is It Important?

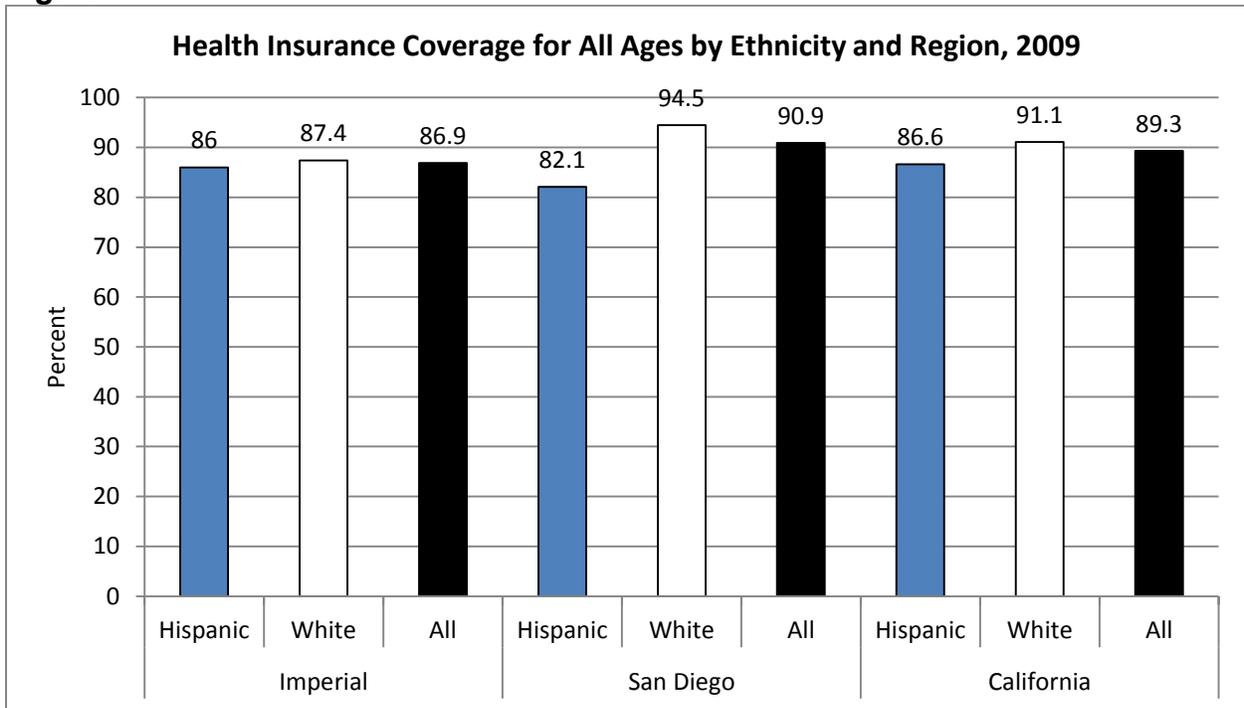
The ability to achieve and maintain wholesome living is constrained by the lack of access to healthcare. Individuals who do not receive healthcare risk greater morbidity and premature mortality. It is estimated that 18,000 unnecessary deaths occur every year due to lack of health insurance in the United States (IOM, 2004).

What Is the Status in the Border Region?

Healthy People 2010 Objective 1-1 is to increase the proportion of persons with health insurance to complete coverage (HHS, 2000). The Healthy Border 2010 Objective is to reduce by 25 percent the population lacking access to a primary health provider.

In San Diego County and California statewide, the Hispanic population reported significantly lower rates of health insurance coverage than the non-Hispanic White population and all ethnicities combined. In San Diego County, non-Hispanic Whites report 94.5 percent coverage vs. 82.1 percent of Hispanics. Non-Hispanic Whites also have significantly higher rates of insurance coverage than all races combined in San Diego County and California statewide (Figure 2.3, Appendix F; Table 2.2).

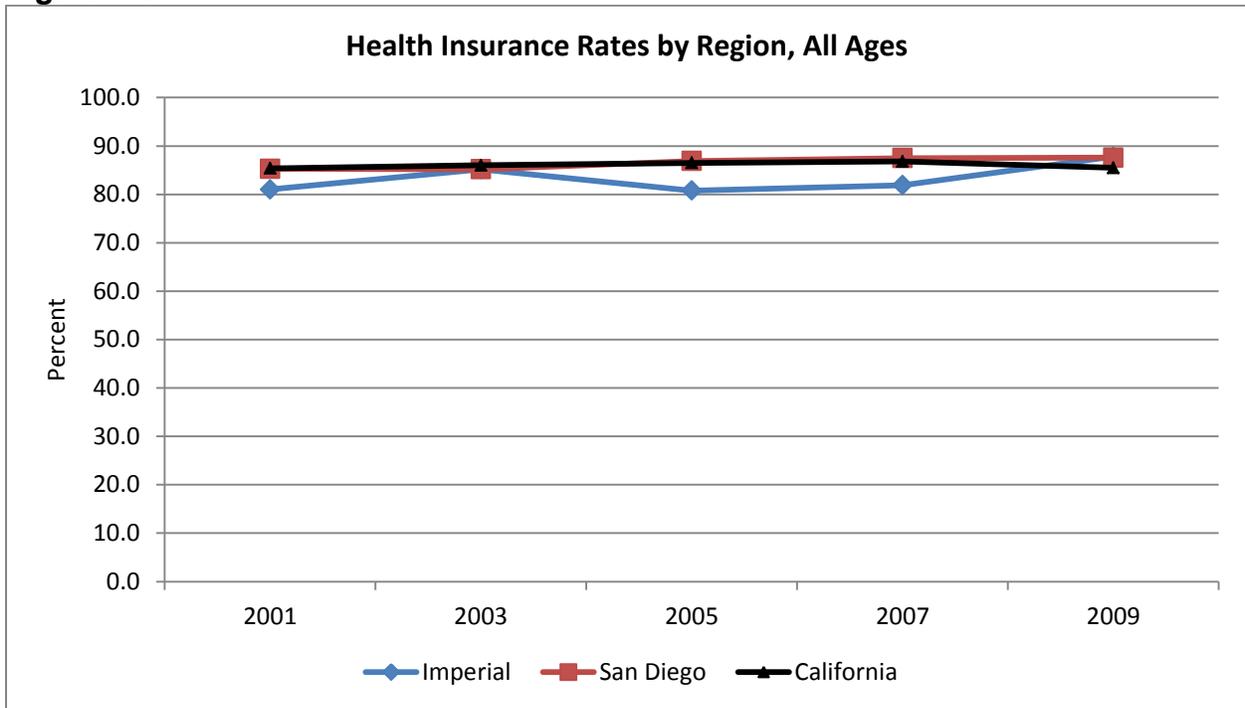
Figure 2.2



Source: 2009 California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>
 Healthy People 2010 Objective 1-1: Increase the proportion of persons with health insurance to 100 percent

From 2001 to 2009, there was no significant change in the percent of insurance coverage in California statewide. In Imperial County the percent of insurance coverage has increased significantly from 2001 to 2009. There is no evidence any region examined is approaching the 2010 goal, with all regions remaining significantly lower than 90 percent of their population covered (Figure 2.3, Appendix F; Table 2.3).

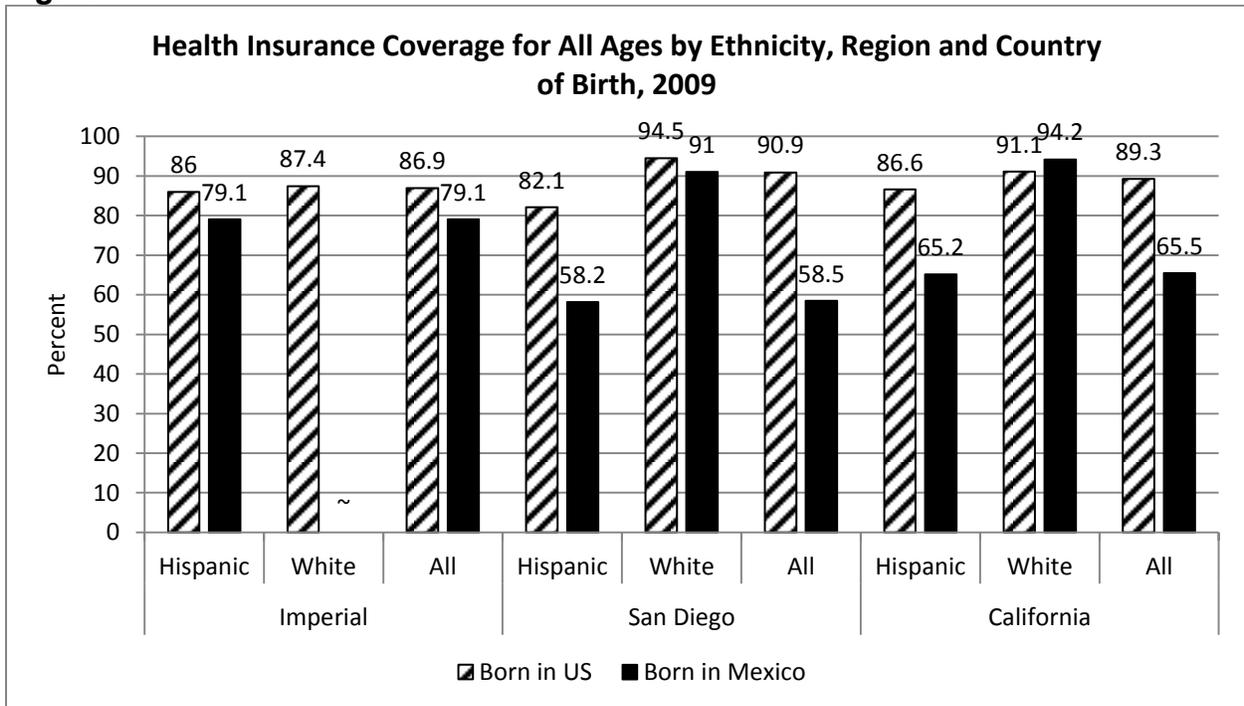
Figure 2.3



Source: 2001, 2003, 2005, 2007 and 2009 California Health Interview Survey: <http://www.chis.ucla.edu/>
Healthy People 2010 Objective 1-1: Increase the proportion of persons with health insurance to 100 percent

Country of birth presents disparities in health insurance coverage. In Imperial County, San Diego County and in California statewide, individuals who are born in Mexico are less likely to have health insurance. The differences are statistically significant in San Diego County and California statewide. For example, in San Diego County, the proportion of U.S.-born individuals who have health insurance is approximately 25 percent higher than the proportion of individuals born in Mexico who are insured (90.9% vs. 58.8%) (Figure 2.4, Appendix F; Table 2.4).

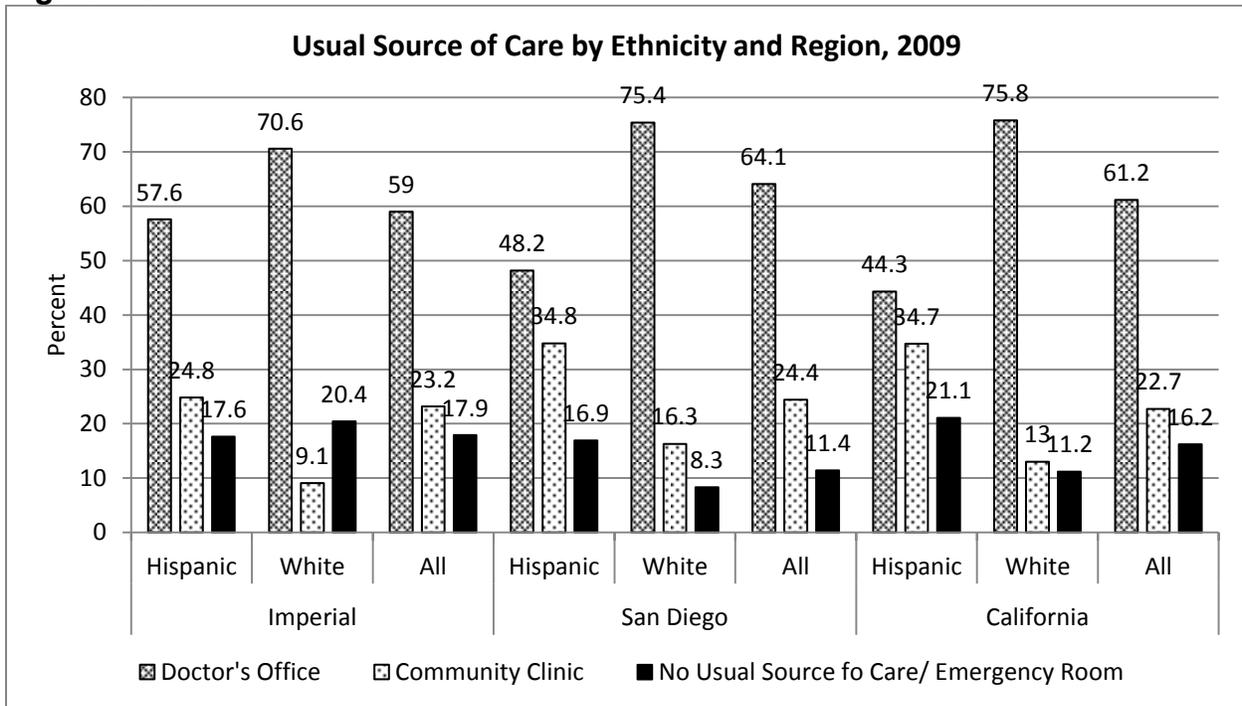
Figure 2.4



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>
 Healthy People 2010 Objective 1-1: Increase the proportion of persons with health insurance to 100 percent

In San Diego County and California statewide, the Hispanic population has a significantly higher percent of population relying on Community clinics for care than their White counterparts and all ethnicities combined. Additionally, In San Diego County and California the Hispanic population is significantly more likely to have no usual source of care or rely on an emergency room, when compared to Whites and all ethnicities combined. In contrast, the White population is significantly more likely to rely on a doctor's office for their usual source of care, than the Hispanic population and all ethnicities combined (Figure 2.5, Appendix F; Table 2.5).

Figure 2.5



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

What Is Being Done?

The state of California has several health insurance programs to help ensure a safety net for Californians who are uninsured or underinsured:

Medi-Cal is financed equally by the State and federal government. Medi-Cal is designed to provide health insurance to individuals who meet certain income criteria, low-income individuals with specific disease such as tuberculosis, breast cancer, or HIV/AIDS, as well as those who are pregnant, disabled, or aged (California Department of Health Care Services, 2011).

California Health Insurance Counseling and Advocacy Program (HICAP) provides one-on-one counsel for Medicare beneficiaries with questions about any facet of Medicare, at no cost (California Department of Aging, 2011).

California Major Risk Medical Insurance Program (MRMIP) offers coverage to individuals who have been rejected for individual policies because of preexisting health conditions. Individuals who qualify for the program pay premiums that are subsidized by California tobacco tax funds (MRMIP, 2011).

Through the Children's Health Insurance Program Reauthorization Act (CHIPRA), the Children Health Insurance Program (CHIP, previously known as SCHIP) in California

pays for coverage of more than 1 million formerly uninsured children. California's main CHIP program, known as Healthy Families, is the largest in the country, with enrollment exceeding the combined total of New York and Texas--the second and third largest programs in the country. Healthy Families provides health insurance coverage for children under age 19 whose families meet certain income criteria. The health insurance plans are offered at a discounted rate that range from \$13 to \$72 a month (Healthy Families Programs, 2011).

DRAFT

CHAPTER 3

MATERNAL AND CHILD HEALTH

Maternal, infant, and child health is considered an index of overall health within a community. The health of mothers, infants, and children is of vital importance, both as a reflection of the current health status of a large segment of the U.S. population and as a predictor of the health for the next generation (HHS, 2000).

Due to advances in public health, many maternal and child health indicators have significantly improved throughout the world. For instance, life expectancy at birth worldwide during 1950-1955 was 46.5 years. Fifty years later (1995-2000) the life expectancy rate worldwide had increased to 65.0 years (WHO, 2005). Additionally, advances in medicine have drastically decreased worldwide infant mortality rates and decreased the burden of disease through regular vaccinations. Though the general trends of maternal and child health have been improving, there are still major disparities observed along racial and socioeconomic divides.

Maternal and child health encompasses a large variety of issues. This report focuses on the following; teen pregnancy, infant mortality, low and very low birth weight, breast-feeding, and childhood immunization.

TEEN PREGNANCY

What Is It?

Teen birthrate is defined as the number of live births to mothers who are 19 years of age or younger per 1,000 female population in that age group.

Why Is It Important?

Clear, negative consequences of teen childbirth have been demonstrated in several areas. Teen mothers exhibit poorer psychological functioning, lower levels of education, more single parenthood, and less stable employment. Additionally, teen mothers experience more pregnancy-related problems, are less likely to get prenatal care and gain appropriate weight, have less healthy infants, and are more likely to smoke during and after pregnancy (CDC, 2009a). Children of teen mothers show more delay of cognitive development, more behavior problems, more aggressive behavior, and higher rates of grade failure, delinquency, and earlier sexual activity. Children of teen mothers are also more likely to experience neglect and abuse, and be placed in foster care.

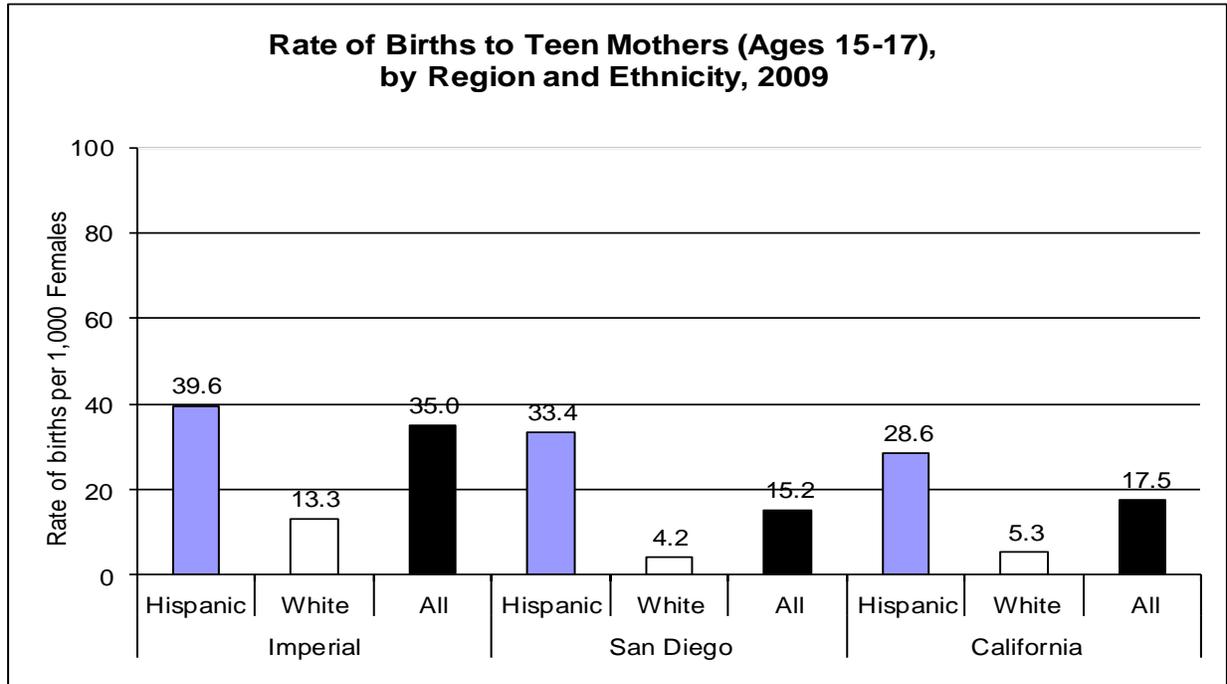
Moreover, fathers of children of teen mothers earn lower salaries and achieve less education than their non-parenting peers (Constantine, Nevarez, and Jerman, 2008).

What Is the Status in the Border Region?

Healthy People 2010 Objective 9-7 is to reduce the rate of teen pregnancies to 43 per 1,000 teen females. In this report the rate of teen births is presented as a proxy for teen pregnancy.

In San Diego County, Imperial County, and California statewide, the rate of birth to teen mothers is significantly higher among Hispanics than non-Hispanic Whites. In California and in San Diego County the rate of birth to teen mothers in the Hispanic population is significantly greater than the rate of birth to teen mothers in all regions as a whole. This trend is mirrored in Imperial County, but the difference is not statistically significant. In California, the rate of births to teen mothers is more than fivefold greater among Hispanics compared with non-Hispanic Whites. This disparity is inflated in San Diego County where the rate in the Hispanic population is approximately 8 times greater than the non-Hispanic White population (33.4 vs. 4.2 per 1000 females). Imperial County reports one of the highest rates of birth to teenage mothers in the state (35.0 per 1,000 females). This rate is significantly higher than San Diego County's (15.2) and California statewide (17.5). (Figure 3.1, Appendix F; Table 3.1)

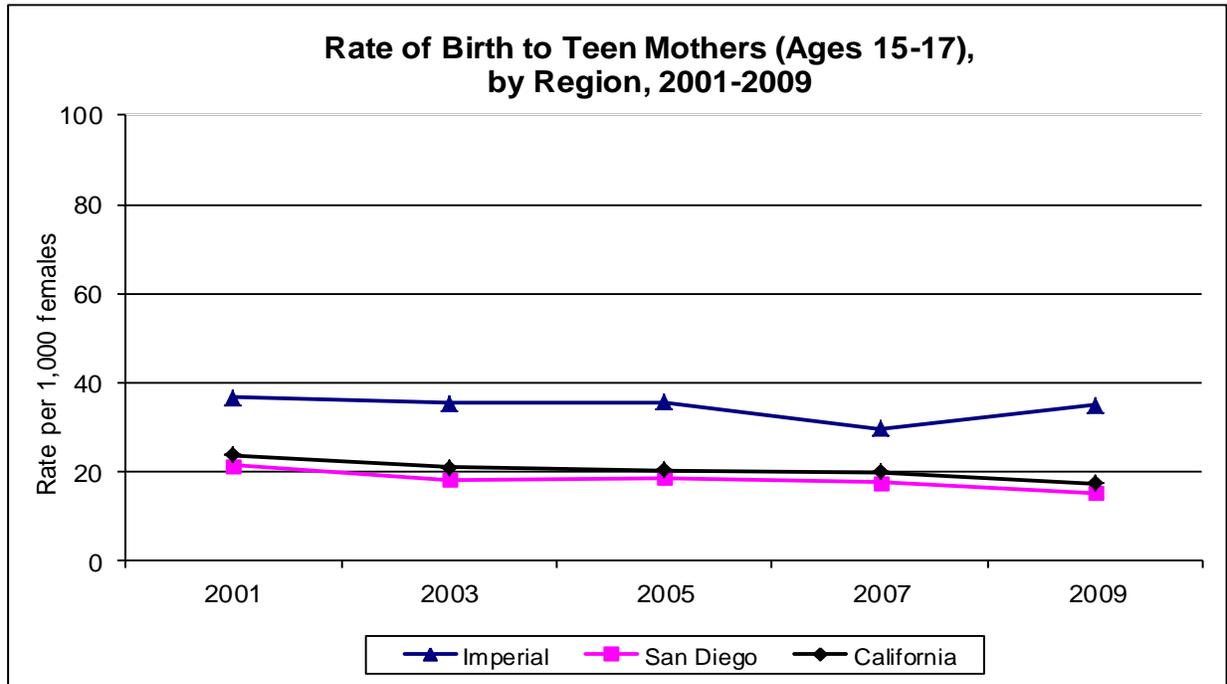
Figure 3.1



Source: Center for Health Statistics, Vital Statistics Query System, California Department of Public Health
 Healthy People 2010 Objective 9-7: Reduce the rate of pregnancies among adolescents to 43 per 1,000 pregnancies

In California and San Diego County, for all ethnicities examined and all ethnicities combined, there has been a statistically significant decrease in the rate of births to teen mothers from 2001 until 2009. This trend is not evident in Imperial County, where throughout these years the rates have not decreased and have persisted with a significantly higher rate than San Diego County and California statewide (Figure 3.2, Appendix F; Table 3.1).

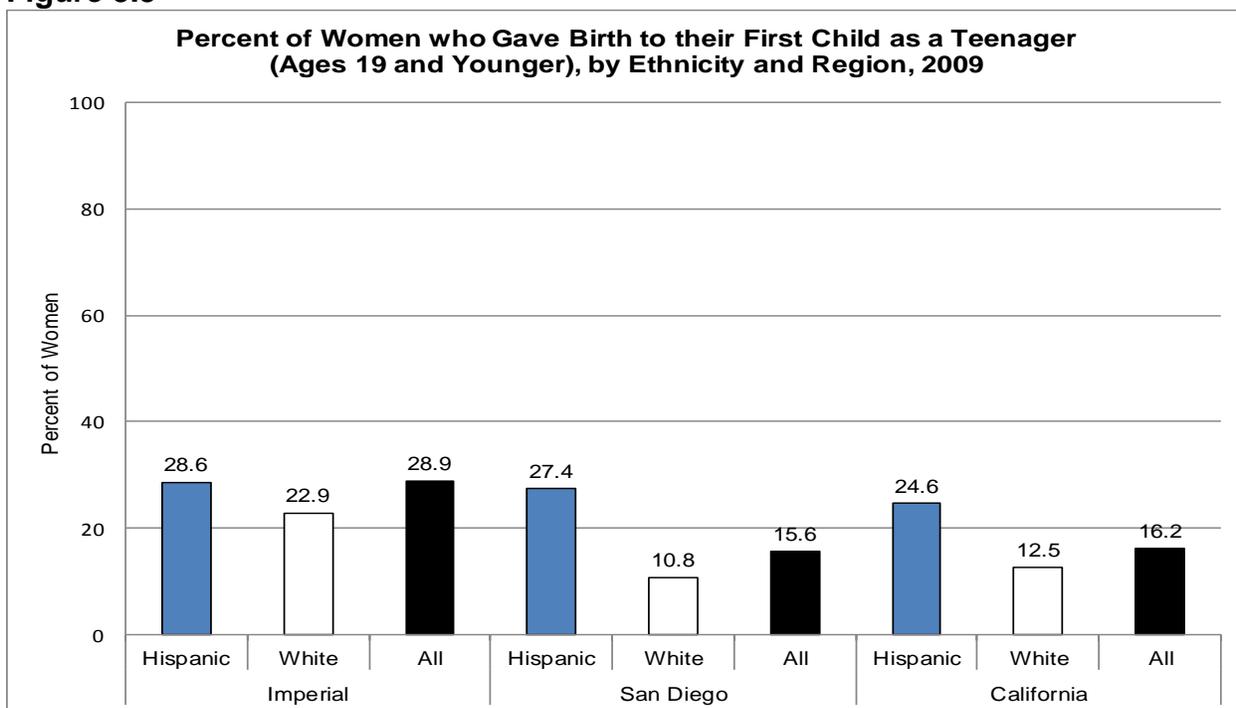
Figure 3.2



Source: Center for Health Statistics, Vital Statistics Query System, California Department of Public Health
Healthy People 2010 Objective 9-7: Reduce the rate of pregnancies among adolescents to 43 per 1,000 pregnancies

In San Diego County and California in 2009, Hispanic mothers were significantly more likely to have given birth to their first child under the age of 19 than both the population as a whole and non-Hispanic White mothers. In both border counties more than 25% of Hispanic women gave birth to their first child under the age of 19. (Figure 3.3, Appendix F; Table 3.2)

Figure 3.3



Source: California Health Interview Survey 2009, AskCHIS: <http://www.chis.ucla.edu/>

What Is Being Done?

California as a state focuses on investing in research-based policies and programs for positive adolescent development and teen pregnancy prevention. These include: enactment of legislation that school-based and other state-funded sexuality education must be comprehensive, age appropriate, and medically accurate; state-funded reproductive health programs administered by the California Department of Public Health; state-funded teen pregnancy prevention programs administered by the California Department of Public Health, the California Department of Social Services, and the California Department of Education, and grant initiatives funded by philanthropic foundations in California. (For additional information see the MCAH 5-Year Title V Needs Assessment Report, CDPH 2010a).

CDPH's Office of Family Planning (OFP) is charged by the California Legislature "to make available to citizens of the State who are of childbearing age comprehensive medical knowledge, assistance, and services relating to the planning of families". The purpose of family planning is to provide women and men a means by which they decide for themselves the number, timing, and spacing of their children. OFP administers the Teen Pregnancy Prevention Program (TPP) which utilizes a variety of approaches and strategies to reduce teenage and unintended pregnancy and absentee fatherhood. Additionally TPP promotes responsible parenting and assists adolescents in accessing clinical services.

The Adolescent Family Life Program (AFLP), administered by the CDPH Maternal Child and Adolescent Health Division (MCAH) and Cal-Learn specifically provide services to teen parents. The AFLP provides voluntary case management for pregnant and parenting teens ages 19 and under to ensure that they receive prenatal care. This program emphasizes early and ongoing prenatal care, parenting skills, resource management, goal setting, school attendance, health education, and other assistance as needed. Cal-Learn provides mandatory case management for pregnant or parenting teens ages 19 and under who participate in the CalWORKS program and have not yet graduated from high school. Participants receive financial bonuses or sanctions based primarily on their report cards and high school graduation.

INFANT MORTALITY RATES

What Is It?

The infant mortality rate is defined as the number of deaths among infants, 1 year of age or younger, per 1,000 live births. Neonatal mortality rates refer to infant deaths at 27 days old or younger and postneonatal mortality refers to infant deaths from 28 days old to 1 year old. The CDPH/MCAH Division reports on these indicators annually to the Health Resources and Services Administration (HRSA) in its Title V report and application (CDPH 2010a). Reduction of infant morbidity and mortality is one of the Division's priorities as identified in the MCAH 5-Year Title V Needs Assessment Report (CDPH 2010b).

Why Is It Important?

Infant mortality is one of the most important health indicators of a nation. It is associated with various health factors, such as maternal health, access to quality medical care, socioeconomic conditions, and public health practices. The United States' infant mortality rate has continued to steadily decline since 1900, from 100 infant deaths per 1,000 live births, to 6.9 infant deaths per 1,000 live births in 2003 (HHS, 2006). However, even with the steady decline in infant mortality, the United States' infant mortality rate is higher than that of most other developed countries. This ranking is due in large part to disparities that continue to exist among various racial and ethnic groups in this country (CDC, 2009d). The rank of the United States in comparison with other countries appears to be worsening. In 2004, the U.S. ranked 29th (CDC, 2008) down from its ranking as 28th in infant mortality worldwide in 1998.

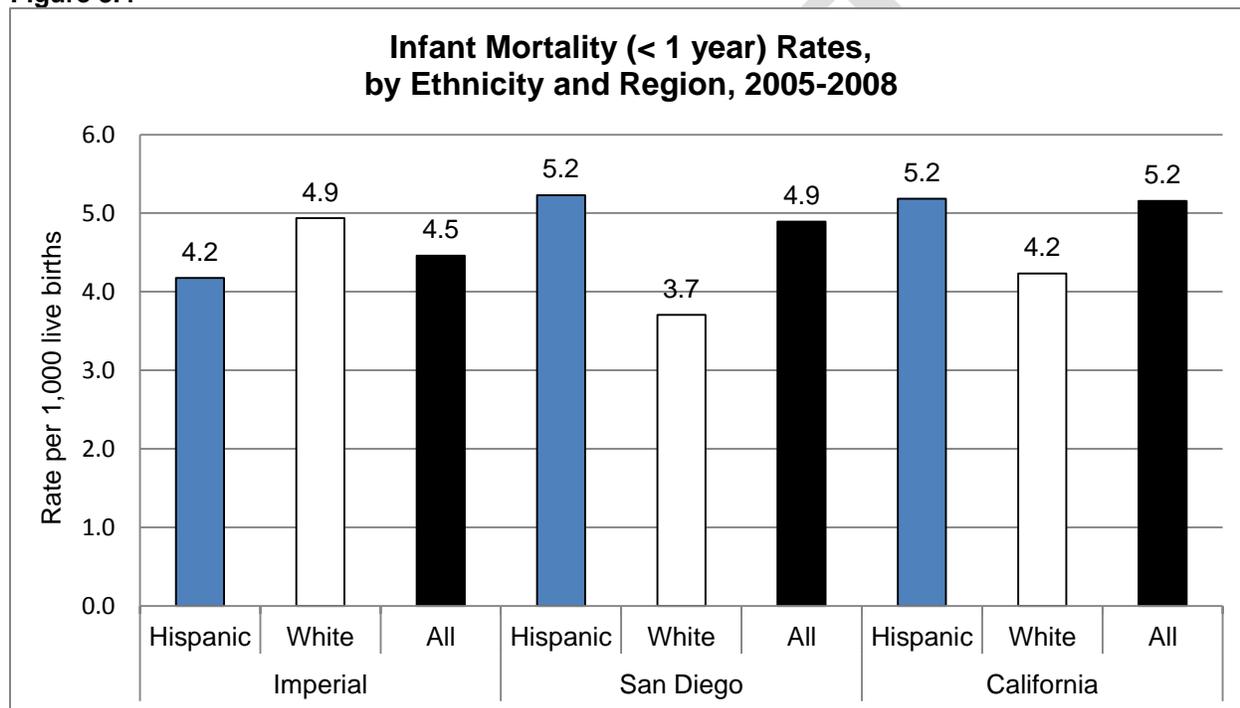
What Is the Status in the Border Region?

Healthy People 2010 Objective 16-1 is to reduce the infant mortality rate to 4.5 deaths, neonatal mortality rate to 2.9 deaths, and postneonatal mortality rate to 1.2 deaths per 1,000 live births. Aggregated data from 2005-2008 show that Imperial County achieved the Healthy People 2010 objective with an overall infant mortality rate of 4.5 per 1000

live births. San Diego County has an infant mortality rate of 4.9 per 1000 live births which is lower than the statewide rate of 5.2 (Figure 3.4, Appendix F; Table 3.3).

In San Diego County and California statewide non-Hispanic Whites report a lower infant mortality rate than their Hispanic counterparts and in San Diego County the Hispanic population reported a higher rate than the county wide rate. (Figure 3.4 Appendix F; Table 3.3). In Imperial County, San Diego County, and California statewide, birth defects are the cause of the largest percent of infant mortality. In San Diego County and California statewide birth defects are the most frequent cause of infant mortality, followed by low birth weight and sudden infant death syndrome (Appendix F; Table 3.4).

Figure 3.4



Source: Birth and Death records, California Department of Public Health
 Healthy People 2010 Objective 16-1c: Reduce all infant deaths (within 1 year) to 4.5 per 1,000 live births

What Is Being Done?

Nationwide efforts to prevent infant mortality include programs to improve access to prenatal and newborn care, including Healthy Start, Medicaid and the State Children’s Health Insurance Program (CHIP). Health and Human Services (HHS) also supports public health campaigns to promote healthy habits among expectant parents or those caring for an infant to prevent child malnutrition. HHS also supports medical research to better understand and prevent birth defects, premature birth and Sudden Infant Death Syndrome, and to promote healthier growth and development (HHS, 2006).

The California Birth Defects Monitoring Program (CBDMP) has been actively collecting data on birth defects, stillbirths and miscarriages in a population based registry since 1982. CBDMP currently monitors a subset, over 40% of annual births in California, which represents the state's geographic, environmental and racial/ethnic diversity. The CBDMP registry data are used for ongoing surveillance to monitor rates and trends of select birth defects and to provide outcome data for the pregnancy blood samples included in the CBDMP Repository of pregnancy blood.

CDPH's Fetal and Infant Mortality Review Program (FIMR) exists to empower local community members to take necessary steps to prevent fetal and infant mortality within their communities. FIMR works to reduce racial disparities in fetal and infant deaths. Another program in California is the Sudden Infant Death Syndrome (SIDS) Program, which works to reduce the number of SIDS deaths and help families and others deal with the tragedy of SIDS. The SIDS program runs outreach programs that educate parents, families, and child-care providers how to reduce the risk of SIDS. Local SIDS programs run trainings for hospital staff, public health nurses, emergency responders, coroners, child-care providers, foster parents, and the general public on SIDS facts and how to deal with the emotional impact of a SIDS-related death.

The CDPH/MCAH Comprehensive Perinatal Services Program (CPSP) provides a wide range of culturally competent services to pregnant women from conception through 60 days postpartum. CPSP provides four separate elements of prenatal care: obstetrical, nutrition, psychosocial and health education. Women receive an initial assessment and a reassessment every trimester. Each local jurisdiction in California has a CPSP coordinator who collaborates with Medicaid providers to administer the CPSP program.

The CDPH/MCAH Black Infant Health Program provides community-based, culturally-sensitive health promotion and support services to pregnant and parenting African American women at risk of adverse birth outcomes in 15 local health jurisdictions, including San Diego County. BIH clients are followed during the prenatal and postpartum periods during which time they receive interpregnancy care services including: health and social assessments; health education regarding nutrition, exercise, breastfeeding, stress, HIV/STD prevention and the avoidance of alcohol, substance use and tobacco use; support in accessing services such as prenatal care, primary care, interpregnancy care, pediatric care and family planning; support for adherence to standardized medical prenatal and well-baby care; referrals and support to access social services, mental health services, food, shelter and clothing; and educational and vocational assistance.

LOW BIRTH WEIGHT

What Is It?

Low birth weight (LBW) is defined as a newborn weighing less than 2,500 grams (5.5 pounds). An infant born weighing less than 1,500 grams (about 3.3 pounds) is considered to be very low birth weight (VLBW). LBW and VLBR are the result of either preterm birth or restricted fetal growth. Each is associated with fetal and neonatal mortality and morbidity, inhibited growth and cognitive development, and chronic disease later in life (UNICEF, 2004).

Why Is It Important?

LBW and VLBW are considered important indicators of future health for the infant as well as for the general public. LBW statistics present a general summary of a community's long-term maternal malnutrition, ill health, and poor pregnancy healthcare (UNICEF, 2004). Individually, LBW and VLBW are associated with an array of developmental disabilities and long-term disabilities, such as cerebral palsy, autism, mental retardation, and vision and hearing impairments (HHS, 2000). Low birth weight infants are approximately 20 times more likely to die than infants who weigh more (UNICEF, 2004).

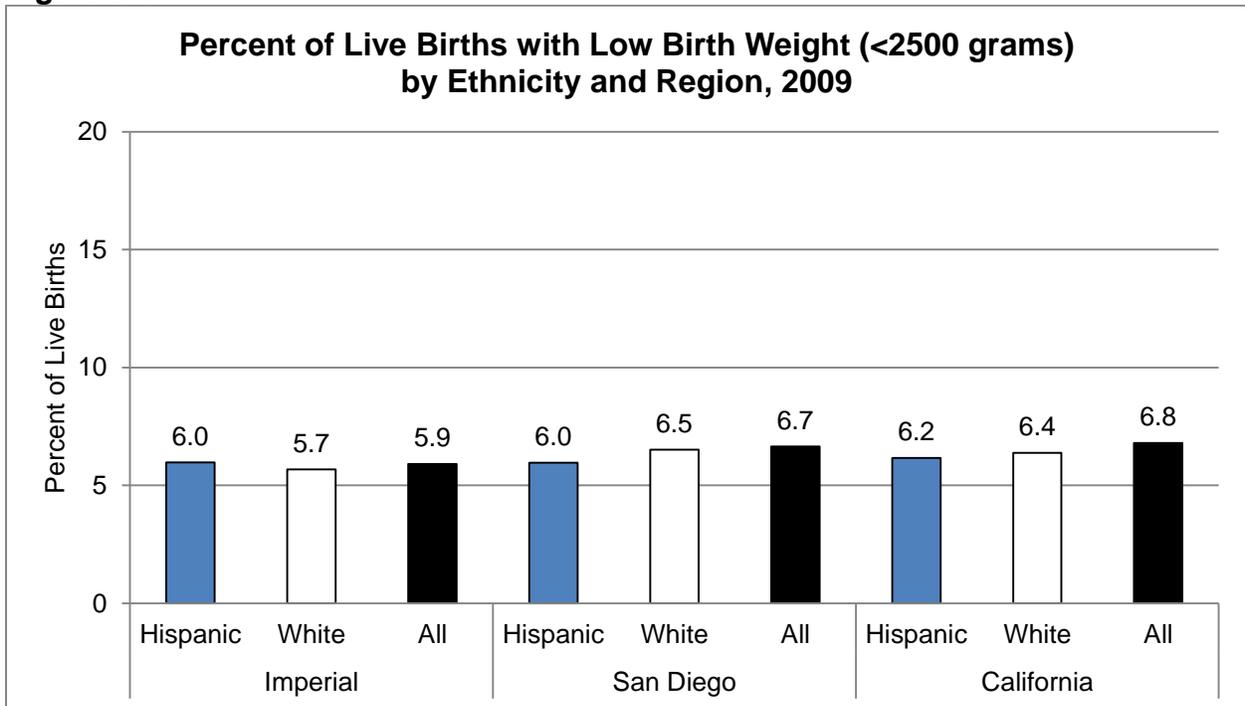
Many of the predisposing factors for LBW are derived from social determinants of health such as socioeconomic conditions, such as poor nutrition, chronic poor health, pregnancy complications, non-specific infections, chronic stress, poor living environments, and unhealthy work environments. LBW and VLBW are both the cause of and the effect of disease, representing an unhealthy cycle in individuals as well as in entire communities (UNICEF, 2004).

What Is the Status in the Border Region?

Healthy People 2010 Objective 16-10 is to reduce low birth weight babies to 5 percent of all live births and to reduce very low birth weight to 0.9 percent.

In 2009, California and San Diego County, Hispanics have a lower rate of LBW than non-Hispanic Whites and all ethnicities combined. There is no significant difference in Imperial County between the ethnicities examined with regards to LBW. Both San Diego County and California had a higher rate of LBW than Imperial County. (Figure 3.5, Appendix F; Table 3.5 & 3.6).

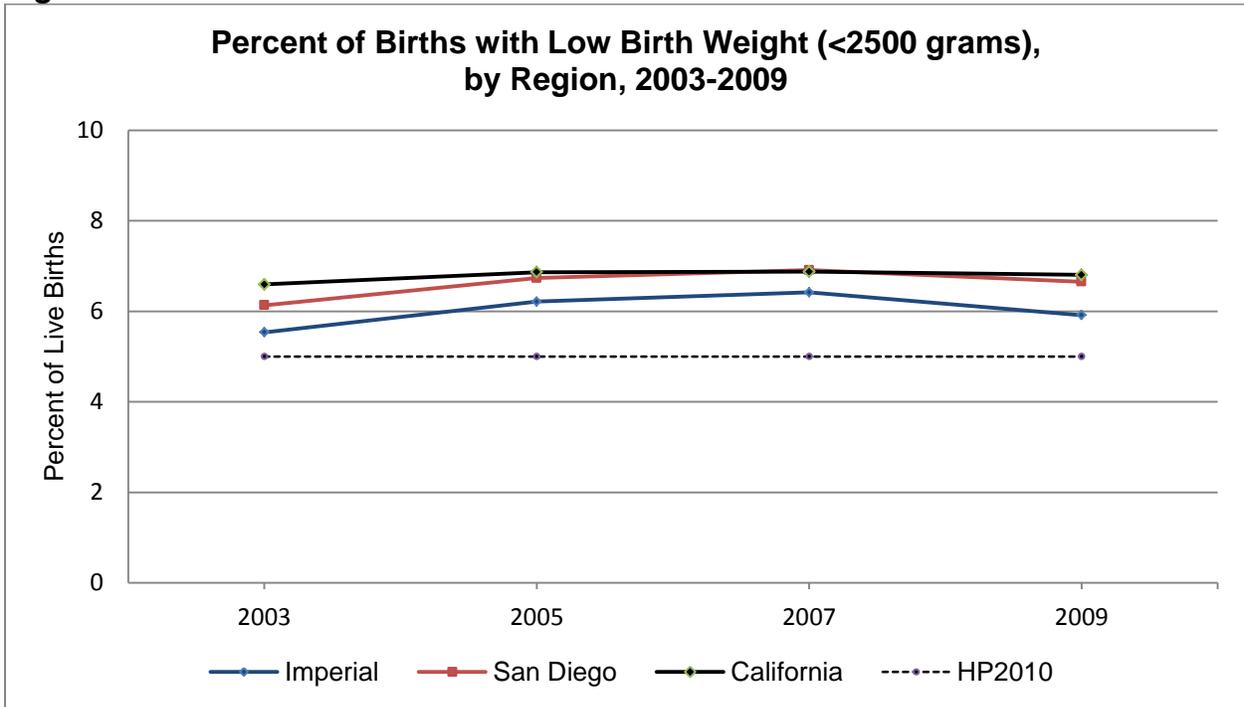
Figure 3.5



Source: CDPH Center for Health Statistics, Vital Statistic Query System, <http://www.apps.cdph.ca.gov/vsq/default.asp>
Healthy People 2010 Objective 16-10a: Reduce low birth weight (LBW) to 5.0 percent

There is no indication that any of the populations examined were approaching the Healthy People 2010 objectives. On the contrary, the rate of LBW in all regions examined had increased from 2003 to 2009. (Figure 3.6 Appendix F; Table 3.5).

Figure 3.6



Source: CDPH Center for Health Statistics, Vital Statistic Query System, <http://www.apps.cdph.ca.gov/vsq/default.asp>
Healthy People 2010 Objective 16-10a: Reduce low birth weight (LBW) to 5.0 percent

What Is Being Done?

San Diego and Imperial Counties participate in CDPH's Comprehensive Perinatal Services Program (CPSP), which works to decrease the incidence of low birth weight in infants and improve the outcome of every pregnancy. CPSP services are available from the beginning of pregnancy until 60 days after the baby is born.

The California Perinatal Quality Care Collaborative (CPQCC) is a group of public and private California leaders in healthcare committed to improving care and outcomes for the state's pregnant mothers and newborns. It provides tool kits statewide on how to care for low birth weight infants in the delivery room and nutritionally.

EARLY POSTPARTUM BREASTFEEDING

What Is It?

Breast milk is uniquely suited to the human infant's nutritional needs and is a live substance with unparalleled immunological and anti-inflammatory properties that protect against a host of illnesses and diseases for both mothers and children. The U.S. surgeon general recommends that babies be fed with only breast milk for the first six months (early postpartum) of life and partially fed breast milk through 12 months (HHS, 2011).

Why Is It Important?

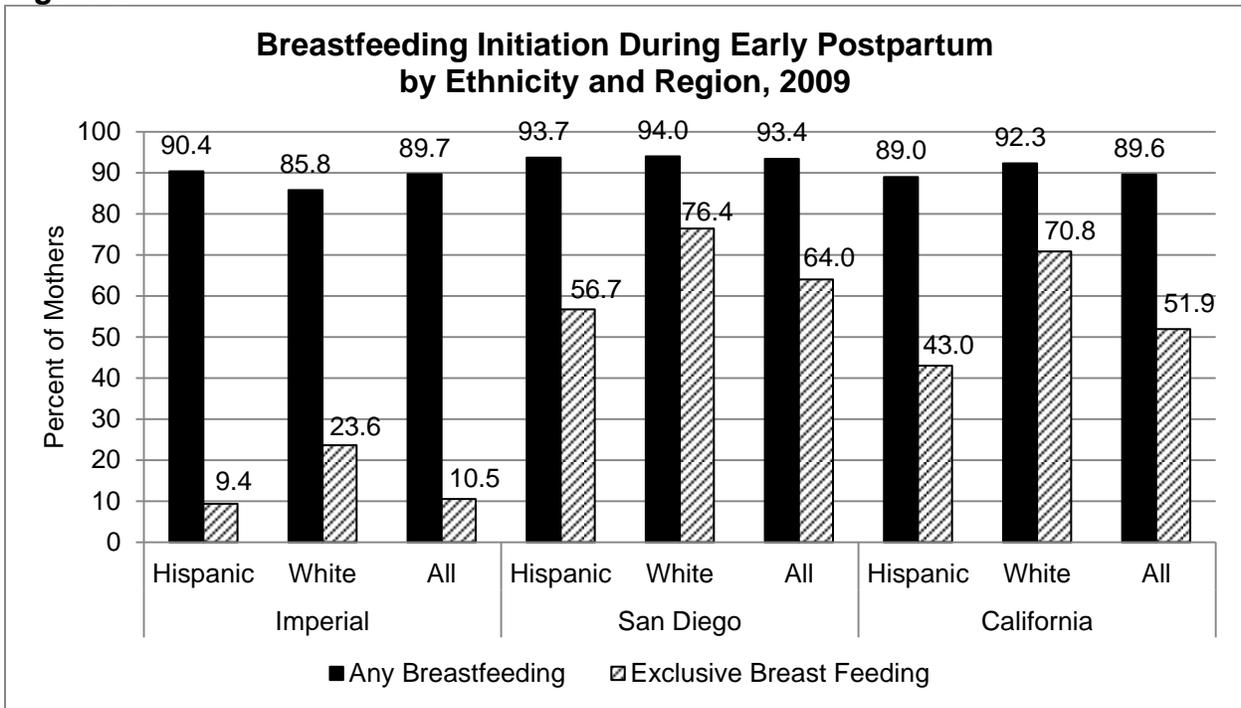
Recent studies show that babies who are exclusively breastfed for six months are less likely to develop ear infections, diarrhea, and respiratory illnesses, and may be less likely to develop childhood obesity. Breast-fed babies are sick less often and have fewer visits to healthcare providers. Both babies and mothers gain many benefits from breastfeeding. Research indicates that women who breastfeed may have lower rates of certain breast and ovarian cancers. Breastfeeding also helps the uterus shrink back to its original size as well as decreases uterine bleeding that can occur after giving birth (HHS, 2011).

Breast-fed children have a decreased risk of postneonatal death in the United States (Chen, 2004). The odds of dying among infants who are not breast-fed in the United States are more than 20 percent higher compared with infants who are breast-fed.

What Is the Status in the Border Region?

Exclusive breastfeeding in the hospital is predictive of postpartum breastfeeding patterns. In 2009, in San Diego and Imperial Counties, and California statewide all ethnicities examined met Healthy People 2010 Goals of 75% for initiating breastfeeding in the hospital. For all regions and ethnicities examined, far fewer mothers breast fed exclusively, per the Surgeon General's recommendation. Fewer than 10% of Hispanic women in Imperial County continued with exclusive breastfeeding until they left the hospital. In San Diego County, a significant percent more women exclusively breast fed while at the hospital than Imperial County and California statewide. In all regions examined non-Hispanic White women breastfed exclusively at the hospital significantly more than their Hispanic counterparts and all ethnicities combined (Figure 3.7, Appendix F; Table 3.7)

Figure 3.7



Source: Maternal, Child, and Adolescent Health Program, California Department of Public Health. <http://www.cdph.ca.gov/data/statistics/Documents/MO-BFP-HospitalRaceEthnicityReport2009.pdf>
 Healthy People 2010 Objective 16-19: Increase the proportion of mothers who breast-feed their babies in early postpartum to 75 percent

What Is Being Done?

CDPH's Breastfeeding Program promotes and supports public health and health care efforts to make breastfeeding the normal method of infant feeding in California for at least the first year of life in order to provide proven benefits to the mother, infant, and society.

San Diego County Breastfeeding Coalition/Imperial County Breastfeeding Coalition is a nonprofit association whose mission is to promote and support breastfeeding through education, outreach and advocacy in their respective communities.

CHILDHOOD IMMUNIZATIONS

What Is It?

Immunizations are one of public health's greatest achievements. Immunizations, also called vaccines, prevent and protect from dangerous illnesses. Many infectious diseases that were once common in the United States are now rare or have been virtually eliminated. Vaccines have helped in the control of various infectious diseases such as polio, measles, whooping cough, and chicken pox.

Why Is It Important?

There are many serious consequences that can occur from lack of vaccination. Infants and children are especially vulnerable to infectious diseases. Because infants are too young to receive all immunizations, they are at especially high risk of hospitalization or serious complications from vaccine-preventable diseases. Immune systems develop as children age, which is why many vaccines are given throughout childhood. Many vaccine-preventable diseases during infancy and childhood, such as whooping cough (pertussis), measles and polio, can cause lifelong disabilities or death. Fortunately, many of these diseases are under control in the United States.

Vaccine-preventable disease levels are at or near record lows. However, high immunization coverage levels should not be taken for granted. Children and adults who are not immunized benefit from the rest of the population being vaccinated. Immunizations are not just for infants and children. People of all ages need immunizations to prevent disease and to stay healthy. To continue to protect America's children and adults, maximum immunization coverage must be obtained in all populations (CDC, 2009f).

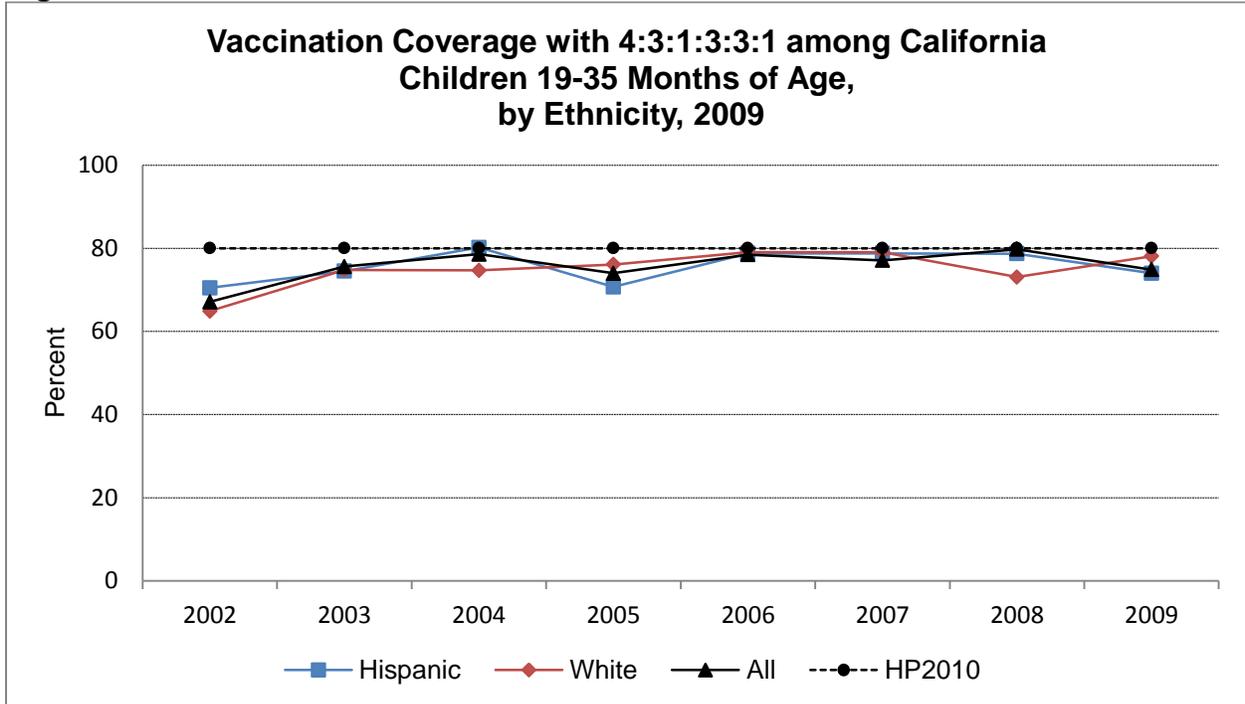
What Is the Status in the Border Region?

Healthy People 2010 has a number of objectives related to immunization coverage. California's immunization coverage goal for 2010 is in line with Healthy People 2010 objectives, with 90 percent coverage for each of the following individual vaccines: 4 doses DtaP (diphtheria, tetanus, and pertussis), 3 doses Hib (Haemophilus influenzae type B), 3 doses Hepatitis B, 1 dose MMR (Measles, mumps, and rubella), 3 doses of polio and 1 dose varicella, and 80 percent coverage for all childhood vaccine series (4:3:1:3:3:1) by 19-35 months of age (CDPH, 2009). Additionally, Healthy People 2010 aims to achieve 95 percent coverage for DtaP, MMR and polio for all children in day care and in kindergarten through first grade.

To prevent some of the most serious infections, the California School Immunization Law requires that children receive a series of immunizations before entry to schools, child-care centers, or family child-care homes. In addition, the California Immunization Law requires schools, child-care centers, and family child-care homes to enforce immunization requirements, to maintain immunization records of all children enrolled, and to submit reports to the health departments.

In California, in 2009, all ethnicities examined failed to meet Healthy People 2010 goals for complete vaccination coverage for children 19-35 months of age. There is not a persistent disparity between ethnicities and vaccination coverage (Figure 3.8, Appendix F; Table 3.8). Though California children did not meet HP2010 goals for complete coverage for 19-35 months old, by the time the children reach kindergarten, complete coverage, and coverage for each individual vaccination is over 90% (Appendix F; Table 3.9).

Figure 3.8



¹4 or more doses of DTaP, 3 or more doses of poliovirus, 1 or more doses of MMR, 3 or more doses of Hib (regardless of brand type), 3 or more doses of Hepatitis B, and 1 or more doses of Varicella.
 Source: CDC National Immunization Survey 2009, <http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis>
 HP2010 Goal: 90 percent coverage for each of the following individual vaccines: 4 doses DtaP, 3 doses Hib, 3 doses Hep b, 1 dose MMR, 3 doses of polio and 1 dose varicella, and 80 percent coverage for all childhood vaccine series by 19-35 months of age

What Is Being Done?

CDPH's Immunization Branch provides leadership and support to public and private sector efforts to protect the population against vaccine-preventable diseases. The Immunization Branch's efforts include educating the public and working directly with the Imperial County Public Health Department's Immunization Program and San Diego County Immunization Branch. The Immunization Branch produces a wide range of materials promoting immunizations in both English and Spanish. Many of the materials are developed in coordination with the four major annual immunization campaigns: Preteen Vaccine Week, National Infant Immunization Week, Wash Your Hands, and seasonal flu-prevention efforts. Educational materials and information about events can be found at <http://www.cdph.ca.gov/programs/immunize>.

In September 2010, Governor Schwarzenegger signed AB 354 - Chapter 434, 2010 requiring Tdap booster vaccination for California students. Under the new law, all 7th-12th grade students in school year 2011-12 will need to have received a dose of Tdap before starting classes. In subsequent years, the requirement will apply only to 7th graders.

The CDPH Immunization Branch manages a Spanish language web-site, *Vacunas y Mi Salud* (Vaccines and my Health). *Vacunas y Mi Salud* provides information in Spanish regarding necessary vaccines, school vaccines, vaccination programs, and other information. The web-site address is <http://vacunasymisalud.org/>.

DRAFT

Chapter 4

ENVIRONMENTAL HEALTH

Air Quality

What Is It?

Air quality can be defined as the concentration of pollutants in the air determined over a set time period. Pollutants refer to the amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation, and/or materials (CARB, 2010a).

U.S. and California environmental agencies regularly monitor a set of criteria pollutants as indicators of air quality. These include ozone, particulate matter (PM₁₀ and PM_{2.5}), carbon monoxide (CO), sulfur dioxide, and nitrogen dioxide. The California Air Resources Board (CARB) operates a statewide network of monitors to measure airborne concentrations for those pollutants. Several monitoring sites are also located in Baja California, Mexico (CARB, 2009a).

Federal and state standards are established for each of the criteria pollutants. These standards are based on the concentration above which a specific pollutant is known to cause adverse health effects in an exposed population. For some pollutants, such as PM₁₀, PM_{2.5}, ozone, sulfur dioxide, nitrogen dioxide, and CO, California's standards are more stringent than national standards. California's standards also include some pollutants that are not regulated on a national level. These pollutants are sulfates, vinyl chloride and hydrogen sulfide (CARB, 2010b). Areas of the country that have criteria pollutant levels that exceed federal standards are considered to be in "nonattainment". Areas with "attainment" status have criteria pollutant levels that do not exceed standards, and "unclassified" or "unclassifiable" areas do not have enough pollutant data to support the designation of a status (US EPA, 2010a). Attainment statuses for both San Diego and Salton Sea Air Basins are in Table 4.1.

It is important to recognize that air pollution generated on one side of the border can affect communities on the opposite side of the border. The border region in California includes two air basins (areas with similar meteorological and geographic conditions): San Diego and the Salton Sea air basins both extend over the border and encompass portions of Baja California, including Tijuana and Mexicali, respectively (CARB, 2010c). For these two joint air basins, there are no major geographic features to prevent the transport of pollutant emissions from either side of the border.

Why Is It Important?

Air pollution is a widespread public health and environmental health problem. Poor air quality contributes to a variety of health problems, including respiratory illness, cardiovascular disease, cancer, and premature death (US EPA, 2010a; US EPA, 2009a). Asthma can be triggered or worsened by exposure to ozone, particulate matter, and tobacco smoke in the air. In addition to the detrimental impact on health, air pollution reduces visibility, damages crops and buildings, and deposits pollutants on the soil and in bodies of water, where they can affect the chemistry of the water and the organisms living there (US EPA, 2007).

What Is the Air Quality in the Border Region?

Despite its large population and economic growth rates, and even greater increases in vehicle usage, the overall air quality in San Diego and Imperial Counties has improved in the past 20 years, mostly by reduced emissions from vehicles and industry, and control of dust from unpaved roads (Lampell, 2002). However, Imperial County in the Salton Sea Air Basin continues to experience air pollution problems primarily due to particulate matter attributable largely to windblown dust from open lands and unpaved roads. Construction and farming activities also contribute to particulate pollution (CARB, 2009b). Additionally, both Imperial and San Diego Counties are nonattainment areas for ozone pollution (CARB, 2010d).

Particulate Matter (PM₁₀ and PM_{2.5})

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, such as nitrates and sulfates, organic chemicals, metals, and soil or dust particles. For regulatory purposes, PM is divided into two categories depending on its size. PM₁₀ is composed of inhalable coarse particles that are larger than 2.5 micrometers and smaller than 10 micrometers in diameter. A primary health effect associated with PM₁₀ is exacerbation of existing health problems such as asthma and other respiratory illnesses. Exposure to PM₁₀ can cause premature death in people with existing heart and lung conditions (CARB, 2009c). PM_{2.5} is composed of fine particles that are smaller than 2.5 micrometers in diameter, which is approximately 1/30th the average width of a human hair. PM_{2.5} particles pose a major health concern because they are small enough to lodge deeply in the lungs (US EPA, 2010b). Another particulate type, PM_{0.1}, (*ultrafine* particles that are 0.1 micrometers in diameter or less) is currently classified in the PM_{2.5} category. These particles may be responsible for more severe health effects, because they are small and reactive enough to pass through the lungs and be carried in the bloodstream. Most ultrafine particles are created through combustion activities, especially motor vehicle transportation (CARB, 2003).

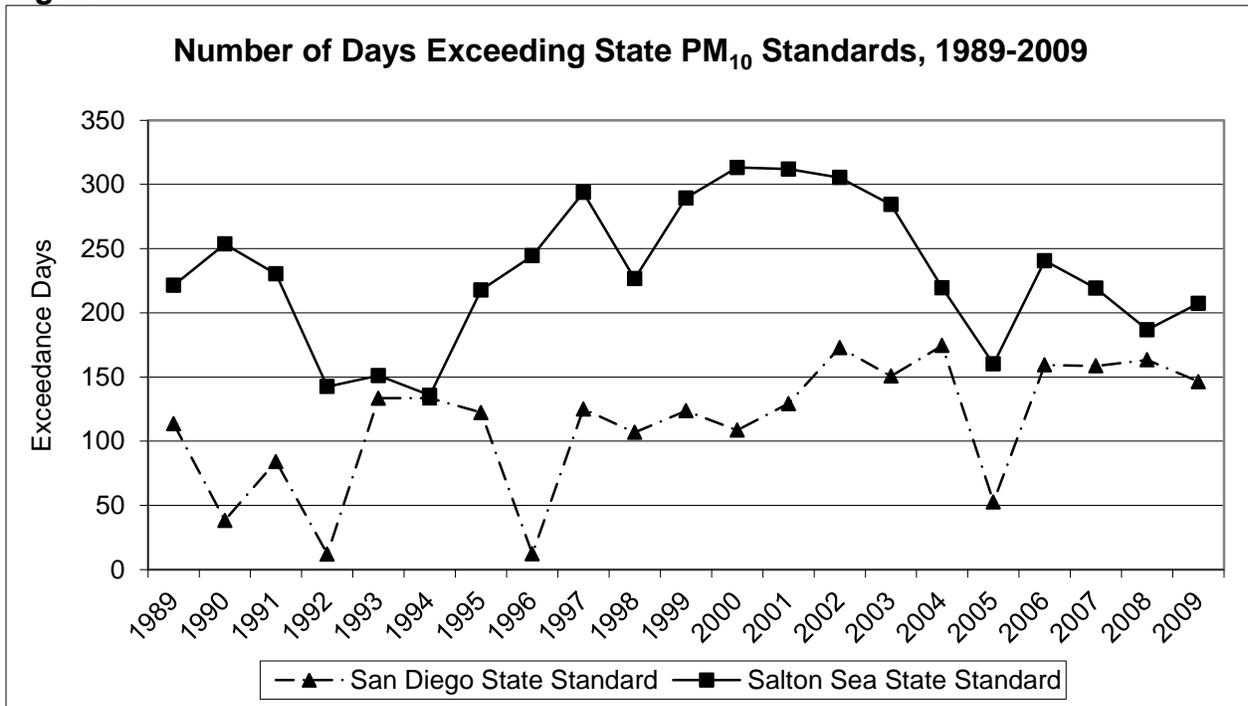
PM₁₀ is a widespread problem in California, with sources including windblown dust, and re-entrained road dust, vehicle exhaust, crushing/grinding operations, wood burning, and vehicle travel on unpaved and paved roads. Imperial County, within the Salton Sea

Air Basin, is a non-attainment area for the PM₁₀ national standards and the stricter state standards. Approximately 69 percent of generated PM₁₀ within the Salton Sea Air Basin is from fugitive windblown dust. PM₁₀ from paved and unpaved roads accounts for about 18 percent of the total PM₁₀ emissions inventory, and construction/ demolition and agricultural operations account for about 4 percent each, of the emissions inventory for the Salton Sea Air Basin (Figure 4.2; Appendix F; Table 4.4) (CARB, 2009b).

PM_{2.5} is directly emitted from industry, road dust, combustion and natural processes, and is also formed in the atmosphere by reactions of precursor gas emissions from combustion sources (US EPA, 2010b). Imperial County is currently considered unclassifiable/ attainment for the 1997 national PM_{2.5} standard and is unclassified for the state PM_{2.5} standard, with the exception of the Calexico area, which is in non-attainment for the PM_{2.5} national standard (CARB, 2010d). In the Salton Sea air basin, windblown dust, road dust, farming operations and motor vehicle exhaust are the primary sources of PM_{2.5} pollution (Figure 4.3; Appendix F; Table 4.5) (CARB, 2009b). In 2009, Salton Sea Air Basin had 207 days in exceedance of state PM₁₀ standards (Figure 4.1; Appendix F; Table 4.2)

San Diego County is unclassified for national PM₁₀ standards, and is categorized as unclassifiable/attainment for national PM_{2.5} standards. In 2009, state PM₁₀ standards were exceeded on 146 days in San Diego Air Basin (Figure 4.1, Appendix F; Table 4.2). The county is a non-attainment area for the state PM₁₀ standards (24-hour and annual) and the state PM_{2.5} standard (annual) (CARB, 2010d). The main PM₁₀ sources in San Diego County include dust from vehicle travel on paved and unpaved roads, as well as construction and demolition. In the San Diego air basin, transportation-related sources (vehicle emissions and road dust) and industrial processes are major PM_{2.5} emitters. Wildfires are also major sources of both categories of particulates in San Diego County, though the air quality impact from this source may vary by year (Figures 4.2 and 4.3; Appendix F; Tables 4.5 and 4.6) (CARB, 2009b).

Figure 4.1

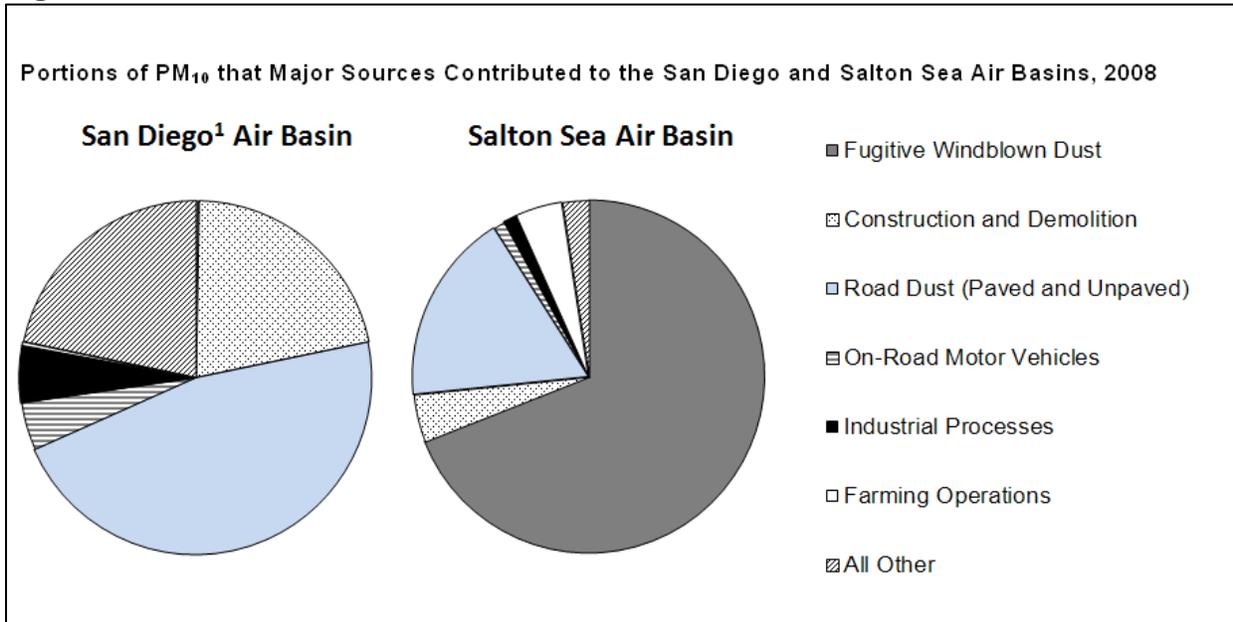


Source: California Air Resources Board (CARB), <http://www.arb.ca.gov/adam/select8/sc8start.pho>

(Note: These values may include exceptional events and calculated Days Exceeding the Standard is an estimate of days expected to exceed the standard if there was sampling every day. This estimate could be low if insufficient samples are collected.)

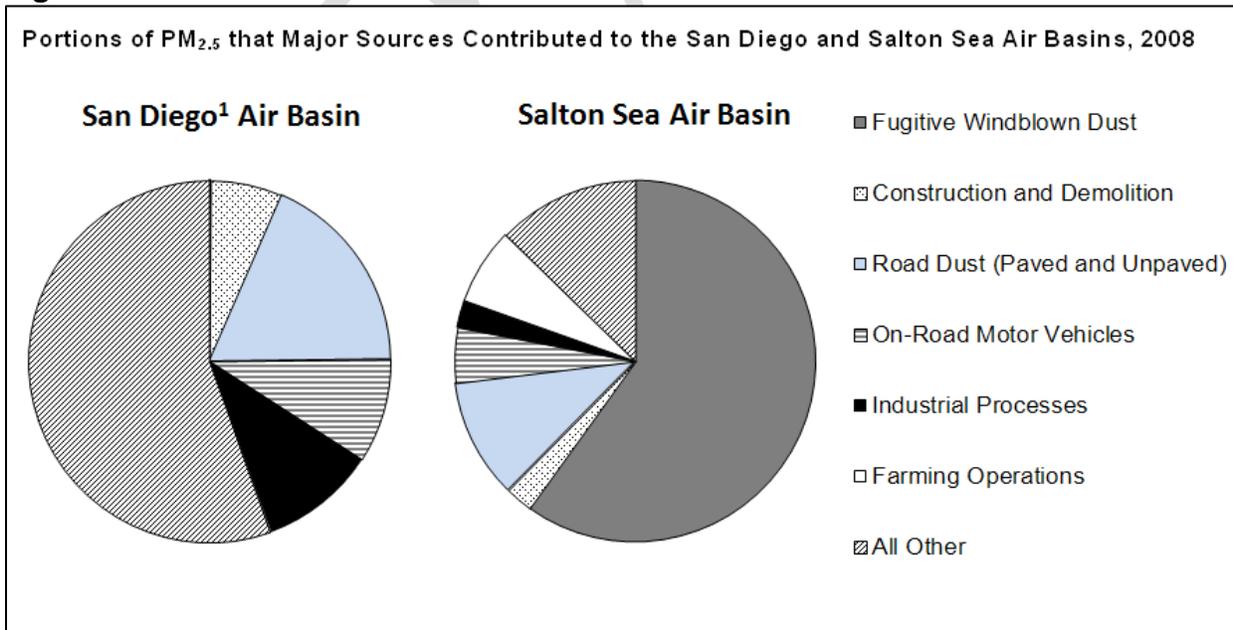
DRAFT

Figure 4.2



¹: In the San Diego air basin, PM₁₀ sources are widespread. Other notable sources include residential fuel combustion (3.25 tons per day/ 2.5% of total), cooking processes such as charbroiling (2.92 tons per day/ 2.3% of total), off-road equipment (2.37 tons per day/ 1.9% of total), aircraft (1.69 tons per day/ 1.3% of total), and electric utilities (0.9 tons per day/ 0.8% of total). Source: CARB, 2009b: <http://www.arb.ca.gov/ei/emissiondata.htm>

Figure 4.3



¹: In the San Diego air basin, PM_{2.5} sources are widespread. Other notable sources include residential fuel combustion (3.14 tons per day/ 7.3% of total), off-road equipment (2.13 tons per day/ 5.0% of total), cooking processes such as charbroiling (1.75 tons per day/ 4.1% of total), aircraft (1.68 tons per day/ 3.9% of total), and electric utilities (0.88 tons per day/ 2.1% of total). Source: CARB, 2009b: <http://www.arb.ca.gov/ei/emissiondata.htm>

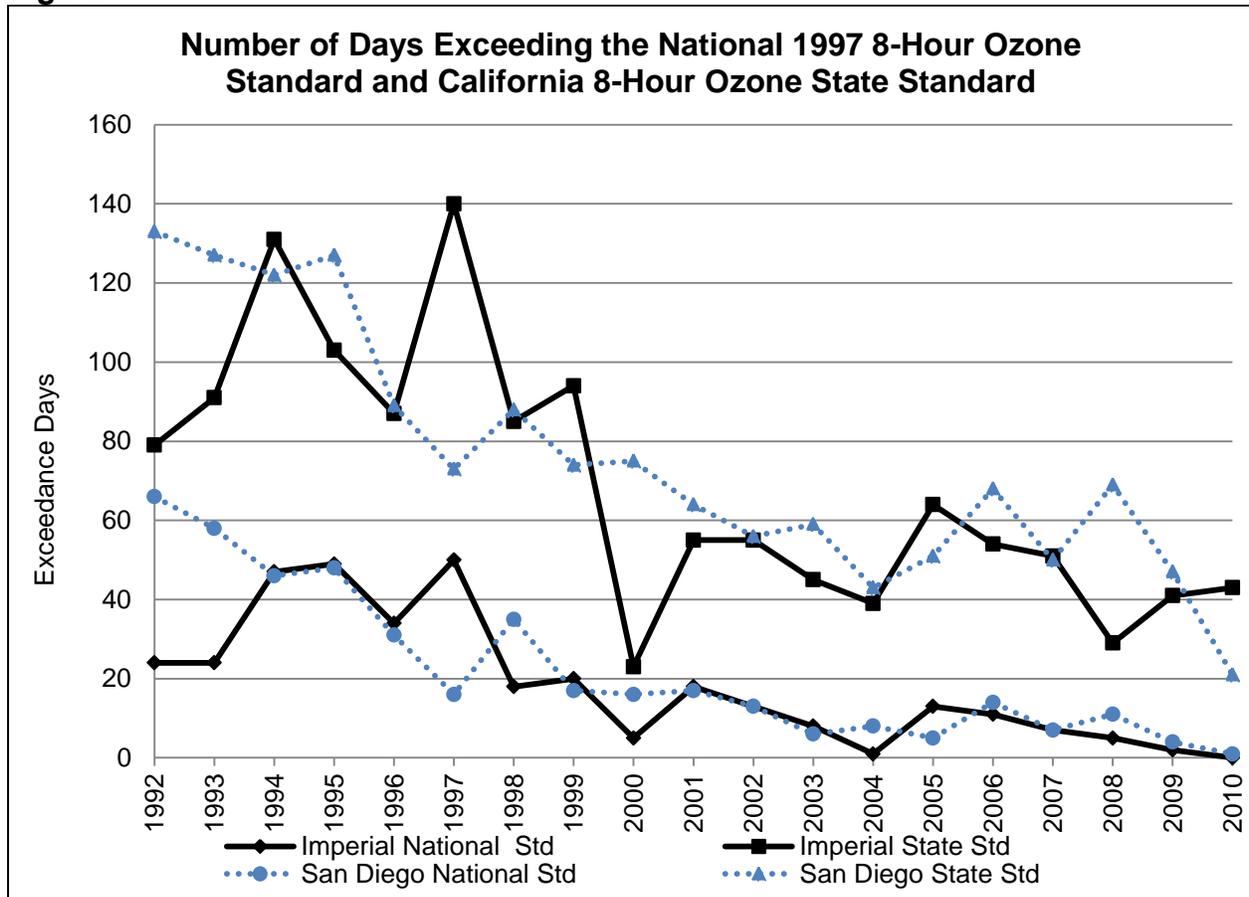
Ozone

Ground-level ozone is the chief component of urban smog and is a pollutant that can exacerbate asthma and other respiratory diseases. Unlike other air pollutants, ozone is not directly emitted. It is formed in the air by chemical processes involving precursor gaseous pollution and sunlight (US EPA, 2010b). Vehicles are responsible for most of the emissions of ozone precursors (Imperial Valley Air Pollution Control District, 2011). Ozone can affect large areas, even far downwind of the emissions. The U.S. Environmental Protection Agency (US EPA) initially proposed a revision to the 1997 8-hour ozone standard in 2008. In 2010, U.S. EPA proposed a more stringent standard that is currently under review and is expected to be released in summer 2011. All of the major urban areas in California, as well as some rural areas such as Imperial County, are in nonattainment for the national and state ozone standards (CARB, 2010d). San Diego County is designated as nonattainment for the national and state ozone standards. In December 2009, U.S. EPA determined that Imperial County ozone concentrations now meet the 1997 8-hour ozone standard. However, it appears that Imperial County will be designated nonattainment for the revised ozone standard that U.S. EPA is expected to finalize later this year.

Although, Imperial County is designated nonattainment for the national (8-hour) and state (one-hour and 8-hour) ozone standards, ozone levels are decreasing significantly. From 1990 to 2009, the number of days that the stricter state standards were exceeded in Imperial County decreased from a high of 131 days in 1994 to 43 days in 2010, a decrease of 67 percent. Similarly, the number of days over the national standard declined from 47 in 1994 to 0 in 2010. Within Imperial County, vehicles traveling on roads and highways were responsible for the bulk of the ozone precursor emissions, followed by off-highway vehicles including agricultural equipment and recreational vehicles (CARB, 2009b). Transport analysis indicates that, on most days, Calexico's air quality is overwhelmingly influenced by emissions from Mexicali which is directly across the border in Mexico.

San Diego County is a nonattainment area for the national (8-hour average) and state (one-hour and 8-hour average) ozone standards. The county is considered to have a serious level of nonattainment for state 1-hour ozone standards (CARB, 2010d). However, despite continued growth in population and motor vehicle usage, San Diego County has also experienced substantial improvement in ozone air quality over the past decades as a result of State and local emission control efforts, including upwind emission reductions (APCD, 2009). The number of days over the State 8-hour ozone standard declined from 122 days in 1994 to only 21 days in 2010, a decrease of 83 percent. Similarly, the number of days over the national standard declined from 46 in 1994, to 1 in 2010 (CARB, 2010e). Mobile sources (such as on-road and off-road motor vehicles, ships, trains, and aircraft) produce the majority of ozone precursor emissions in San Diego County. Stationary industrial facilities and consumer and home products contribute to a lesser extent (CARB, 2009b).

Figure 4.4



Source: (CARB, 2010e), <http://www.arb.ca.gov/adam/select8/sc8start.php>

Carbon Monoxide (CO)

Carbon monoxide (CO) is a byproduct of combustion. In urban areas, most CO pollution is emitted directly by mobile sources such as cars and trucks. CO reduces the ability of the blood to carry oxygen, which can be critical for people with heart disease, chronic lung disease, or anemia, as well as for unborn children (US EPA, 2010b). Unlike other pollutants, CO problems tend to be geographically localized. In recent decades, CO levels have decreased greatly in most areas of California as a direct effect of using cleaner fuels and vehicles, despite significant increases in population and vehicle use.

Currently, the entire State of California is in attainment for both federal and state CO standards (Table 4.1). The city of Calexico in Imperial County had been designated as a nonattainment area for the State CO standard from 1995 to 2005. In 2006, Calexico was re-designated to attainment for the CO standard (CARB, 2010d).

Table 4.1

2010 Attainment Statuses of Salton Sea and San Diego Air Basins					
Air Basin	Standard	Ozone	PM₁₀	PM_{2.5}	CO
Salton Sea	National	Nonattainment	Nonattainment	Unclassifiable / Attainment	Attainment
	State	Nonattainment	Nonattainment	Unclassified	Attainment
San Diego	National	Nonattainment	Unclassified	Unclassifiable / Attainment	Attainment
	State	Nonattainment	Nonattainment	Nonattainment	Attainment
State Standard		8-hour, 0.070 ppm	24-hour, 50 µg/m ³ Annual, 20 µg/m ³	Annual, 12 µg/m ³	8-hour, 9 ppm
		1-hour, 0.09 ppm			1-hour, 20 ppm
National Standard		8-hour, 0.075 ppm	24-hour, 150 µg/m ³	24-hour, 35 µg/m ³	8-hour, 9 ppm
				Annual, 15 µg/m ³	1-hour, 35 ppm

* In December 3, 2009, U.S. EPA published its finding that Imperial County attained the 1997-8-hour ozone standard
Unclassified/ Unclassifiable: Information is incomplete and does not support a designation of attainment or non-attainment.
Attainment: The state standard for that pollutant was not violated at any site in the area during a three-year period.
Non-attainment: There was at least one violation of a state standard for that pollutant in the area.
Sources: CARB, 2010b: <http://www.arb.ca.gov/desig/adm/adm.htm>.

ASTHMA

What Is It?

Asthma is a chronic inflammatory lung disease. Common symptoms include recurrent episodes of shortness of breath, wheezing, coughing, and chest tightness. Asthma episodes can range from mild to life-threatening, but can be controlled and prevented with appropriate clinical management and by limiting exposure to environmental triggers (Millet, Tran, Eatherton, Flattery, & Kreutzer, 2007). Asthma may be caused by a variety of factors such as family history, exposure to secondhand smoke and other environmental pollutants, or the household environment. Asthma symptoms may be triggered by animal dander, mold, pollen, stress, and exercise, and ambient air pollution from vehicles and other sources (California Breathing, 2007).

Why Is It Important?

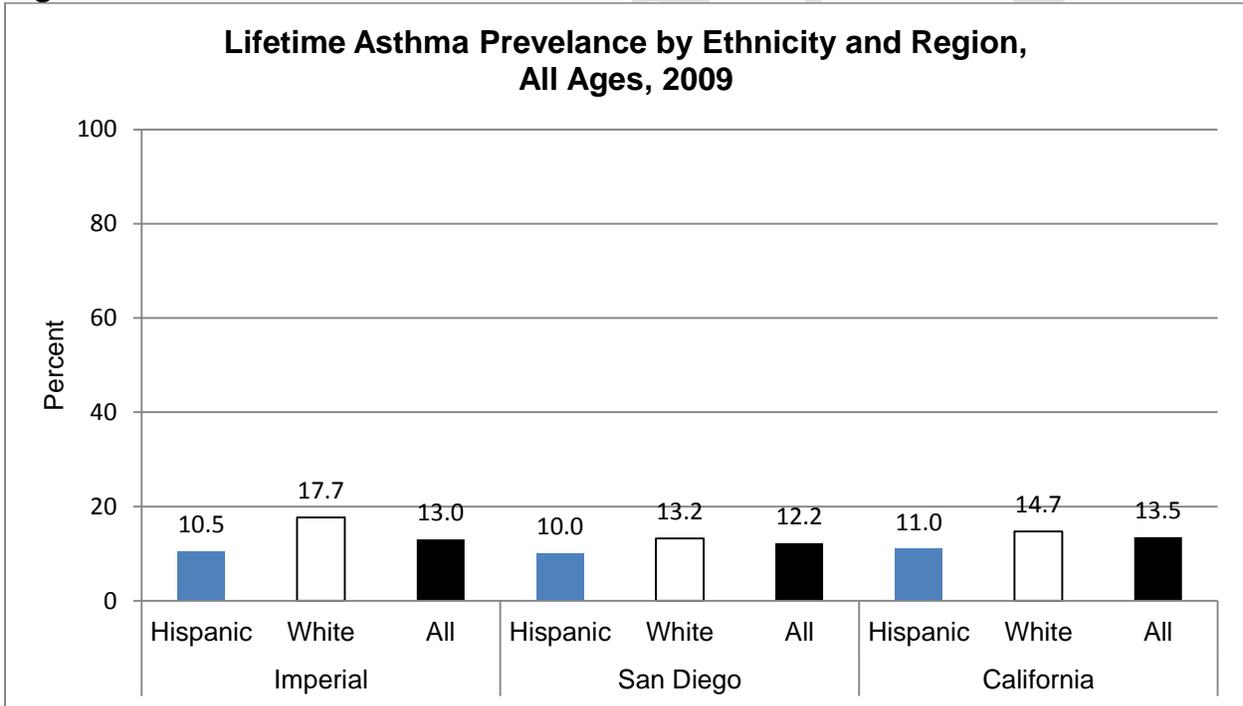
Asthma is one of the most common chronic diseases in the United States and has been recognized as a growing public health concern (Millet, Tran, Eatherton, Flattery, & Kreutzer, 2007). It has significant and costly negative effects on those with the disease and on society as a whole, being directly responsible for lower quality of life, elevated medical care expenditures, reduced work productivity, school absenteeism, and loss of life (Meng, Babey, Malcolm, Brown, & Chawla, 2003). More than 5 million Californians have been diagnosed with asthma at some point in their lives, and nearly 3 million currently have the disease (Millet, Tran, Eatherton, Flattery, & Kreutzer, 2007). Asthma is also one of the leading chronic childhood diseases in the United States and a major cause of childhood disability (Asthma and Allergy Foundation of America, 2011). In California alone, it affects 1.7 million children (Millet, Tran, Eatherton, Flattery, & Kreutzer, 2007). Asthma is the primary cause of hospitalizations among children in the

United States and continues to be the leading cause of school absenteeism. These absences not only reduce the child’s ability to learn and participate in school, they also translate to lost funds for school districts because of reduced average daily attendance for funding.

What Is the Status in the Border Region?

Asthma prevalence has increased dramatically in the United States during the past two decades (Stockman, Shaikh, Von Behren, & Kreutzer, 2003; American Lung Association, 2010). In California, San Diego County, and Imperial County there has been no improvements in asthma prevalence from 2005-2009. All regions and ethnicities examined remained at over 10 percent asthma prevalence. The trend is mirrored in adults (18+ years) and in children (0-17 years) for all three regions with the exception of children in California which decreased significantly from 16.1 percent to 12.7 percent (Figure 4.5, Appendix F; Table 4.6).

Figure 4.5



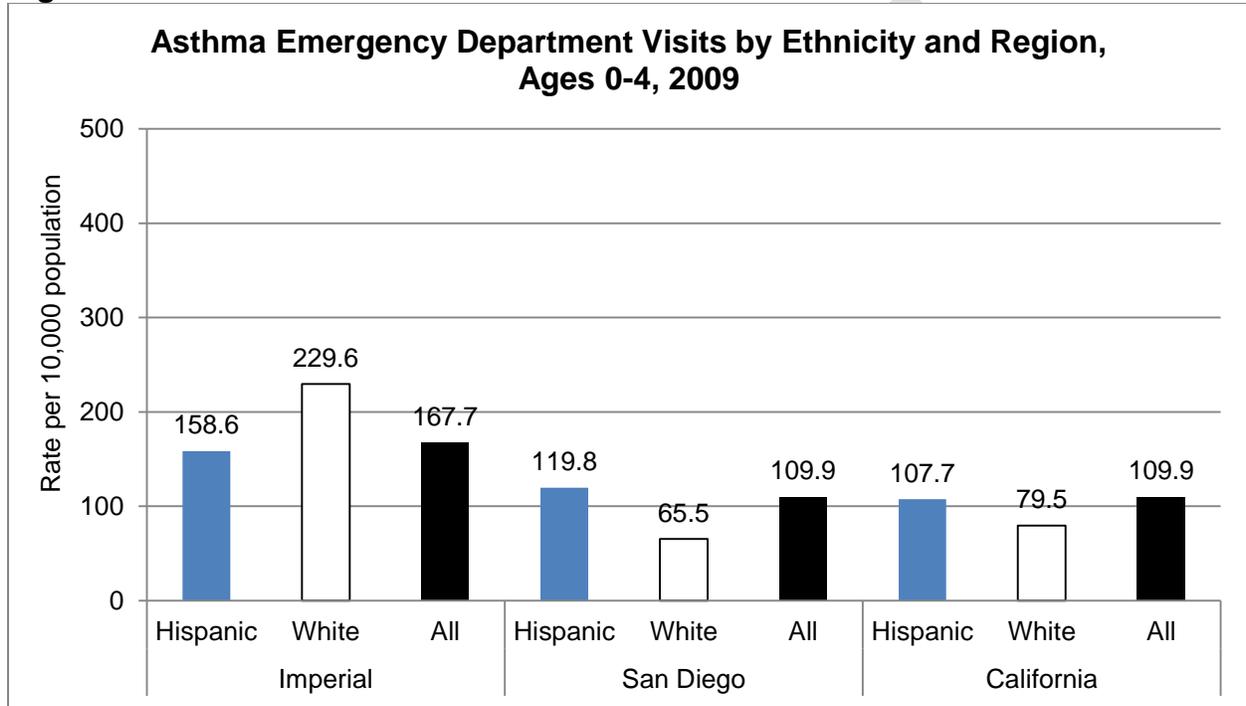
Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

ASTHMA EMERGENCY DEPARTMENT (ED) VISITS

There are a number of reasons people may go to the ED or be hospitalized for treatment of asthma symptoms. These include improper asthma management, lack of a plan for managing worsening asthma, or lack of health insurance or access to a primary health care provider (California Breathing, 2007).

Rates of emergency department (ED) visits are significantly higher in Imperial County than San Diego County and California statewide. In San Diego County and California statewide, all ethnicities combined and Hispanics had significantly higher rates of ED visits than the White population. In both San Diego County and California statewide rates of asthma ED visits for the population as a whole and the Hispanic population increased significantly from 2005-2009. While both San Diego County and California met Healthy people 2010 goals, Imperial County did not (Figure 4.6; Appendix F; Table 4.7).

Figure 4.6



^a age-adjusted rate per 10,000 population
 Source: 2010 Environmental Health Investigations Branch Asthma Query (http://www.ehib.org/page.jsp?page_key=24)
 HP 2010 Goal: Reduce the rate of asthma emergency department visits in children under age 5 years to 150 per 10,000 population

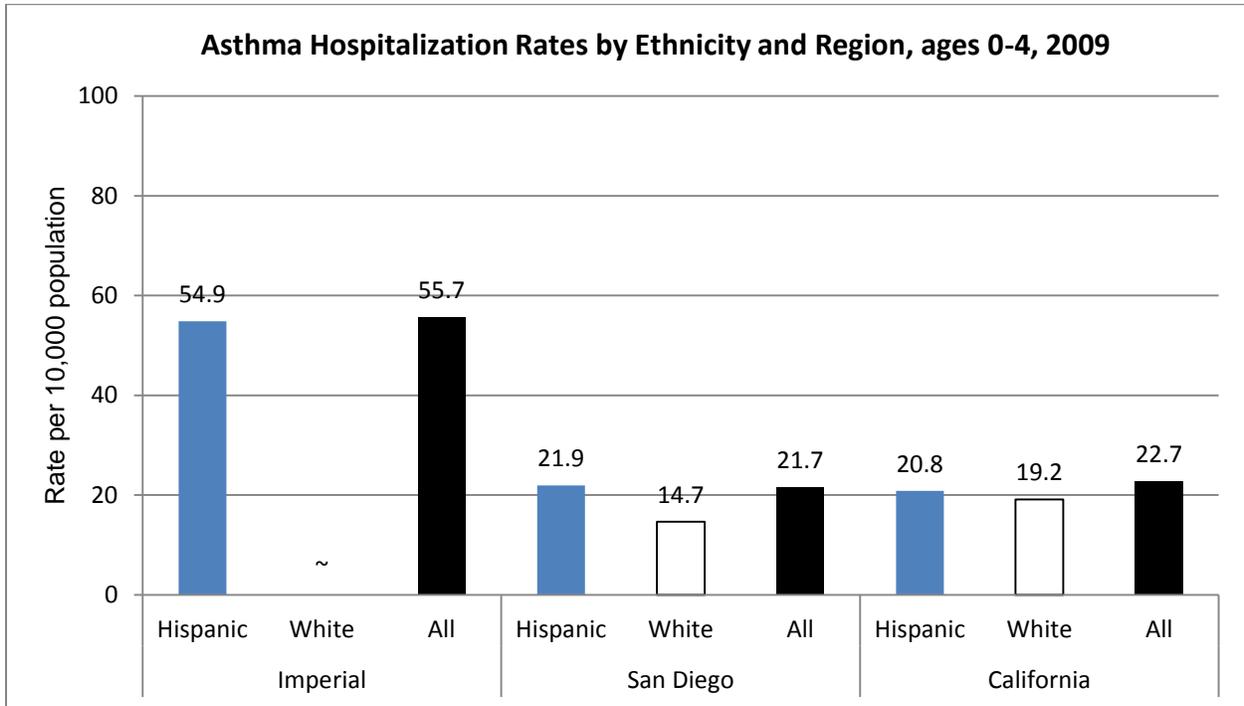
ASTHMA-RELATED HOSPITALIZATIONS

Asthma hospitalization rates in the United States have gradually declined during the past two decades (American Lung Association, 2010). In 2005, California reported lower asthma hospitalization rates than for the United States. However, rates varied by race/ethnicity and county (California Breathing, 2007). In San Diego County and California statewide all ethnicities examined met the Healthy People 2010 goals. In San Diego County the White population had a rate significantly lower than the Hispanic population and all ethnicities combined. Additionally the White population in California has shown significant improvement from 2005-2009 decreasing from 23 percent to 19.2 percent (Figure 4.7, Appendix F; Table 4.6).

Imperial County does not mirror the trends in California and San Diego County. Rates of asthma hospitalization in Imperial County in 2009 are significantly higher than San

Diego County and California statewide rates. From 2005-2009 there has been no improvement in Imperial County and the rates do not meet the Healthy People 2010 goal (Figure 4.7, Appendix F; Table 4.8).

Figure 4.7



^a age-adjusted rate per 10,000 population
 Source: 2010 Environmental Health Investigations Branch Asthma Query (http://www.ehib.org/page.jsp?page_key=24)
 HP 2010 Goal: Reduce the rate of asthma hospitalizations in Children under age 5 years to 25 per 10,000 population

What is being done?

CALIFORNIA ASTHMA PUBLIC HEALTH INITIATIVE (CAPHI)

CAPHI is a program within the California Department of Public Health (CDPH) that aims to improve the quality of life for all children and adults with asthma in California. Specifically, the program collaborates with local agencies and organizations to reduce preventable asthma morbidity and mortality, eliminate disparities, and implement effective programs and policies according to national guidelines. CAPHI has worked with stakeholders to create strategic plans and guidelines for asthma in California (CAPHI, 2008).

California Breathing

California Breathing, within the California Department of Public Health’s Environmental Health Investigations Branch, is charged with implementing the state’s Strategic Plan for Asthma. The program focuses on asthma surveillance and developing interventions

that focus on environmental causes of asthma and asthma symptoms. California Breathing works with a network of partners to expand surveillance and intervention strategies statewide (California Breathing, 2011).

San Diego Regional Asthma Coalition

Comprised of a collaborative of over 50 agencies including local government, community clinics, health care providers, school districts, and community organizations, the San Diego Regional Asthma Coalition addresses asthma from surveillance, research, disease management, service, and environmental perspectives. The Coalition provides outreach and educational materials and research results; it also coordinates community projects to increase asthma awareness and improve environmental conditions for vulnerable populations.

PESTICIDE ILLNESS

What is it?

A pesticide is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest. Pests are living organisms that occur where they are not wanted or that cause damage to crops or humans or other animals. Examples include: insects, mice and other animals, unwanted plants (weeds), fungi, microorganisms such as bacteria and viruses, and prions. The term pesticide refers to insecticides, herbicides, fungicides, and various other substances used to control pests. Additionally, there are many household uses for pesticides including, cockroach sprays and baits, insect repellents for personal use, rat and other rodent poisons, flea and tick sprays, powders, and pet collars, kitchen, laundry, and bath disinfectants and sanitizers, products that kill mold and mildew, some lawn and garden products, and some swimming pool chemicals (US EPA, 2011).

PESTICIDE ILLNESS AND INJURY

By their nature as substances that in many cases are designed to kill pests, pesticides can pose risks to humans and to the environment. The health effects of pesticides depend on the type of pesticide. For example, pesticides such as organophosphates and carbamates affect the nervous system, while others may affect the hormone or endocrine system in the body. Additional health effects may include skin or eye irritation and other carcinogenic symptoms. In many cases, the amount of pesticide people are likely to be exposed to is too small to pose a risk. To determine risk, one must consider both the toxicity and hazard of the pesticide as well as the likelihood of exposure. A low level of exposure to a very toxic pesticide may be more dangerous than a high level of exposure to a relatively low toxicity pesticide. Hospitalization may be necessary for individuals exposed to a certain degree of pesticide (US EPA, 2011).

Workers in certain occupations may be exposed to pesticides by:

- Preparing pesticides for use, such as mixing a concentrate with water or loading the pesticide into application equipment.
- Applying pesticides, such as in an agricultural or commercial setting.
- Entering an area where pesticides have been applied to perform tasks, such as picking crops (US EPA, 2011).

Acute pesticide poisoning can cause severe harm to the individual and have an economic impact due to the cost of hospitalization and loss of wages. Pesticides can cause short-term adverse health effects, called acute effects, as well as chronic adverse effects that can occur months or years after exposure. Examples of acute health effects include stinging eyes, rashes, blisters, blindness, nausea, dizziness, diarrhea, and death. Examples of known chronic effects are cancers, birth defects, reproductive harm, neurological and developmental toxicity, immunotoxicity, and disruption of the endocrine system.

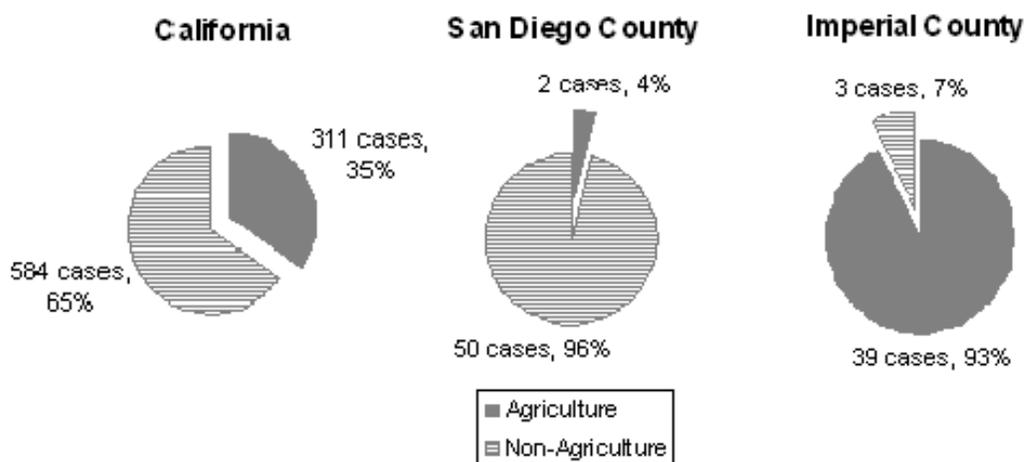
PESTICIDE USE AND PESTICIDE RELATED ILLNESSES AND INJURY IN THE BORDER REGION

In 2009, California's 81,500 fields and ranches earned \$34.8 billion in revenue. California agriculture includes more than 400 commodities and account for nearly half of the country's fruits, nuts, and vegetables (CDFA, 2010). San Diego and Imperial Counties are routinely in California's top ten agriculture counties, ranking 9th and 10th respectively, and each earning approximately \$1.5 billion in 2009 (*Summary of California County Agricultural Commissioners' Reports, 2008-2009.*) The same year, over one million pounds of pesticide were applied in San Diego County and over 3.6 million pounds were applied in Imperial County (Department of Pesticide Regulation (DPR) 2009 Annual Pesticide Use Report Indexed by Chemical).

In California, in 2008, pesticides were at least a possible contributing factor (pesticide associated) in 895 (70 percent) of the 1,275 cases investigated. Pesticide associated cases are cases that have been investigated and found to be definitely, probably, or possibly related to pesticide exposure. Agriculture was the source of exposure in 35 percent of the 895 pesticide associated cases. In Imperial County, agriculture was the source in 93 percent (39) of the 42 pesticide related cases and in San Diego County, the principle source was non agriculture related (96 percent, 50 of 52 pesticide related cases) (Figure 4.8) (DPR, 2010).

Figure 4.8

Pesticide Illness Cases¹ by Region and Intended Use, 2008



¹Cases probably, possibly, and definitely related to pesticide exposure

Source: California Department of Pesticide Regulation Summary of Illness/Injury Incidents Reported in California as Potentially Related to Pesticide Exposure Summarized Statewide and by County of Occurrence 2008
http://www.cdpr.ca.gov/docs/whs/pisp/2008total_illness_county.pdf

In 2008, the largest pesticide episode due to drift occurred in Imperial County. An aerial application of malathion to alfalfa drifted approximately a half mile onto three farm labor crews harvesting broccoli. Thirty four of 46 workers interviewed reported health effects from the incident. Samples were collected and unambiguously identified the presence of malathion. The applicator paid a fine of \$5,000 (DPR, 2008).

What is being done?

In order to track patterns of pesticide illness, develop trainings and informational materials, recommend protective standards, and determine liability, surveillance throughout the United States and California is conducted. Even though pesticide illness is a reportable disease, it is widely believed that pesticide illness is under-reported due to a number of factors (i.e. physician's diagnosis, lack of access to health care, language barriers, etc.) (NRDC, 1998). In addition to these barriers, in the border counties, individuals may seek medical attention on the other side of the border.

In California, pesticide illness is a reportable disease. Since 1971, California law has required doctors, when they suspect an illness or injury related to pesticide exposure, to contact their local health department. Pesticide illness reporting programs are administered by both the California Department of Public Health and (CDPH) and the California Environmental Protection agency (CalEPA).

CDPH's Occupational Pesticide Illness Prevention Program (OPIPP) is administered by CDPH's Occupational Health Branch. OPIPP is one of twelve state programs that

reports pesticide illness cases to the Centers for Disease Control's National Institute for Occupational Safety and Health (NIOSH) Sentinel Event Notification System for Occupational Risk (SENSOR) database. Reporting to NIOSH enables them to assess the magnitude and trends of acute occupational pesticide-related illness and injury, and develop preventative interventions nation-wide.

CalEPA's Department of Pesticide Regulation's (DPR) Pesticide Illness Surveillance Program (PISP) tracks both occupational and non-occupational pesticide illness. It is the oldest and largest pesticide illness surveillance system in the nation. PISP documents information on adverse effects from pesticide products and maintains a database that is used for evaluating the circumstances of pesticide exposure resulting in illness. PISP data is evaluated and categorized to determine illness trends and potential areas for further investigation. PISP data also helps DPR reevaluate pesticide registrations and modify use practices to enhance protection for people and the environment. Scientists at DPR and the U.S. Environmental Protection Agency also use the information to improve safety information on pesticide labels.

PISP data is summarized annually in a report released by DPR. PISP data is also available through their California Pesticide Illness Query (CalPIQ) at http://apps.cdpr.ca.gov/calpiq/calpiq_input.cfm.

To identify possible pesticide illnesses or injuries that might go unreported by doctors, DPR's also reviews illness reports submitted to the State workers' compensation system. An investigation is initiated when a report mentions a specific pesticide – or pesticides in general - as a possible cause of injury. Reports that cite unspecified chemicals also prompt investigation if the incident occurs in a setting associated with pesticide use. Additionally, DPR has conducted a number of initiatives including a cooperative effort with the California Poison Control System (CPCS). If a consulting physician contacts CPCS about a pesticide-related case, CPCS will offer to report the case for the physician.

The CPCS is a public service and provides immediate, free and expert treatment advice, and referrals over the telephone in case of exposure to poisonous or toxic substances. Interpreters, in many languages, including Spanish, are always available. CPSC is managed by the University of California San Francisco, School of Pharmacy, Department of Clinical Pharmacy and consists of four call centers: UC Davis Medical Center (Sacramento Division), San Francisco General Hospital (San Francisco Division), Children's Hospital Central California (Fresno/Madera Division), UC San Diego Medical Center (San Diego Division). Pharmacists, physicians, nurses, and poison information providers answer the calls to 1-800-222-1222, 24 hours a day, 7 days a week, 365 days a year.

County agricultural commissioners investigate all cases within their jurisdictions, whether identified by physician reports, generated by CPCS or found through DPR's review of workers' compensation reports. DPR provides commissioners with instruction, guidance, oversight, and technical support during their investigation. After commissioners complete their investigations, they prepare reports describing the

circumstances under which pesticide exposure may have occurred and other relevant information. They may also assess fines and other penalties, if circumstances warrant.

LEAD POISONING

What Is It?

Lead is a metal that is found naturally in the Earth's crust and is used commercially and industrially. Lead can be combined with other substances to manufacture automobile batteries, ammunition, pigments, glazes, dyes, paints, and other construction materials such as piping and solder (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007a). Lead was also extensively used as a gasoline additive. Because of lead's known negative effects on humans and the environment, the use of lead in gasoline, food cans and paints has been dramatically reduced or banned for decades in the United States (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007a).

People are exposed to lead when they come into contact with products that are contaminated with lead, or through lead-contaminated soil or dust in the environment. There is still limited ongoing lead emission into air from varied sources. Lead can enter the body through breathing, but it is most frequently ingested (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007b). The most common sources of lead exposure in the United States are deteriorating lead-based paint in older buildings, and soil and dust contaminated with lead. People may also be exposed to lead through their occupations, older plumbing fixtures, lead-glazed ceramics and pottery, traditional remedies, contaminated food products, and hobbies such as furniture refurbishing and stained glass making (US EPA, 2010b).

Lead in the body can affect almost every organ and system, though the most frequent effects of lead toxicity take place in the nervous system. Acute exposure to very high amounts of lead can cause serious brain or kidney damage, sterility, miscarriage or death. Some symptoms of toxicity from long-term lead exposure include decreased performance in nervous system tests, weakness in fingers, wrists or ankles, changes in blood pressure and anemia (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007b). Infants and children are more vulnerable to lead poisoning than adults are for several reasons. They are more likely to swallow contaminated items such as paint chips, their bodies absorb a bigger proportion of lead when they ingest it, and their organs and systems are still developing. Fetuses exposed to lead in the womb are also more vulnerable to the long-term effects from lead. Symptoms of chronic lead poisoning in babies and children include decreased IQ, learning deficits and hyperactivity, anemia, kidney problems, stomach aches, behavioral problems, reduced mental and physical growth, and weakness (American Academy of Pediatrics, 2005; United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007b).

Why Is It Important?

Despite dramatically reduced lead levels in many products and in mean blood levels, lead still is considered one of the top environmental hazards for children in the United States (President's Task Force on Environmental Health Risks and Safety Risks to Children, 2000). In 2007-2008, about 1% of children in the United States had blood lead levels greater than or equal to 10µg/dL, the Centers for Disease Control and Prevention level of concern (US EPA, 2010c). However research has indicated that negative health effects may be seen in children with blood lead levels below the 10µg/dL threshold, indicating that there is no safe level of lead in children's blood (Forum on Child and Family Statistics, 2010, US EPA, 2004).

Exposure to chipping lead-based paint is a particular problem for children living in homes built before 1978, the year in which sales of lead-based paint were banned. Flaking, chipping paint is most associated with deteriorated housing in urban areas (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007a). Studies have suggested that ingesting a single chip of paint would expose a child to more lead than would many other short-term exposures (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007b). In 2009, an estimated 25% of U.S. homes had significant lead-based hazards (Forum on Child and Family Statistics, 2010).

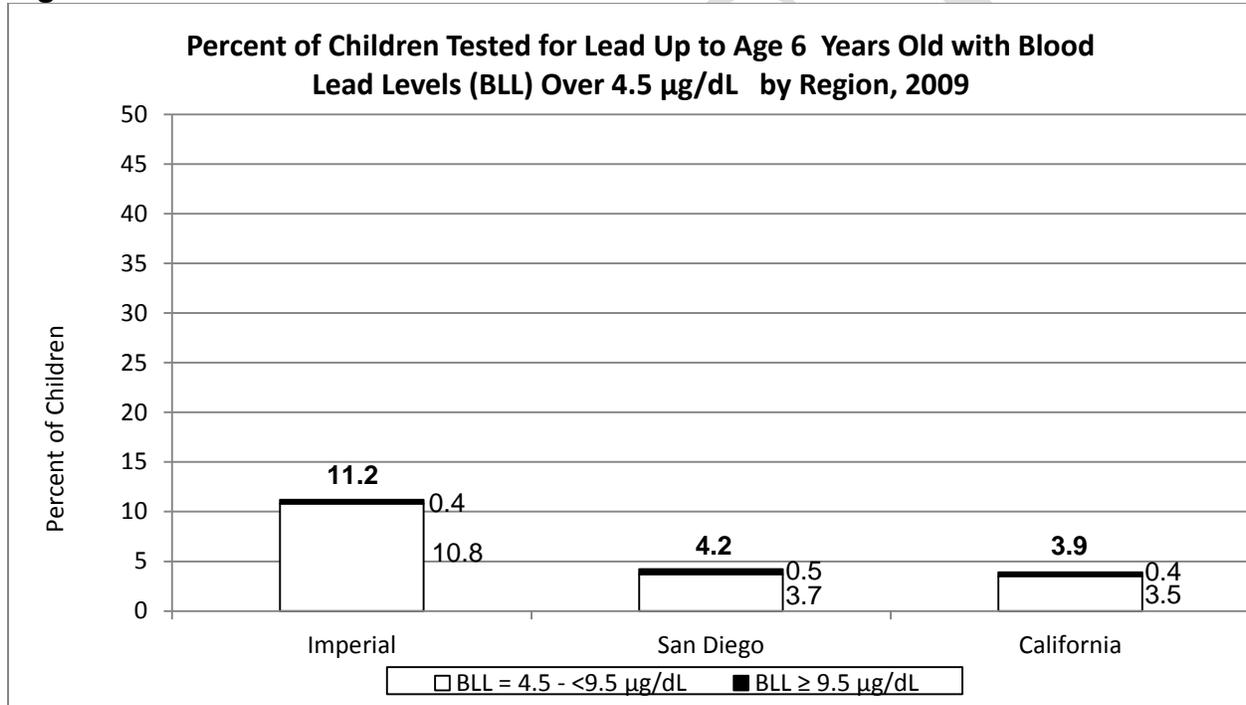
Lead has been found to disproportionately affect people with low socioeconomic status. Pregnant women with less than a high school education have higher blood levels than those with college educations (Jones, Parker, & Mendola, 2010). Children living in poverty, African American and Hispanic children generally have higher blood lead levels (Forum on Child and Family Statistics, 2010). Among Mexican-American pregnant women, those born in Mexico have been found to have higher blood lead concentrations than those born in the United States (Jones, Parker, & Mendola, 2010). Nutritional status affects lead toxicity; children who consume lower amounts of iron and calcium absorb more lead into their bodies (United States Environmental Protection Agency (EPA), 2010d).

Cultural differences also affect lead exposure. Candies, ceramics, and folk remedies from other countries, including Mexico, have been found to be accidentally contaminated or intentionally adulterated with lead (United States Agency for Toxic Substances and Disease Registry (ATSDR), 2007a). Cultural sources of lead poisoning among Mexican-American children include pottery with lead glazes used for cooking, as well as the traditional remedies *Azarcon* and *Greta*. Certain candies from Mexico, including some sold in ceramic containers have also been found to contain lead (Aguirre & Hernandez, 2003).

What Is the Status in the Border Region?

Childhood lead poisoning is currently considered the most common environmental illness in California (CDPH-EHIB), 2011). In California, lead testing regulations focus on young children and children in government assisted health programs. In the state, 3.9 percent of tested children up to 6 years old have reported blood lead levels of 4.5 µg/dL or more. In Imperial County, the percentage is higher, with 11.7 percent of children up to 6 years having reported blood lead levels of 4.5 µg/dL or more. San Diego County has percentages similar to that of California statewide. In both San Diego County and California statewide, 0.5 percent of tested children under 6 years old have reported blood levels of 9.5 µg/dL or greater. In Imperial County, 0.4 percent of tested children under 6 did (Figure 4.9; Appendix F: Tables 4.9 and 4.10).

Figure 4.9



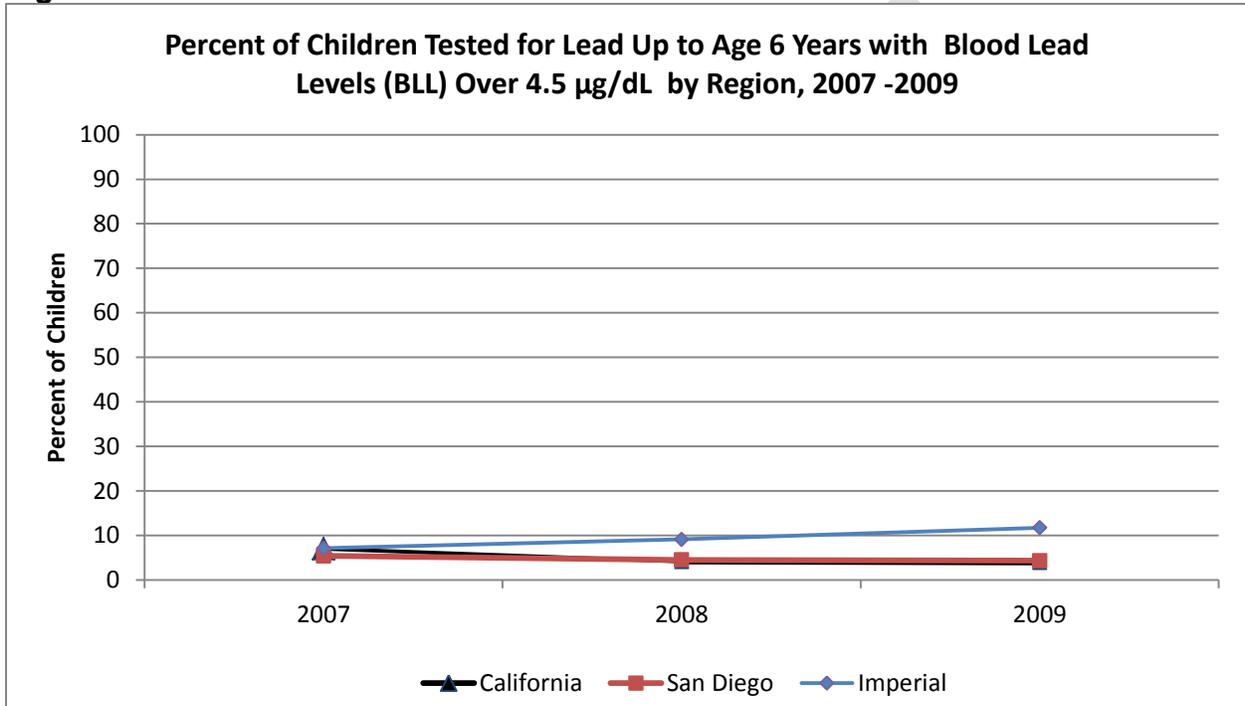
Source: CDPH EHIB Lead Poisoning Data Query http://www.ehib.org/page.jsp?page_key=457

In San Diego County between 2005 and 2009, 192 children under 21 years of age were identified with persistent BLLs of 14.5 µg/dL or greater or had a single blood value of 20 mcg/dL or greater (County of San Diego Childhood Lead Prevention Program, 2010). Of these children, 91.2 percent were 5 years old and younger of age and approximately 70 percent were Hispanic. For all of these cases, a home visit and investigation with environmental testing was conducted to determine possible sources of lead exposure. The most common potential source, lead in paint, was found in the household of 47 children. The second and third leading sources identified were lead in ceramic pottery and home remedies. Thirty children had been given home remedies such as *azarcon* or *greta* and 15 had been served food out of or prepared in ceramic pottery. Other

potential lead sources include, in order of frequency, household dust, exposure from a household member's occupation, soil, water, and hobbies. More than 41 percent of children with high BLL had traveled outside the U.S. within the past year.

In California, there appears to have been a decrease in the percent of children with BLL over 4.5 µg/dL from 2007-2009. Imperial County appears to have had a significant increase in children with BLL over 4.5 µg/dL, increasing from 7.1% in 2007 to 11.7% in 2009 (Figure 4.10, Appendix F, table 4.9)

Figure 4.10



Source: CDPH EHIB Lead Poisoning Data Query, http://www.ehib.org/page.jsp?page_key=457

What is being done?

CHILDHOOD LEAD POISONING PREVENTION BRANCH

Childhood Lead Poisoning Prevention Acts from the mid-1980s through 1991 established the Childhood Lead Poisoning Prevention Program in California. The Childhood Lead Poisoning Prevention Branch (CLPPB) was charged with taking the necessary steps to reduce childhood lead poisoning in the state. Today, CLPPB is within the California Department of Public Health (CDPH), and aims to eliminate childhood lead poisoning through prevention of lead exposure and identification, and treatment of lead burdened children. CLPPB provides community outreach and educational resources in several languages, health care provider outreach and education, surveillance for childhood lead poisoning, support for management of lead burdened children throughout the state, and elimination of sources of exposure that are identified. The CLPPB contracts with local jurisdictions throughout the state to carry out program goals and activities. In 2009, over 700,000 children were tested for lead exposure in California. Outreach was conducted to over 23,000 families, 5,400 child care providers and 3,000 health care providers (California Department of Public Health Childhood Lead Poisoning Prevention Branch, 2010).

COUNTY CHILDHOOD LEAD POISONING PREVENTION PROGRAM (CLPPP)

In San Diego and Imperial Counties, the state-contracted local CLPPP programs provide services including case management of lead burdened children, nutritional and developmental assessment, and referrals, for children with lead exposure and their families. The programs also carry out environmental investigations to identify sources of lead exposure and activities to reduce and eliminate sources of lead, the programs provide outreach to and services for health care providers, community health education to prevent lead exposure, and surveillance for lead exposure. . Both counties engage in community outreach and education through presentations and community events and also have education materials available in multiple languages, including English and Spanish (CLPPP, 2010). In 2009, over 55,000 children were tested for lead in San Diego and Imperial counties combined.

CHAPTER 5

INFECTIOUS DISEASE

“From an epidemiologic perspective, the border population must be considered as one, rather than different populations on two sides of a border; pathogens do not recognize the geopolitical boundaries established by human beings (Weinberg, 2003)”.

TUBERCULOSIS

What is it?

Tuberculosis (TB) is caused by the bacterium *Mycobacterium tuberculosis*, a bacteria that usually attacks the lungs but can attack other regions of the body such as the kidney or spine, or brain if not treated properly and can also cause death. TB is spread through the air when a person with active TB coughs, sneezes, or speaks and people nearby breathe in the bacteria. TB does not always produce symptoms and thus is called latent TB. Often people's bodies are able to keep the bacteria from growing and the only sign of infection is a positive TB skin test or blood test. People with latent TB are not infectious; however, TB becomes active if the immune system becomes weak, such as in people with HIV, and can no longer stop the bacteria from growing. (CDC, 2010)

Why is it Important?

Tuberculosis is one of the leading causes of death from infectious diseases worldwide. The Centers for Disease Control and Prevention (CDC) is committed to eliminating TB from the United States. This is defined as having less than one case of TB per 1 million people per year. Achieving this goal will not be possible without strengthening collaborations with national and international health partners, especially Mexico, to improve locating, testing, and treating those at highest risk for TB.

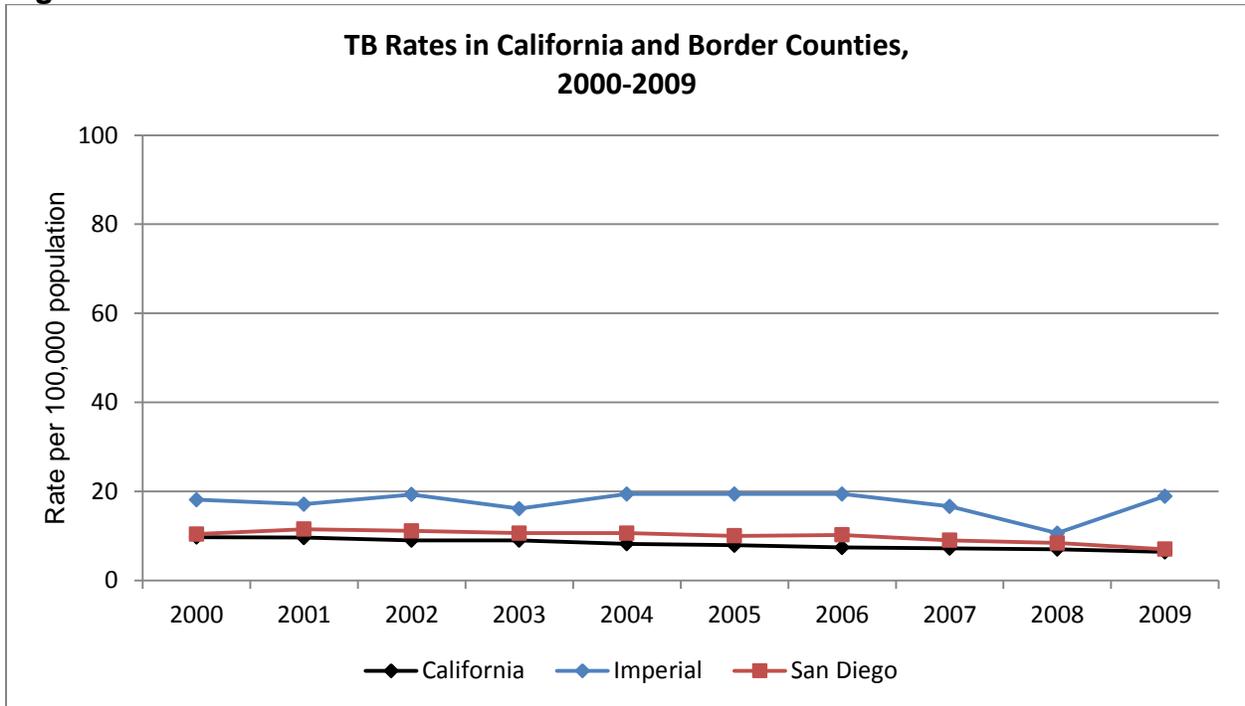
The Status of TB in the Border Region

California reported a 25 percent decrease in TB cases from 2000 (n=3297) to 2009 (n=2466), the most recent year with complete data available. Similarly, the case rate has decreased 34 percent from 9.7 cases per 100,000 population to 6.4 per 100,000 during that time. However, the TB case rate in California is consistently higher than the national rate (3.8 per 100,000 in 2009).

California's border counties are major contributors to the state's TB burden. San Diego reported 9 percent (223 cases) of the state's TB cases in 2009 and a case rate of 7.0 per 100,000. Like California, San Diego County has experienced a decrease in cases and case rates during the past decade. Since 2000, San Diego County has had a case rate decline of 33 percent. While Imperial has a lower TB case count (35 cases), this

county reported the highest case rate of all the California counties in 2009 (18.9 per 100,000) and has consistently had a rate higher than the state average (Figure 5.1).

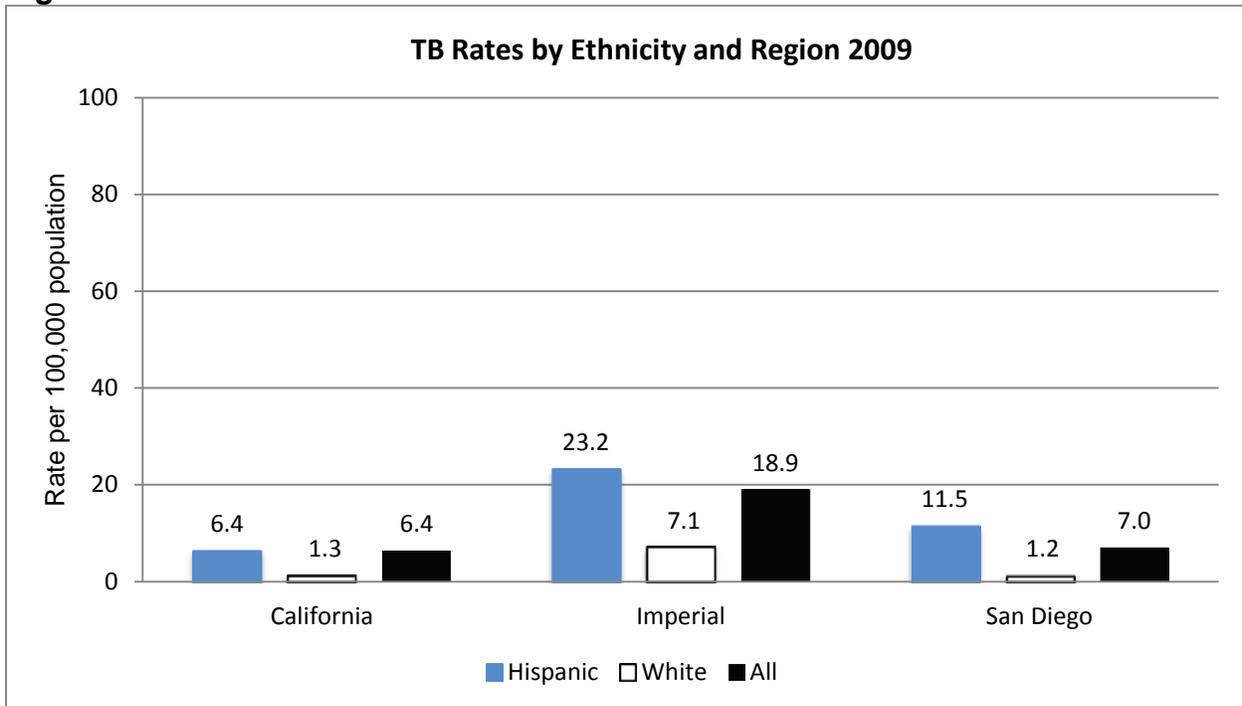
Figure 5.1



Source: Tuberculosis Control Branch, Division of Communicable Disease Control
Center for Infectious Diseases, California Department of Public Health

A large proportion of California cases are of Hispanic ethnicity (38 percent from 2007-2009). The proportions of Hispanic TB cases were much higher in Imperial (93%) and San Diego (51%) Counties. In California as well as the border counties, the TB case rate was higher among Hispanics than whites (Figure 5.2). This disparity remains in San Diego County despite a 39 percent decrease in the rate among Hispanics since 2000.

Figure 5.2



Source: Tuberculosis Control Branch, Division of Communicable Disease Control Center for Infectious Diseases, California Department of Public Health

From 2007-2009, 76 percent of California’s TB cases were born outside of the U.S. The most common birth country was Mexico, which accounted for 23 percent of all TB cases. In the border counties, the proportion of Mexican-born cases was higher than in the rest of California: 33 percent of San Diego County’s cases and 62 percent of Imperial’s cases were born in Mexico. However, Mexican-born cases were not confined to border regions. During this time period, 71 percent of TB-reporting jurisdictions reported at least one Mexican-born case. Los Angeles alone reported 33 percent of the Mexican-born TB cases in California, the highest number of TB cases reported by a single county.

During this time period, 28 percent of Mexican-born TB cases in California were diagnosed within 5 years of arrival to the U.S. and 58 percent were diagnosed more than 10 years after arrival. San Diego Mexican-born cases had a distribution of time from U.S. entry to TB diagnosis similar to California: 28 percent were diagnosed within 5 years and 59 percent were diagnosed more than 10 years after U.S. entry. However, in Imperial only 17 percent of cases were diagnosed in the first five years and 77 percent were diagnosed more than 10 years after arrival.

Clinical Characteristics

Positive sputum smears are an indicator of infectious pulmonary TB. Mexican-born cases in California and the border regions were more likely to have a positive sputum smear than all other (non-Mexican-born) TB cases. At the time of diagnosis, 48 percent

of Mexican-born and 36 percent of non-Mexican-born in California were sputum smear positive.

Drug resistance

Drug resistance is a growing concern nationally and internationally. In California, the proportion of TB cases with drug resistance has changed very little throughout the last decade. From 2007-2009, initial resistance to isoniazid (INH), a key first-line anti-TB drug, occurred in 10 percent of California TB cases, 11 percent of San Diego cases, and 6 percent of Imperial cases. In all three areas, 8 percent of Mexican-born TB cases were resistant to INH.

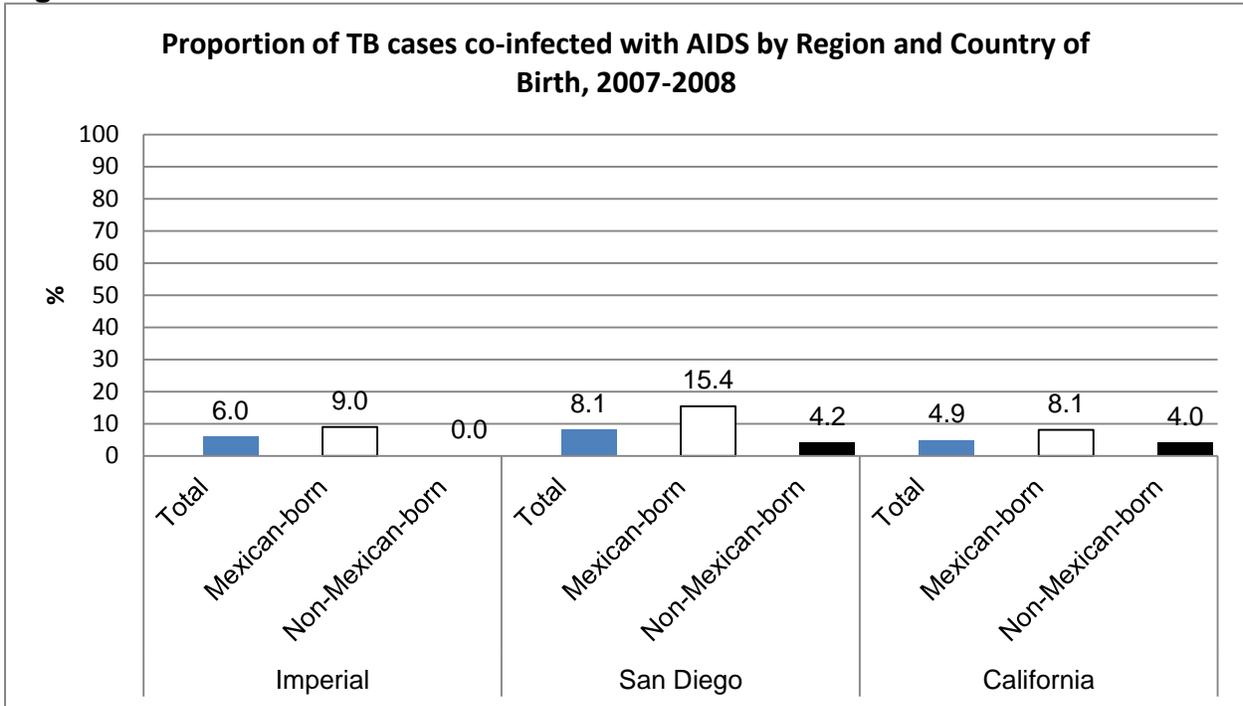
Multidrug-resistant (MDR) TB is defined as resistance to at least INH and rifampin (RIF), two of the most effective drugs used to treat TB. MDR-TB is more difficult to treat, often requiring up to 24 months of treatment with drugs that are costly and may cause serious complications for the patient. In California, of the cases with initial drug susceptibility results, 1.5 percent were identified as MDR-TB from 2007-2009. San Diego reported 10 MDR-TB cases (1.5%) during this time period, the third-highest burden after Los Angeles and Orange Counties. Imperial reported 2 MDR-TB cases during this time.

Extensively drug resistant (XDR) TB is defined as MDR-TB with additional resistance to a fluoroquinolone and an injectable aminoglycoside. From 1993-2009, one of 23 cases of XDR-TB reported in California was from a border county.

TB and HIV co-infection

Co-infection with both HIV and TB has implications for the diagnosis, treatment, and outcome of both diseases. Based on a match between TB and AIDS records, nearly 5 percent of TB cases in California were also diagnosed with AIDS in the two year period 2007-2008 (most recent available data). Imperial reported 6 percent of TB cases to be co-infected with HIV, and San Diego reported 8.1% (Figure 5.3). TB-AIDS is more common in Mexican-born cases than in all other (non-Mexican-born) cases in California and the border counties. California Mexican-born TB cases were 2 times as likely to have TB-AIDS as non-Mexican-born.

Figure 5.3



Source: Tuberculosis Control Branch, Division of Communicable Disease Control Center for Infectious Diseases, California Department of Public Health

Treatment Outcomes

From 2007-2008 (the most recent available data on treatment outcomes), 87 percent of California’s TB cases that started on anti-TB therapy completed their treatment. San Diego reported similar outcomes for TB cases, with 88 percent completing treatment. In Imperial, the proportion of cases that completed treatment was 73 percent. Reasons for not completing treatment include death, losing a patient to follow-up, treatment refusal, and moving before treatment is completed. In California, 7 percent of TB cases moved prior to completing therapy. This includes moves within California, within the U.S., and to international destinations. Of the California cases that moved before completing treatment, 12 percent moved to Mexico. In San Diego, 13 percent of patients that moved before completing treatment went to Mexico. The proportion of TB cases with a destination of Mexico was much higher in Imperial (50%).

Conclusions

In the past decade, both the number and case rate of reported TB cases have declined in California as well as in the border counties. Although the number of Mexican-born TB cases also declined during this time, Mexican-born cases continue to contribute 20-25% of California’s TB burden with even higher proportions in the border counties. Mexican-born TB cases are more likely to have a positive sputum smear, be co-infected with HIV, and to move prior to completing TB treatment. Collaboration with health partners in

Mexico and public health interventions aimed at reducing TB among Mexican-born are needed in order to effectively control TB in the state.

What Is Being Done?

Binational TB Card

In 2003, in an effort to increase the number of patients traveling between the United States and Mexico who complete treatment, CDC implemented a pilot program for the binational TB card. During the initial interview of a TB patient, the binational TB card is given to any patient likely to travel to Mexico during his or her TB treatment (e.g., migrant workers, patients with close family in Mexico). The TB card contains CureTB's (800) number that the patient may call from either the United States or Mexico. Patients who call CureTB can be linked to a provider in their destination country. The case manager also uses an educational flip chart to provide information regarding the purpose of the TB card, and obtains locating information in Mexico in case the patients travel there during TB treatment.

In 2007, CureTB and the State of California expanded the use of the binational TB card and educational flip charts statewide, and in 2008 the Centers for Disease Control and Prevention provided additional funding to the program for nationwide expansion of the program.

Cure TB

The San Diego County TB Control Branch operates CureTB, a U.S.-Mexico referral system for patients with tuberculosis who cross the border during care. CureTB was developed to improve the continuity of care for TB patients traveling between these two countries. CureTB staff is bilingual and bicultural, and are familiar with the Mexican and U.S. health care systems, as well as the TB standards of care in both nations.

In 2009, CureTB received 286 requests for services, of which 78 (27%) were for active TB cases that moved during diagnostic workup or treatment. Treatment completion was documented for 37 (47%) referred TB cases; 15 (19%) were lost to follow-up; 8 (10%) moved back to the referring jurisdiction; 9 (12%) refused treatment after arrival; 8 (10%) died and 1 (1%) the treatment was stopped on medical advice.

FOODBORNE AND WATERBORNE DISEASES

Foodborne disease is caused by consuming contaminated foods or beverages. Because many different disease-causing microbes, or pathogens, can contaminate foods, there are many different foodborne infections.

More than 250 foodborne diseases have been identified. Most of these diseases are infections, caused by a variety of bacteria, viruses, and parasites that can be foodborne. These diseases have many symptoms and there is no one "syndrome" that defines a foodborne illness; however, the microbe or toxin enters the body through the gastrointestinal tract and often causes the first symptoms there, so nausea, vomiting, abdominal cramps, and diarrhea are common symptoms in many foodborne diseases. Since many microbes can spread in more than one way, it is not always possible to confirm that a disease is foodborne.

The Centers for Disease Control and Prevention (CDC) estimates that foodborne diseases cause 76 million illnesses, 325,000 hospitalizations, and 5,000 deaths in the United States each year. The great majority of cases are mild, and cause symptoms for only a day or two. The most severe cases tend to occur in the very old, the very young, those who already have an illness that reduces their immune system function, and healthy people exposed to a very high dose of an organism (CDC, Division of Bacterial and Mycotic Diseases).

The remainder of this section presents information on some of the most common foodborne and waterborne diseases.

AMEBIASIS

What Is It?

Amebiasis is a gastrointestinal disease caused by a one-celled parasite called *Entamoeba histolytica* (*E. histolytica*). The symptoms are generally mild and can include loose stools, stomach pain, and stomach cramping.

Although anyone can acquire this disease, it is most common in people who live in developing countries that have poor sanitary conditions. In the United States, amebiasis is most often found in immigrants from developing countries. It can also be found in Americans who acquired infection on travels to developing countries or who reside in institutional settings with poor sanitary conditions. Men who have sex with men can become infected, but may not necessarily develop symptoms.

Individuals can become infected with *E. histolytica* by putting anything into their mouth that was contaminated with the stool of a person infected with *E. histolytica*; by swallowing something, such as water or food that was contaminated with *E. histolytica*; or by touching and bringing to their mouth cysts (eggs) picked up from surfaces contaminated with *E. histolytica* (State of California, Department of Health Services, Amebiasis Fact Sheet).

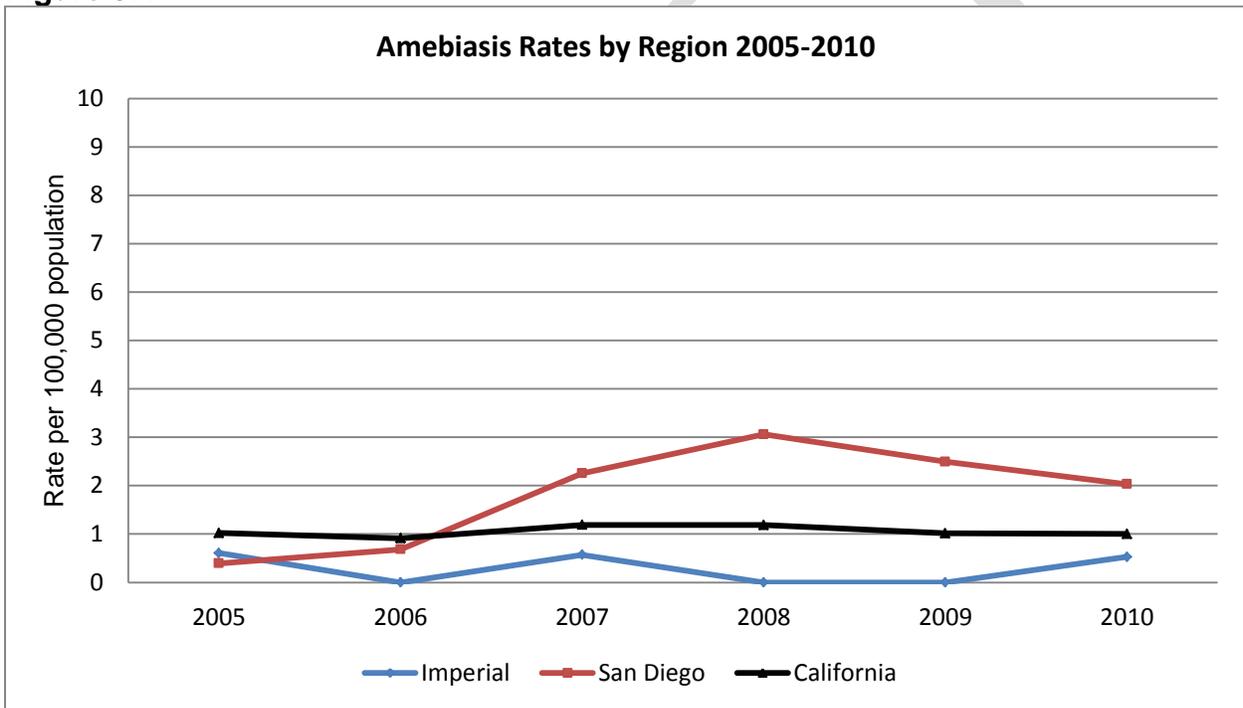
Why Is It Important?

Amebic dysentery is a severe form of amebiasis associated with stomach pain, bloody stools, and fever (State of California, Department of Health Services, Amebiasis Fact Sheet).

What Is the Status in the Border Region?

In San Diego County and California statewide, amebiasis rates increased significantly from 2006-2007. From 2007-2010 rates in San Diego County were significantly higher than rates in Imperial County and California statewide. The rates in CA and San Diego County have remained steady with no significant increases or decreases from 2008 until 2010. In Imperial County there have been few cases of Amebiasis, with individual cases in 2005, 2007, and 2010. (Figure 5.4, Appendix F; Table 5.1).

Figure 5.4



Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)
Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

CAMPYLOBACTERIOSIS

What Is It?

Campylobacteriosis is a gastrointestinal disease caused by a type of bacteria called *Campylobacter*, which causes fever, diarrhea, and abdominal cramps. Illness usually

occurs 2-5 days after exposure to *Campylobacter* and lasts about a week. The illness is usually mild, and some people with campylobacteriosis have no symptoms at all.

Although campylobacteriosis is most commonly associated with eating raw or undercooked poultry, eating anything contaminated with *Campylobacter* can result in illness. Animals can be infected by *Campylobacter* and outbreaks of campylobacteriosis have occurred from people who drank surface water that was contaminated by infected birds or cows (State of California Department Public Health, Campylobacteriosis Fact Sheet)..

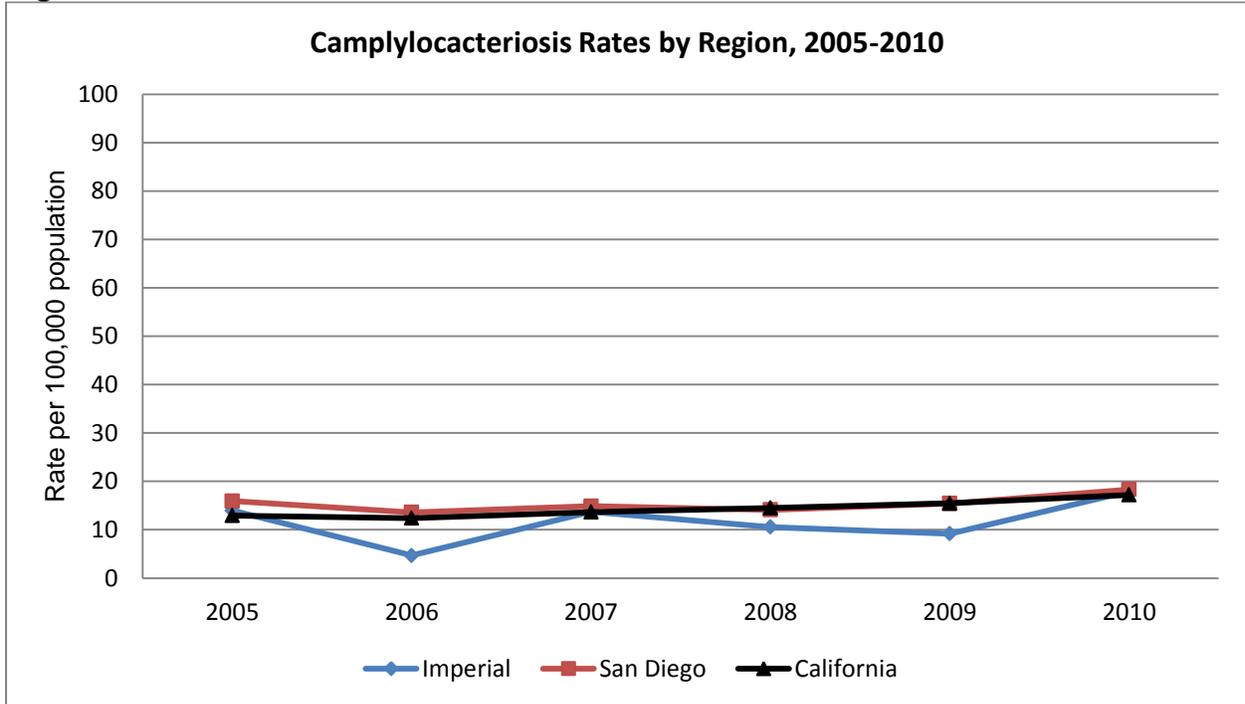
Why Is It Important?

In some persons with compromised immune systems, *Campylobacter* can cause a serious, life-threatening infection. *Campylobacter* is also one of the most common types of bacteria causing diarrhea in the United States. Approximately 2.5 million people (roughly 1% of the U.S. population) are infected each year. There are well over 5,000 cases of *Campylobacter* reported in California annually. Since many milder cases are not diagnosed or reported, the actual number of infections may be considerably higher (State of California Department of Health Services, Campylobacteriosis Fact Sheet).

What Is the Status in the Border Region?

In California there were significant increases in rates of campylobacteriosis in 2007, 2009, and 2010. In San Diego and Imperial Counties there were no significant changes in the rates from 2005-2010. Both San Diego County and Imperial County reported their highest case counts in 2010 (587 and 34 cases respectively). The rates during the time period examined did not differ significantly by region (Figure 5.5, Appendix F; Table 5.2).

Figure 5.5



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

CRYPTOSPORIDIOSIS

What Is It?

Cryptosporidiosis (Crypto) is a diarrheal disease caused by microscopic parasites, *Cryptosporidium*, that can live in the intestine of humans and animals and are passed in the stool of an infected person or animal. The most common symptom of cryptosporidiosis is watery diarrhea. Other symptoms include stomach cramps or pain, dehydration, nausea, vomiting, fever, or weight loss. In people with healthy immune systems, symptoms usually last about 1-2 weeks

During the past two decades, Crypto has become recognized as one of the most common causes of waterborne disease (recreational water and drinking water) in humans in the United States. Several community-wide outbreaks of cryptosporidiosis have been linked to drinking municipal water or recreational water contaminated with *Cryptosporidium*. The parasite is found in every region of the United States and throughout the world (Centers for Disease Control and Prevention, Division of Parasitic Diseases).

Why Is It Important?

Although Crypto can infect all people, some groups are more likely to develop more serious illness. Young children and pregnant women may be more susceptible to the dehydration resulting from diarrhea, and in people with significantly weakened immune systems it may be more severe and could lead to serious or life-threatening illness (Centers for Disease Control and Prevention, Division of Parasitic Diseases).

What Is the Status in the Border Region?

From 2005-2010, rates in San Diego County did not change significantly, remaining between 0.7 - 0.9 cases per 100,000 population. There was only one case, in 2010, of crypto in Imperial County during the time period examined. In California statewide, the Hispanic population reported rated of crypto significantly lower than Whites and the population as a whole (Appendix F; Table 5.3)

CYSTICERCOSIS

What Is It?

Cysticercosis is an infection caused by the pork tapeworm, *Taenia solium*. Infection occurs when the tapeworm larvae enter the body and form cysticerci (cysts). The tapeworm that causes cysticercosis is found worldwide. Infection is found most often in rural, developing countries with poor hygiene where pigs are allowed to roam freely and eat human feces. The disease is also highly endemic in many developing countries, including Mexico (Centers for Disease Control and Prevention, Division of Parasitic Diseases).

Why Is It Important?

When cysticerci are found in the brain, the condition is called neurocysticercosis and it is the most severe form of the disease (Centers for Disease Control and Prevention, Division of Parasitic Diseases)

What Is the Status in the Border Region?

From 2005 until 2010 there was one case of cysticercosis in Imperial County, 20 cases in San Diego County, and 215 in California. During the time period examined, California's highest case count was 53 in 2005 and lowest was 28 in 2010. San Diego County had between 2 and 5 cases annually. In California statewide, the Hispanic population made up the largest percent of cases, with approximately 80-90 percent of cases for each year examined (Appendix F; Table 5.5).

ESCHERICHIA COLI 0157:H7

What Is It?

E. coli O157:H7 is one of hundreds of strains of the bacterium *Escherichia coli*. Although most strains are harmless and live in the intestines of healthy humans and animals, this strain produces a powerful toxin and can cause severe illness. The illness it causes is often a severe and bloody diarrhea and painful abdominal cramps, without much fever.

E. coli O157:H7 is a bacterial pathogen that has a reservoir in cattle and other similar animals. Human illness typically follows consumption of food or water that has been contaminated with microscopic amounts of cow feces.

E. coli O157:H7 is an emerging cause of foodborne illness. An estimated 10,000-20,000 cases of infection occur in the United States each year. Most illness has been associated with eating undercooked, contaminated ground beef. Person-to-person contact in families and child care centers is also an important mode of transmission. Infection can also occur after drinking raw milk and after swimming in or drinking sewage-contaminated water (California Department of Public Health, *E. coli* O157:H7 Fact Sheet).

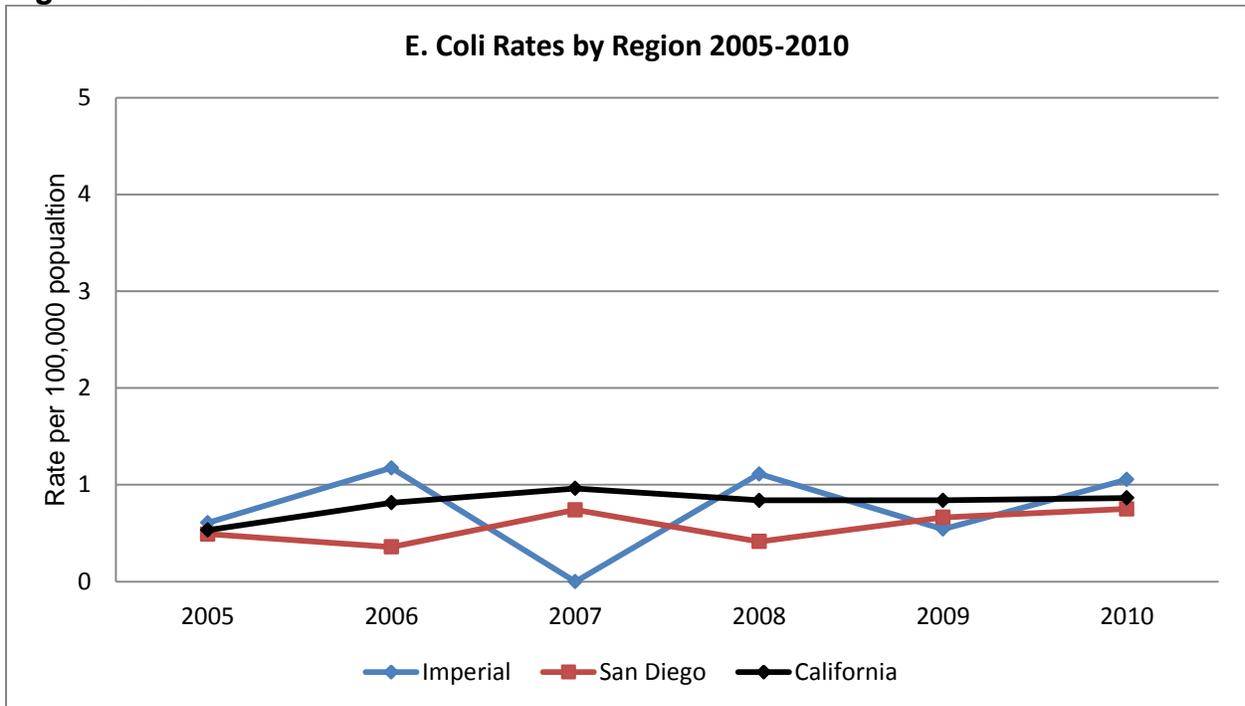
Why Is It Important?

In 3-5 percent of cases, a complication called hemolytic uremic syndrome (HUS) can occur several weeks after the initial symptoms. This severe complication can be characterized by temporary anemia, profuse bleeding, and kidney failure (CDC, Division of Bacterial and Mycotic Diseases).

What Is the Status in the Border Region?

In Imperial County there have been 1-2 cases of *E. coli* annually from 2005-2010. In California there was a significant increase in the rate of *E. Coli* cases from 2005-2006. In California from 2006-2010 there have been between 0.8-1.0 cases per 100,000 population. In California the rate of *E. coli* in the Hispanic population is significantly less than in the White population. This trend appears to be mirrored in San Diego County, though the difference is not statistically significant (Figure 5.6, Appendix F; Table 5.5).

Figure 5.6



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

GIARDIASIS

What Is It?

Giardiasis is a diarrheal illness caused by *Giardia lamblia*, a microscopic parasite that lives in people and animals. Infected people and animals pass *Giardia* cysts in their stool. These cysts can survive in the environment, in water, and food and on surfaces and objects.

Symptoms include diarrhea, abdominal cramps, nausea, bloating, gas, fatigue, weight loss, and dehydration. Symptoms generally begin 1-2 weeks after infection. In otherwise healthy persons, symptoms usually last 2-6 weeks, but occasionally last longer. Some infected people do not develop any symptoms.

Giardia may be found in soil, food, water, or on surfaces that have been contaminated with feces from infected people or animals. People become infected after accidentally swallowing *Giardia* cysts. Giardiasis can also be spread from person to person.

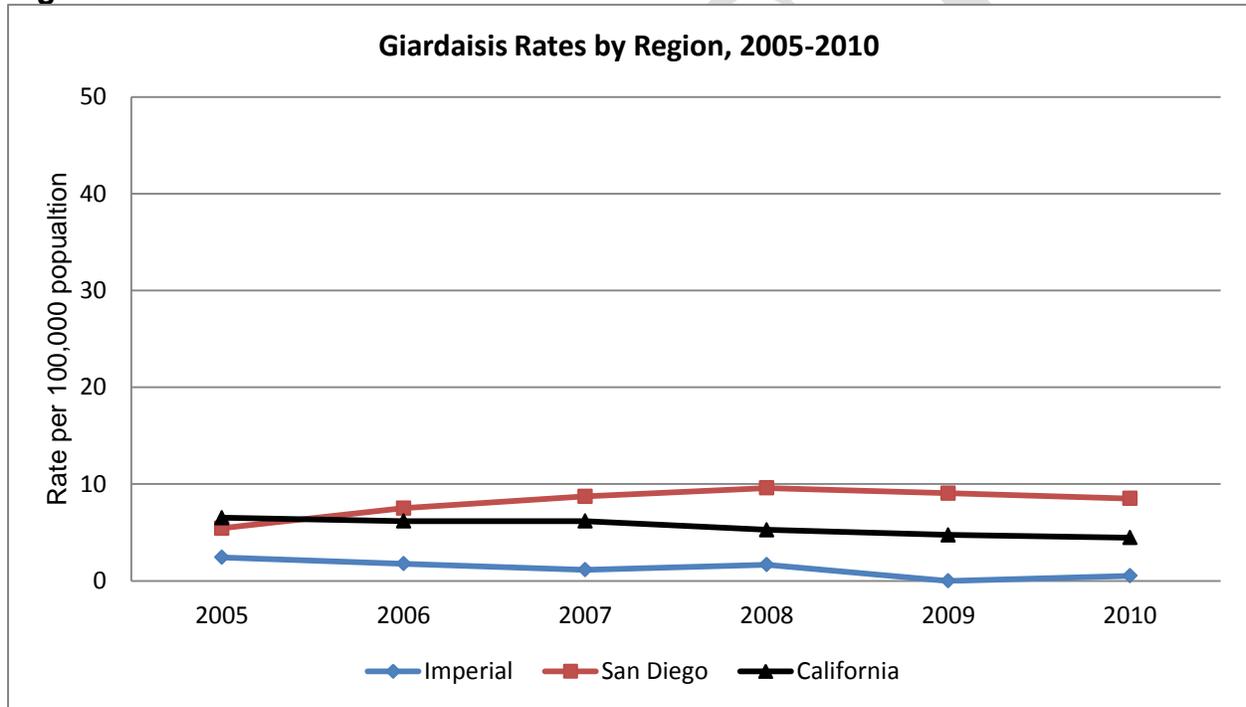
In the United States, *Giardia* is one of the most common causes of waterborne diseases in people. Outbreaks have been associated with contaminated municipal and recreational waters, day care centers, and among men who have sex with men. In California, between 2,000 and 4,000 cases of giardiasis are reported each year;

however, it is likely that there are many more cases each year that go undiagnosed (Centers for Disease Control and Prevention, Division of Parasitic Diseases).

What Is the Status in the Border Region?

In San Diego County and California the rates of giardiasis in the White population persist at levels higher than the Hispanic population. For all years examined in California the differences are statistically significant. In California, from 2005-2010 there is a significant decrease in the rates of giardiasis. On the other hand, during the same time period, the rate has increased in San Diego County. In Imperial there appears to be a decrease in giardiasis rates from 2005-2010, though the change is not statistically significant (Figure 5.7, Appendix F; Table 5.6).

Figure 5.7



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

HEPATITIS A

What Is It?

Hepatitis A is a liver disease caused by the hepatitis A virus (HAV). HAV infection produces a self-limited disease that does not result in chronic infection or chronic liver disease. Adults have signs and symptoms more often than children. When symptoms

are present, they usually occur abruptly and can include jaundice, fatigue, abdominal pain, loss of appetite, nausea, diarrhea, or fever.

Transmission occurs by the fecal-oral route, either by direct contact with an HAV-infected person or by ingestion of HAV-contaminated food or water. In addition, HAV-contaminated food may be the source of hepatitis A for an unknown proportion of persons whose source of infection is not identified (Centers for Disease Control and Prevention). Foodborne or waterborne hepatitis A outbreaks are relatively uncommon in the United States.

Hepatitis A rates in the United States have declined by 89 percent since the hepatitis A vaccine first became available in 1995. But hepatitis A is one of the most common vaccine-preventable infections acquired during travel (Centers for Disease Control and Prevention, *Traveler's Health: Yellow Book*).

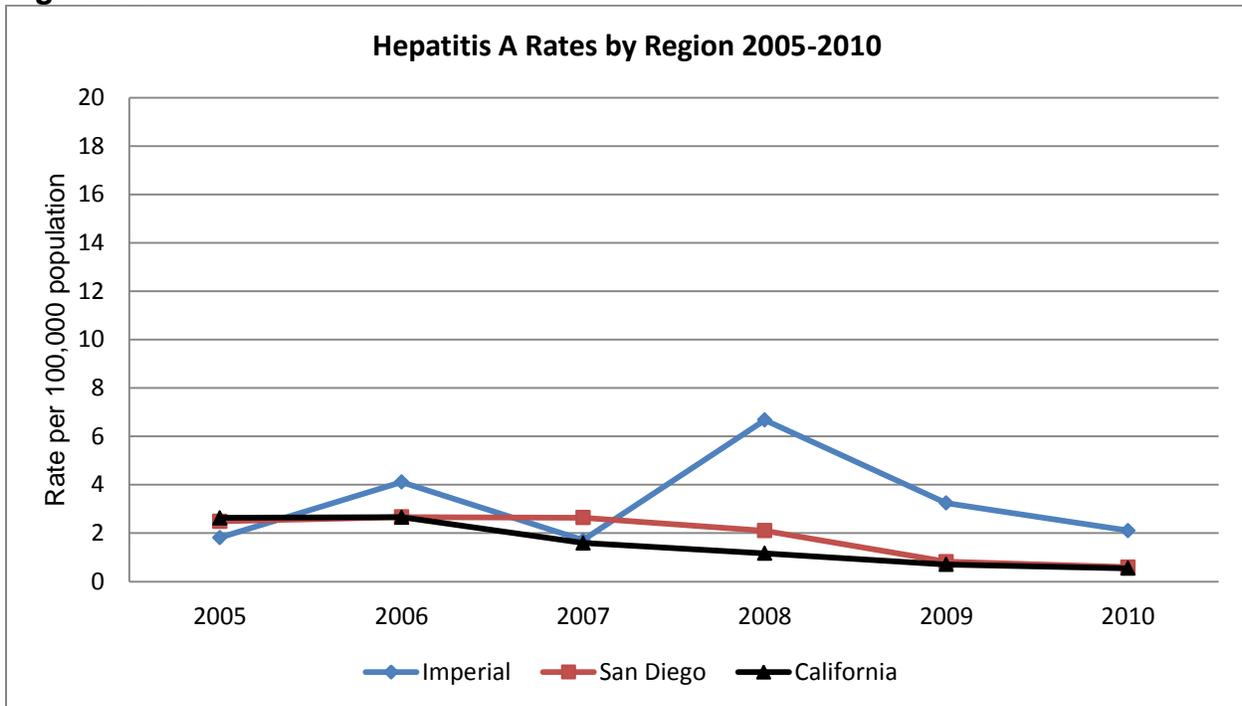
Why Is It Important?

Hepatitis A is endemic throughout much of the world, where poor sanitation and crowding facilitate transmission. The number of cases associated with travel, as well as the overall incidence, has decreased in recent years, according to notifiable disease data in the United States. However, the proportion of overall cases attributed to travel has increased (Centers for Disease Control and Prevention, *Traveler's Health: Yellow Book*).

What Is the Status in the Border Region?

In California there were significant decreases in rates of Hepatitis A in 2007, 2008, and 2009. In San Diego County rates of Hepatitis A persisted at above 2 cases per 100,000 population from 2005-2008 and decreased significantly in 2009. The case count in Imperial County fluctuated from 2005-2010, with a high of 12 cases in 2008 and a low of 3 in 2005 and 2007. In 2008 and 2009 rates of Hepatitis A were significantly higher in Imperial County than California and San Diego County. The difference appears to persist in 2010; though the difference is not statistically significant (Figure 5.8, Appendix F; Table 5.7).

Figure 5.8



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

LISTERIOSIS

What Is It?

Listeria monocytogenes is a bacterium. It is often found in the environment, particularly in soil, vegetation, animal feed, and in human and animal feces. Animals can carry the bacterium without appearing ill and can contaminate foods of animal origin such as meats and dairy products. Eating food contaminated with *Listeria* may lead to the development of a disease called listeriosis. Symptoms include flu-like symptoms, nausea, vomiting, cramps, diarrhea, headache, constipation, and persistent fever. Symptoms usually appear within 2-30 days and up to 90 days after consuming contaminated food (Centers for Disease Control and Prevention, Division of Foodborne, Bacterial and Mycotic Diseases).

Why Is It Important?

Listeria monocytogenes has recently been recognized as an important public health problem in the United States. The disease affects primarily persons of advanced age, pregnant women, newborns, and adults with weakened immune systems. However, in rare cases people without these risk factors can also be affected.

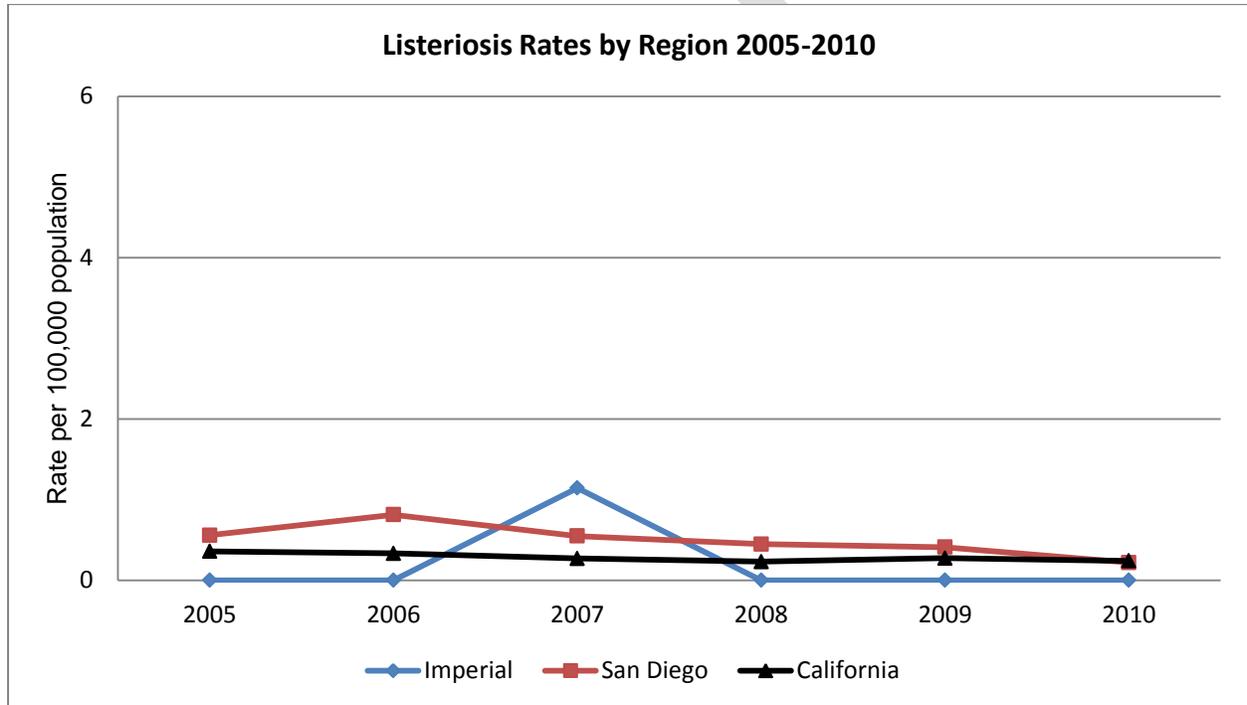
Infected pregnant women may experience only a mild, flu-like illness; however, infections during pregnancy can lead to miscarriage or stillbirth, premature delivery, or infection of the newborn.

Listeriosis is a leading cause of death among patients with foodborne diseases in the United States, with an estimated 2,500 persons becoming seriously ill with listeriosis each year. Of these, 500 or 20% die (Centers for Disease Control and Prevention, Division of Foodborne, Bacterial and Mycotic Diseases).

What Is the Status in the Border Region?

In San Diego County and California statewide there appear to be a decrease in the rate of listeriosis from 2005-2010. This decrease is statistically significant in San Diego County from 2006-2010. In Imperial County there were 2 cases of listeriosis in 2007 and no other cases reported for the other years examined (Figure 5.9, Appendix F; Table 5.8).

Table 5.9



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

SALMONELLOSIS (NON-TYPHOID)

What Is It?

Salmonellosis is an infection caused by the bacteria *Salmonella*. Most people infected with *Salmonella* develop diarrhea, fever, and abdominal cramps between 12 and 72 hours after infection. The illness usually lasts 4-7 days, and most people recover without treatment. The most common sources of exposure to *Salmonella* are raw and undercooked eggs, undercooked poultry and meat, dairy products, seafood, fruits, and vegetables (Centers for Disease Control and Prevention, Division of Foodborne, Bacterial and Mycotic Diseases).

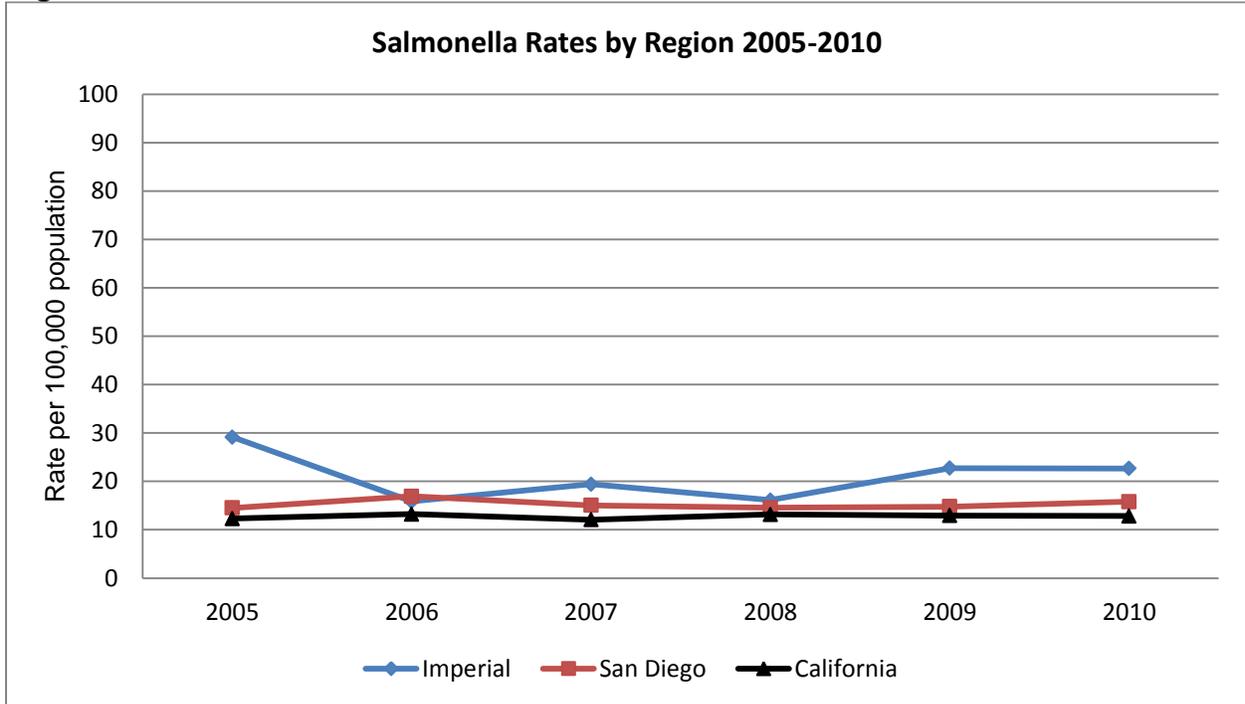
Why Is It Important?

Salmonellosis is a common cause of death from foodborne illness. In some people, the diarrhea may be so severe that the patient needs to be hospitalized. In these patients, the *Salmonella* infection may spread from the intestines to the bloodstream and then to other body sites, and can cause death unless the person is treated promptly with antibiotics. The elderly, infants, and those with impaired immune systems are the groups most likely to have a severe illness. Every year, approximately 40,000 cases of salmonellosis are reported in the United States. Because many milder cases are not diagnosed or reported, the actual number of infections may be 30 or more times greater (Centers for Disease Control and Prevention, Division of Foodborne, Bacterial and Mycotic Diseases).

What Is the Status in the Border Region?

Rates of *Salmonella* in Imperial County persist at levels higher than the state and in San Diego County. In 2007, 2009, and 2010 the rates in Imperial County were significantly higher than the rates in California. In 2008 the rates were significantly higher than San Diego County. In San Diego County from 2005-2010 rates of salmonella fluctuated between 14.5-16.9 per 100,000 population, with no statistically significant trend changes. In California the rates fluctuated between 12.1-13.2 per 100,000 population, also with no statistically significant changes (Figure 5.10, Appendix F; Table 5.9)

Figure 5.10



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

SHIGELLOSIS

What Is It?

Shigellosis is a gastrointestinal disease caused by a group of bacteria called *Shigella*. Illness often occurs 1-2 days after exposure to *Shigella*, and lasts 5-7 days. Symptoms of shigellosis usually include diarrhea (occasionally bloody or mucousy), fever, and abdominal cramps. Some people with shigellosis have very few or no symptoms, but can still pass *Shigella* to others. Sometimes, *Shigella* can contaminate food and cause illness among those who eat the tainted item. Shigellosis can also result from drinking or swimming in contaminated water.

Why Is It Important?

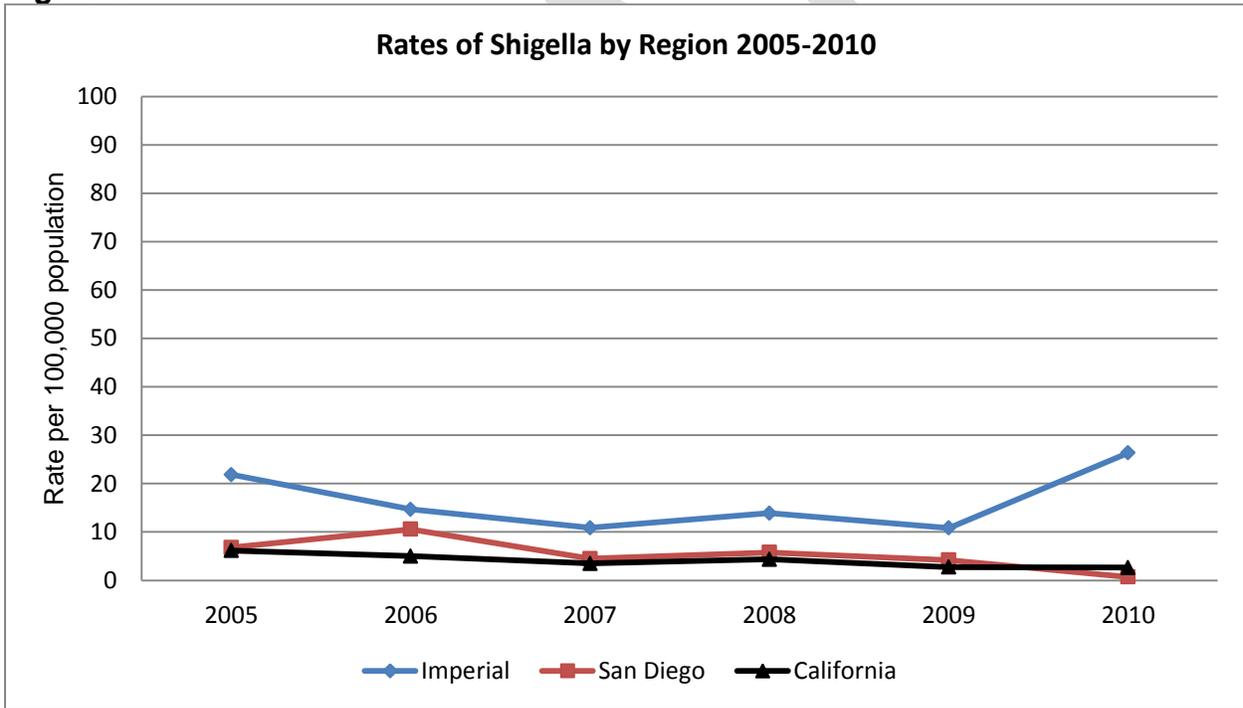
This disease can be quite severe and lead to hospitalization, especially in young children and the elderly. Most people with shigellosis recover completely; however, in a small percentage of people infected by *Shigella*, a condition called Reiter's syndrome can occur. Reiter's syndrome is the development of joint pain and swelling, eye irritation, and painful urination that occurs as a reaction to *Shigella* infection.

In the United States, about 18,000 cases are reported each year. The number of reported cases in California has generally declined over the past decade, with about 2,500 cases reported statewide each year for the last few years. However, because many milder cases are not diagnosed or reported, the actual number of infections may be up to 20 times higher (California Department of Public Health, Diseases and Conditions, Shigellosis Fact Sheet).

What Is the Status in the Border Region?

Rates of shigella in Imperial County persisted at levels significantly higher than California statewide for all years examined and levels significantly higher than San Diego County in 2007-2010. In California the Hispanic population reported rates significantly higher than the White population and all ethnicities combined for all years examined. This trend is mirrored in San Diego County with the exception of 2010, where all ethnicities examined reported a statistically significant decrease (Figure 5.11, Appendix F; Table 5.10).

Figure 5.11



Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007
 Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section (CDPH-CID-DCDC-IDB-SSS)

SEXUALLY TRANSMITTED DISEASES

In 1997, the Institute of Medicine published a ground-breaking report, “The Hidden Epidemic: Confronting Sexually Transmitted Diseases (STDs),” which drew attention to the alarming rates of STDs. Before 1980, only syphilis and gonorrhea were common. Since then, the term “STD” has come to denote the more than 25 infectious organisms, including HIV/AIDS, that are transmitted through sexual activity, along with the dozens of clinical syndromes that they cause. STDs continue to be among the most common infections in the United States; of the 10 most frequently reported infections, five are STDs. The spectrum of health consequences ranges from mild acute illness to serious long-term complications such as cervical, liver, and other cancers and reproductive health problems (Institute of Medicine, “The Hidden Epidemic: Confronting Sexually Transmitted Disease,” 1997).

For the first time in more than a decade, rates of chlamydia, gonorrhea, and primary and secondary syphilis all decreased in California in 2009 compared to rates in 2008. Large numbers of combined reported cases of STDs made them by far the most commonly reported communicable diseases in California (and in the United States). Furthermore, because STDs are often asymptomatic, the true burden of these diseases is many times greater than the number of reported cases (CDPH, STD Branch 2009 Annual Report).

In addition to HIV/AIDS, this report will discuss three sexually transmitted infections: syphilis, gonorrhea, and chlamydia, which are among the most common STDs in the United States.

CHLAMYDIA

What Is It?

Chlamydia is caused by the bacterium *Chlamydia trachomatis*; it is spread through vaginal, anal, or oral sex. Chlamydia may also be transmitted from a mother to an infant during vaginal childbirth. In women, chlamydial infections, which are usually asymptomatic, may result in pelvic inflammatory disease, which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain if left untreated. Chlamydia also can cause infections in newborn babies. Some women may experience pelvic pain, bleeding between periods, pain during sex or when urinating, and abnormal discharge from the vagina. Some men will have no symptoms at all; others may have pain when urinating, abnormal discharge from the penis, and/or testicular pain. Infected individuals may also contract HIV more easily if exposed. The infection can be treated and cured by the use of antibiotics following STD treatment guidelines (CDC, 2010).

Why Is It Important?

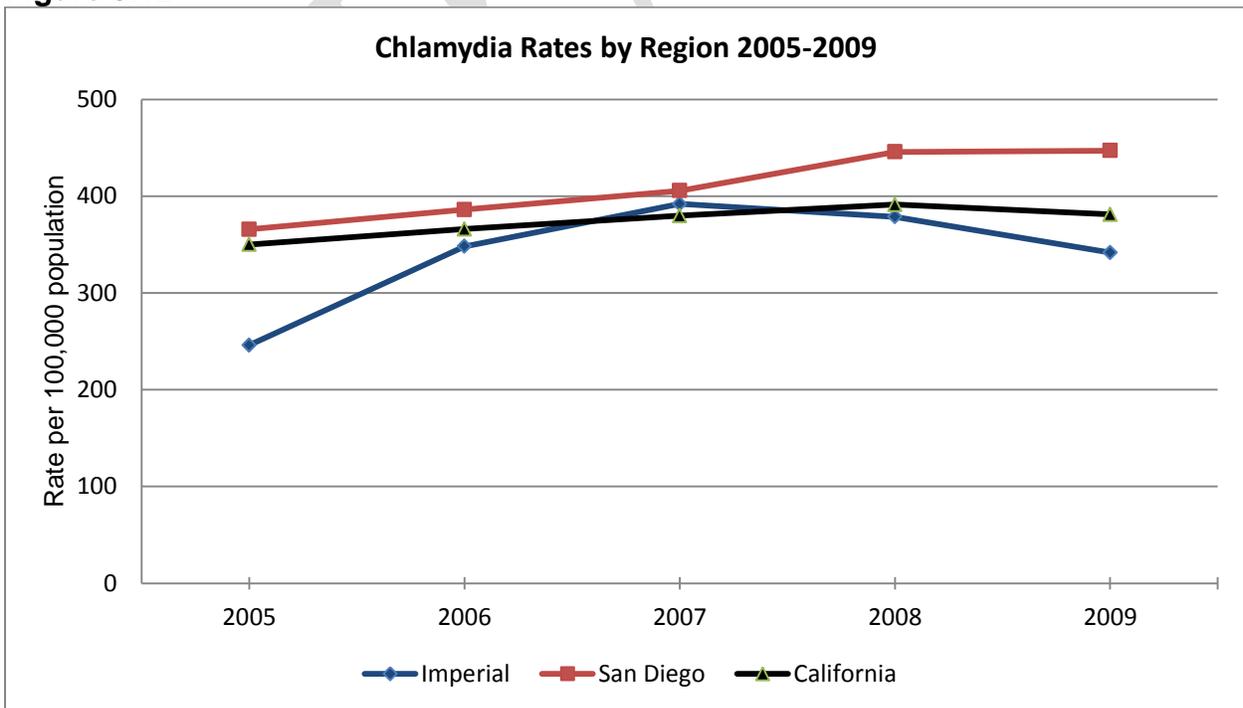
Chlamydia is the most commonly reported infectious disease in the United States and may be one of the most dangerous sexually transmitted diseases for women today. In women, untreated chlamydia can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID). Chlamydia can also cause asymptomatic fallopian tube infection. PID and “silent” infection in the upper genital tract can cause permanent damage to the fallopian tubes, uterus, and surrounding tissues. The damage can lead to chronic pelvic pain, infertility, and potentially fatal ectopic pregnancy (pregnancy outside the uterus). Chlamydia may also increase the chances of HIV infection, if exposed (CDC, 2010).

The prevalence is highest in persons 20-24 year of age. In California, chlamydia is among the most prevalent of all STDs: In 2009, a total of 146,476 cases were reported, for a rate of 380.6 per 100,000 population (CDPH, 2009).

What Is the Status in the Border Region?

In Imperial County, San Diego County, and California statewide, rates of chlamydia were significantly higher in 2009 than 2005. In Imperial County and California statewide, there appears to be a slight decrease from 2007 to 2009, though this decrease is not statistically significant. There is no evidence of improvement in San Diego County (Figure 5.12, Appendix F; Table 5.11).

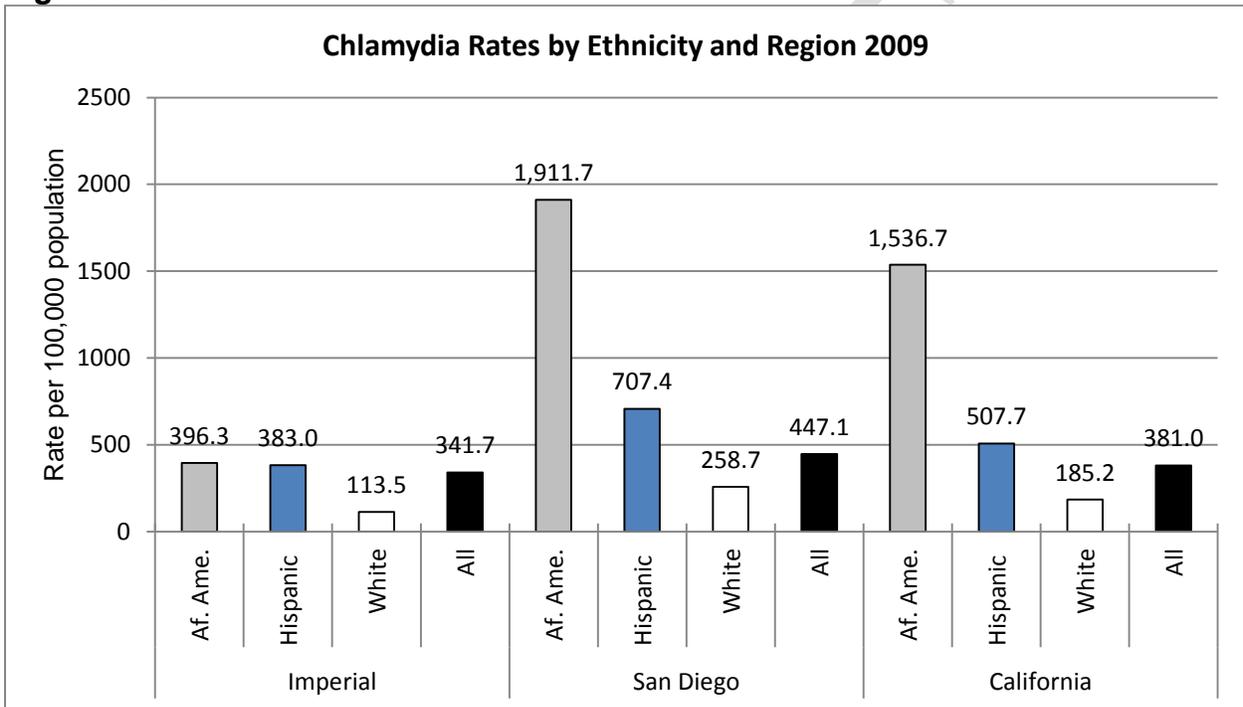
Figure 5.12



Source: California Department of Public Health, STD Control Branch

In 2009, chlamydia rates were significantly lower in Imperial County than they were in San Diego County and California statewide. In all regions examined, Hispanics and African Americans had significantly higher rates than Whites. In San Diego County and statewide African Americans had significantly higher rates than all other races individually and all races combined. This trend was not mirrored in Imperial County, where there was no significant difference between the Hispanic and African American Population. (Figure 5.13, Appendix F; Table 5.11)

Figure 5.13



Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health, STD Control Branch

GONORRHEA

What Is It?

Gonorrhea, caused by the bacterium *Neisseria gonorrhoeae*, is transmitted through oral, vaginal, and rectal sex. Symptoms of gonorrhea in women may be mild and may be mistaken for a bladder or vaginal infection, with a painful or burning sensation during urination, increased vaginal discharge, or vaginal bleeding between menstrual cycles. Often, gonorrhea is asymptomatic and detectable only through screening. Infected men may experience painful or swollen testicles and the most common symptoms are a burning sensation while urinating, or discharge of a white, yellow, or green substance

from the penis. Rectal infection is also possible, with symptoms including discharge, anal itching, soreness, bleeding, or painful bowel movements. Pharyngeal (throat) infections can also cause a sore throat and swollen lymph nodes. Untreated gonococcal infection is associated with adverse reproductive health consequences in both females and males, such as pelvic inflammatory disease (females) and urethritis (males), and can lead to more severe complications such as infertility. In addition, infections in pregnant females can lead to serious perinatal complications. Infected individuals may also contract HIV more easily if exposed. The infection can be treated and cured by the use of antibiotics; however, the emergence of drug-resistant strains is affecting treatment choices in certain geographic areas, including California (CDC, 2007)

Why Is It Important?

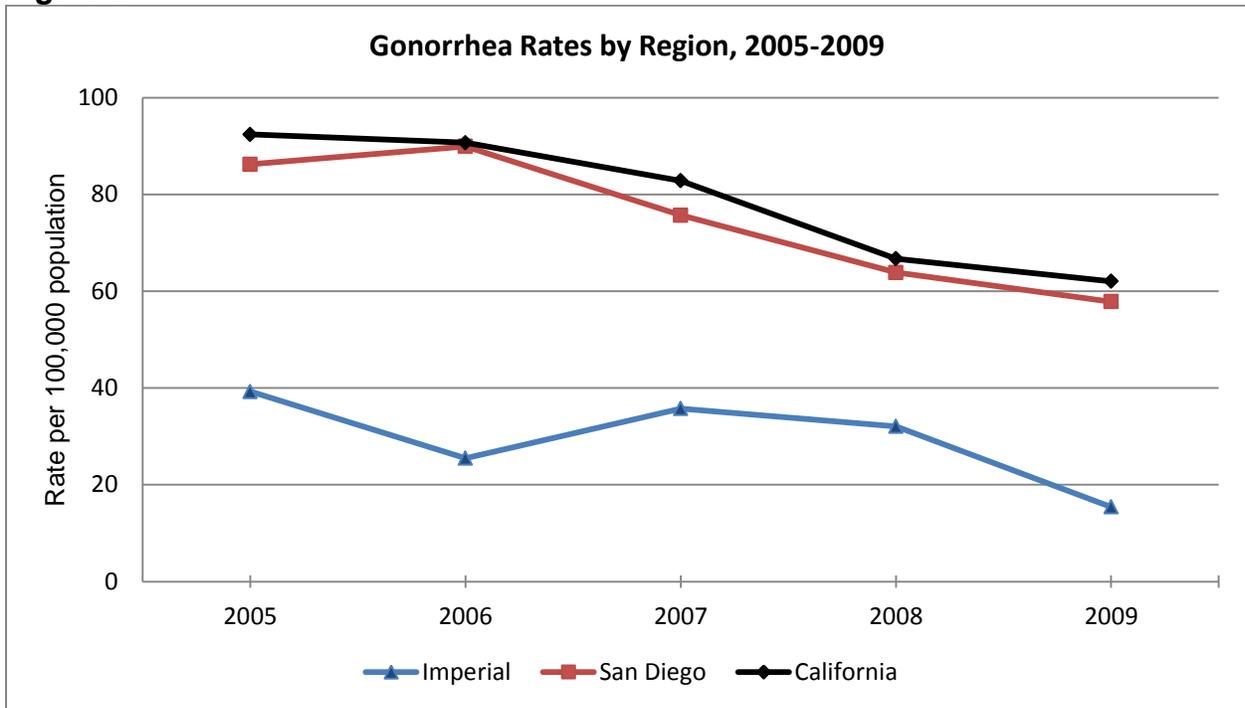
Gonorrhea is currently the second-most common reportable communicable disease in California. In 2009 California received a total of 23,876 reports of gonorrhea cases, for an incidence of 62.0 per 100,000 population. Because of incomplete screening of at-risk populations, under-reporting of infections by medical and laboratory providers, and presumptively treated infections that are not laboratory-confirmed, the case-based incidence underestimates the true incidence (California Department of Public Health, STD Branch 2009 Annual Report).

Incidence rates for gonorrhea declined significantly between 1985 and 1999 in both California and the United States. However, in California, gonorrhea rates increased approximately 65% between 1999 and 2005. The California gonorrhea rate of 62.0 per 100,000 population in 2009 was over three times higher than the Healthy People 2010 target objective of fewer than 19 cases per 100,000 (CDPH, 2009).

What Is the Status in the Border Region?

Rates of gonorrhea decreased significantly statewide, and in San Diego County, from 2005 to 2009. Though the trends mark improvement for California, neither San Diego County nor California statewide met the Healthy People 2010 objective of 19 new cases per 100,000 population. (Figure 5.14, Appendix F; Table 5.12)

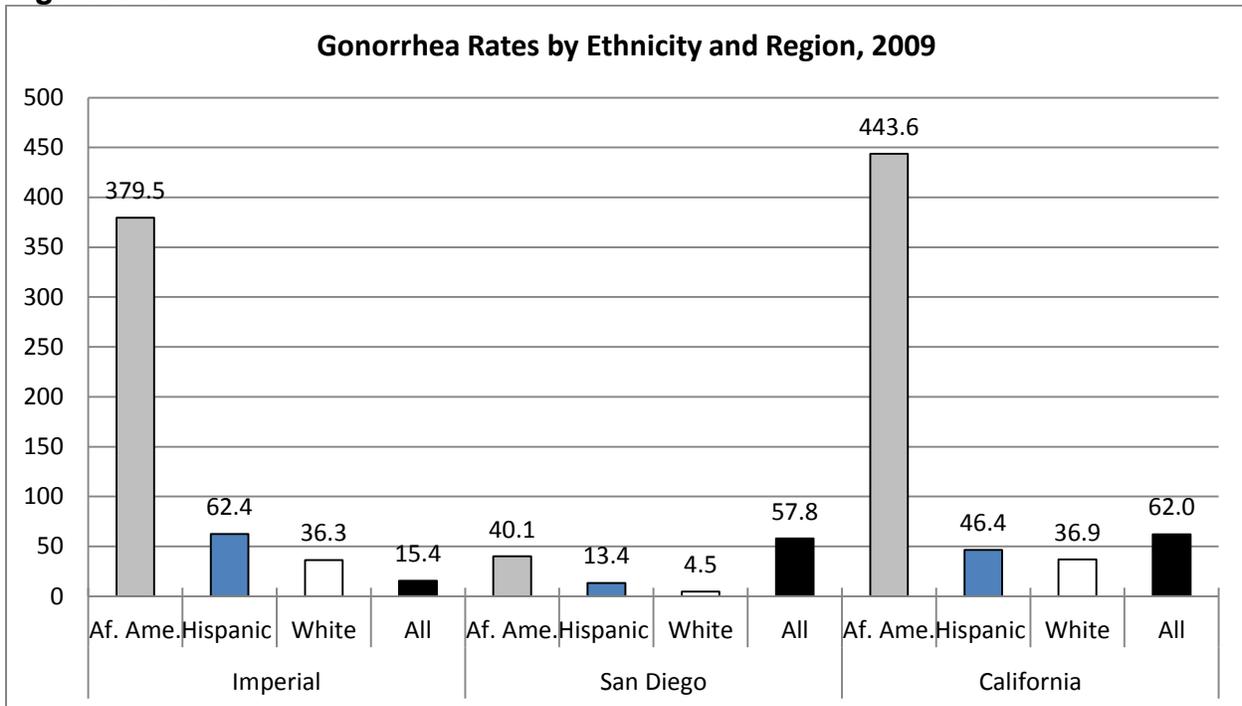
Figure 5.14



Source: California Department of Public Health, STD Control Branch
Healthy People 2010 Objective 25-2: 19 new cases per 100,000 population

In San Diego County and California statewide the African American population presented significantly higher gonorrhea rates than the population as a whole, and their White and Hispanic counterparts. Though lower than the African American population, the Hispanic population presented rates significantly higher than the White population. These trends are mirrored in all regions examined, though not statistically significant in Imperial County. Imperial County met the HP2010 goal of 19 new cases per 100,000 population, while San Diego County did not (Figure 5.15, Appendix F; Table 5.13)

Figure 5.15



Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health, STD Control Branch
Healthy People 2010 Objective 25-2: 19 new cases per 100,000 population

INFECTIOUS SYPHILIS – PRIMARY & SECONDARY SYPHILIS (P&S)

What Is It?

Syphilis is a systemic disease caused by the bacterium *Treponema pallidum*; when symptoms are present, they are often indistinguishable from those of other diseases. Syphilis can be transmitted through direct contact with a syphilis sore (chancre) which occur mainly on the external genitals, vagina, anus, or in the rectum. Sores also can occur on the lips and in the mouth. Transmission of the organism occurs during vaginal, anal, or oral sex and pregnant women with the disease can pass it to the fetus (CDC, 2007).

Primary syphilis is the first stage of the disease and is marked by the appearance of a lesion (chancre). Eventually, the chancre will heal without treatment and, if no adequate treatment is administered, the infection will progress to the secondary stage. Secondary syphilis is characterized by the appearance of a rash in at least one area, such as on the palms of the hands or soles of the feet. Other symptoms include fever, swollen lymph glands, sore throat, patchy hair loss, headaches, weight loss, muscle aches, and fatigue. The signs and symptoms of secondary syphilis will resolve with or without treatment, but without treatment, the infection will progress to the latent and possibly late stages of disease (CDC, 2007).

Many infected people do not have any symptoms for years and remain at risk for late complications if untreated. Infected persons in the late stages of syphilis may experience damage to internal organs (brain, nerves, eyes, heart, blood vessels, liver, bones, joints), and symptoms can include paralysis, numbness, dementia, or gradual blindness; in some cases death occurs. Curing a person infected with syphilis can be done through one application of antibiotics in its early stages; those in the later stages require a longer-term application of antibiotics. Genital sores (chancres) caused by syphilis make it easier to transmit and acquire HIV infection sexually. There is an estimated two- to five-fold increased risk of acquiring HIV if exposed to that infection when syphilis is present (CDC STD Syphilis Fact Sheet 2008). Screening at-risk persons for syphilis is important given the availability of effective treatments and the duration of latent stages after symptom disappearance.

Primary and Secondary (P&S) syphilis and early latent stages (less than one year's duration) of syphilis are considered infectious, with primary and, to a lesser degree, secondary infections having the highest likelihood of transmission. Because of this higher likelihood of transmission, greater epidemiologic relevance, and the potential for misclassification of early latent syphilis (e.g., unrecognized primary lesions or secondary symptoms), this report focuses primarily on P&S syphilis (CDPH, 2009).

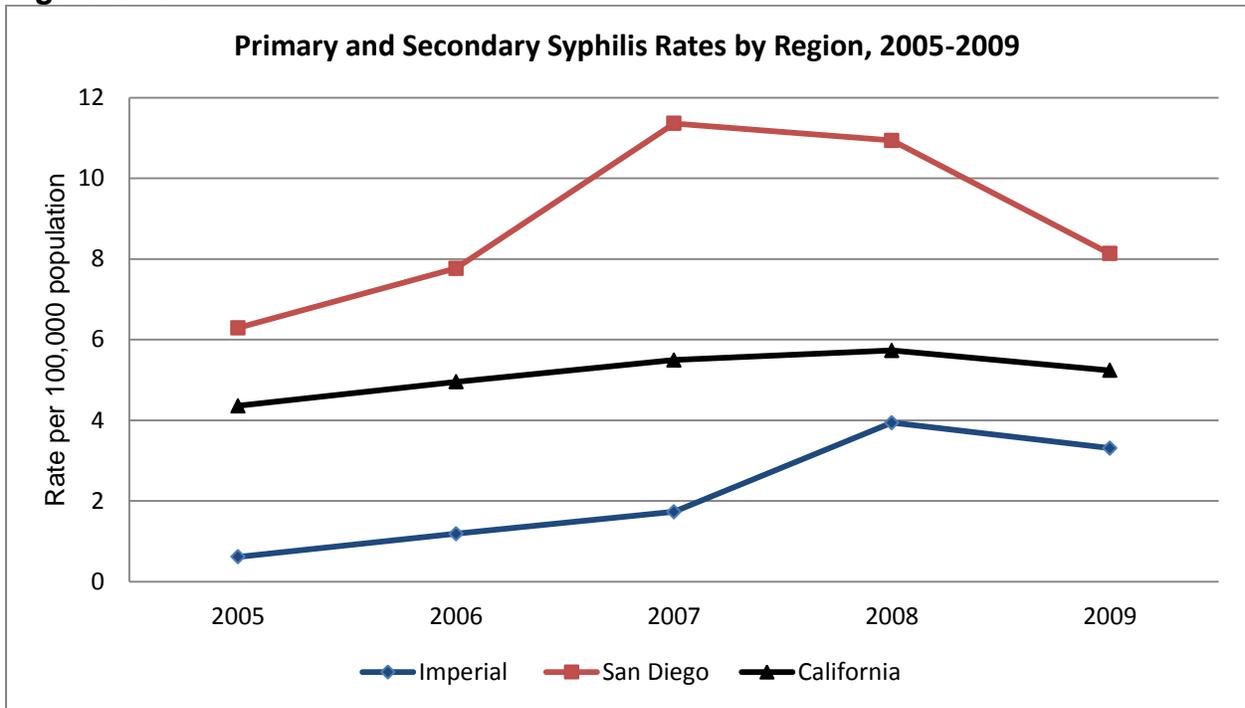
Why Is It Important?

The rate of P&S syphilis decreased throughout the 1990s, and in 2000 reached an all-time low. However, since 2000, P&S syphilis had been on the rise, with this being the first year in a decade where rates decreased in California. In 2009, 2,005 cases of P&S syphilis (5.2 per 100,000 population) were reported in California, placing the state rate above the national average rate of 4.5 for 2008. (California Department of Public Health STD Branch 2009 Annual Report).

What Is the Status in the Border Region?

Rates of P & S Syphilis appear to be higher in 2009 than 2005 for all regions examined, though the increase is only statistically significant for California. Additionally in California statewide and in San Diego County P & S syphilis rates are significantly lower in 2009 compared to rates in 2008 (Figure 5.16, Appendix F; Table 5.13).

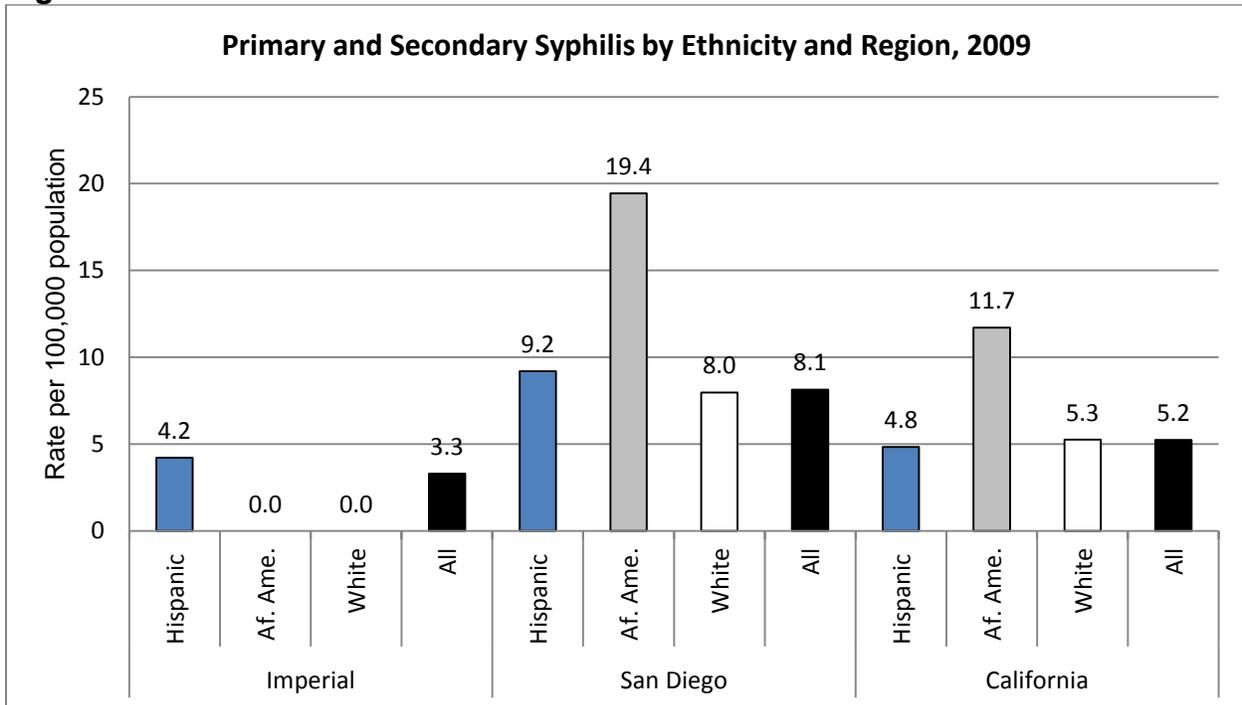
Figure 5.16



Source: California Department of Public Health, STD Control Branch
Healthy People 2010 Objective 25-3: 0.2 cases per 100,000 population

African American rates are the highest in San Diego County and California, significantly higher than all races examined and all races combined. There is no significant difference between Hispanics, Whites and all races combined. None of the regions or ethnicities examined met the HP2010 objective of less than 0.2 cases per 100,000 (Figure 5.17, Appendix F; Table 5.13).

Figure 5.17



Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health, STD Control Branch
Healthy People 2010 Objective 25-3: 0.2 cases per 100,000

CONGENITAL SYPHILIS

What Is It?

The syphilis bacterium can infect the baby of a woman during her pregnancy or during childbirth. Depending on how long a pregnant woman has been infected, she may have a high risk of having a stillbirth or the infant may die soon after birth, particularly if untreated, due to experiencing complications (e.g., seizures, failure to thrive, saddle nose, bone pain, sores, and others). In older children, syphilis may produce brain damage, blindness, and other developmental delays. Diagnosis is complicated and treatment options may depend on factors such as identification of syphilis in the mother, adequacy of maternal treatment, presence of clinical, laboratory, or radiographic evidence of syphilis in the infant, and comparison of maternal (at delivery) and infant non-treponemal serologic titers. Preventing congenital syphilis depends on diagnosing and treating expectant mothers (CDC, 2007).

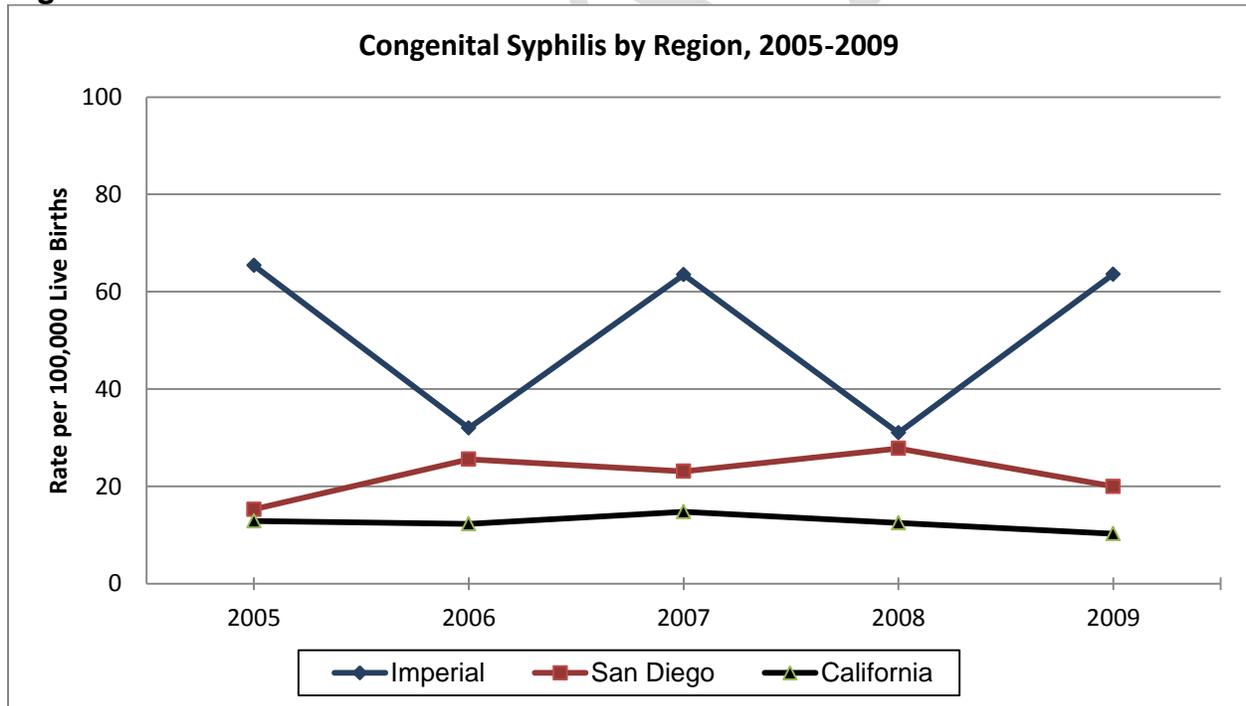
Why Is It Important?

Trends in congenital syphilis morbidity follow those of adult female P&S syphilis morbidity with a lag of 1-2 years. As P&S syphilis rates declined in California during the early 1990s, congenital syphilis rates similarly declined. The rate of congenital syphilis in California reached a low of 9.4 per 100,000 live births in 2002, increased from 2003 to 2007, and has since declined to 9.8 in 2009. This exceeds the HP target for congenital syphilis of 1.0 case per 100,000 live births (CDPH STD Branch 2009 Annual Report).

What Is the Status in the Border Region?

From 2005 to 2009, there has been no significant improvement in congenital syphilis rates for California or either of its border counties. San Diego County appears to persist with rates higher than the State, though the difference is not statistically significant. Both California statewide and San Diego County had lower rates in 2009 than 2008, though the differences are not statistically significant. (Figure 5.18, Appendix F; Table 5.14)

Figure 5.18

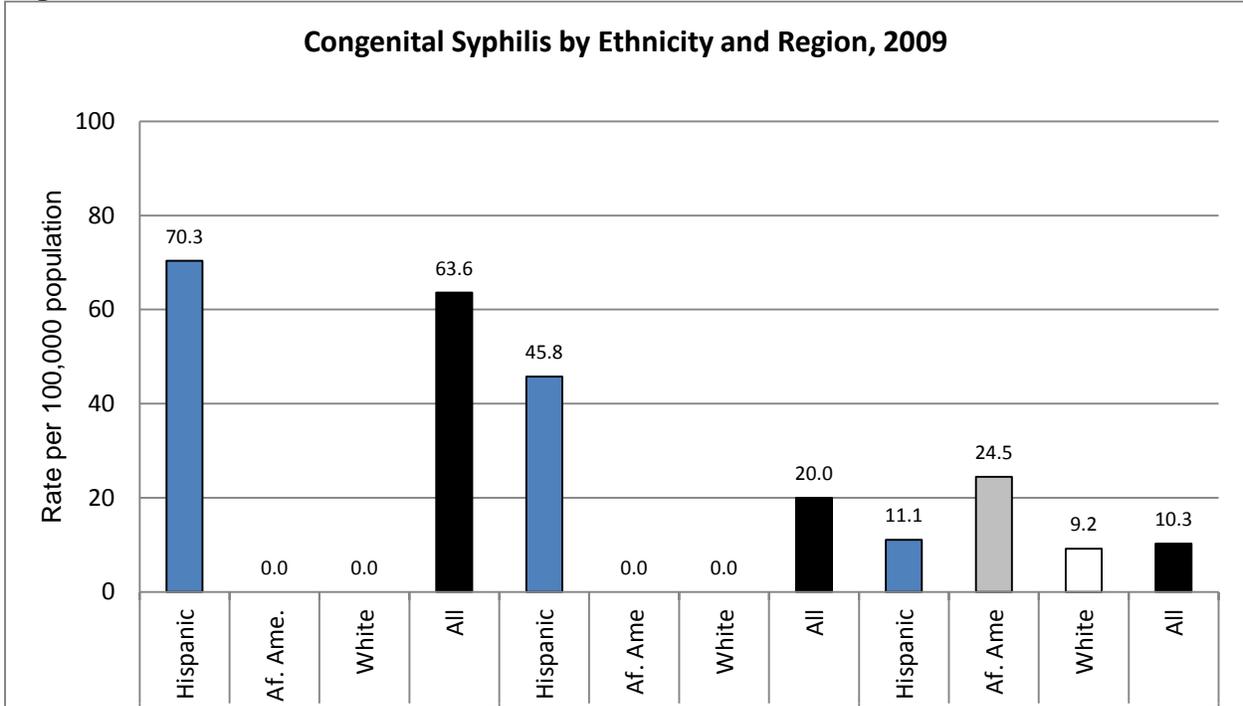


Source: California Department of Public Health, STD Control Branch
Healthy People 2010 Objective 25-3: 1 cases per 100,000 live births

In California statewide the African American population presents the highest rates of any other race (24.5 cases per 100,000 live births). In Imperial and San Diego

Counties, the Hispanic populations present the highest rates of congenital syphilis, 70.3 & 45.8 cases per 100,000 live births, respectively. None of the regions or ethnicities examined met the HP2010 goal of 1.0 case per 100,000 live births (Figure 5.19, Appendix F; Table 5.14).

Figure 5.19



Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health, STD Control Branch
 Healthy People 2010 Objective 25-3: 1 cases per 100,000 live births

HIV/AIDS

What is it?

Human immunodeficiency virus (HIV) is the virus that can lead to acquired immune deficiency syndrome (AIDS). There are two types of HIV, HIV-1 and HIV-2, and in the United States the primary type is HIV-1. The main difference between these strains is that HIV-2 is typically slower acting than HIV-1. HIV damages a person's immune system by destroying white blood cells (CD4+ and T-Cells) that are crucial to fighting's diseases and infections. After initial infection with HIV some people develop flu-like symptoms while others have no symptoms at all. People living with HIV are often asymptomatic and feel healthy; however, HIV is still affecting their bodies. Without being tested for HIV people can live for years without ever showing symptoms of HIV and not know they are infected. AIDS is the late stage of HIV infection when a person's immune system is severely damaged by the virus and has difficulty fighting off diseases and

certain cancers. A person is considered to have AIDS when their CD4 counts drop below 200 cells per cubic millimeter of blood. Normal CD4 counts range from 500-1,500 cells per cubic millimeter of blood (CDC, 2010).

HIV is primarily found in the blood, semen and vaginal fluids and is transmitted in three main ways; having unprotected sex with someone who has HIV (unprotected sex means not using a condom during oral, vaginal or anal intercourse), sharing paraphernalia for injecting drugs (this includes, needles, syringes, rinse water, etc.) and being born to or breastfeeding from an infected mother. There are many risk factors that increase a person's likelihood of getting infected with HIV including having multiple sex partners, having other sexually transmitted diseases, or having been diagnosed with tuberculosis or Hepatitis A. HIV cannot reproduce outside of the body, therefore, it is not spread through the air, water, by insects, by saliva, tears or sweat or by casual contact like shaking hands or sharing dishes (CDC, 2010).

The only way to confirm an HIV diagnosis is by being tested. The CDC recommends that everyone between the ages of 13 and 64 should be tested at least once. However, if you are at increased risk you should be tested at least once a year (CDC). The most common HIV tests detect HIV antibodies. Conventional tests are sent off for laboratory testing and can take a week or two for results to be available. Rapid tests are becoming more popular and can produce results in as little as 20 minutes. All positive tests must be confirmed by a secondary test to rule out a false positive (CDC, 2010).

Why is it important?

Conventional HIV testing methods have a "window period". This is the time between infection with HIV and when the body produces antibodies. During the window period the virus is replicating rapidly and the likelihood of transmitting the virus to a partner is high. Most people will develop antibodies for the virus within two to eight weeks of infection and 97 percent will develop them within three months. In rare cases it can take up to six months for the body to produce antibodies. The window period can lead to increased HIV prevalence because those newly infected may be unaware of their status even if they have been recently tested. Furthermore, negative HIV tests give false hope about status and risk behaviors. While there is treatment for HIV that can reduce viral load to undetectable levels, there is not currently a cure for HIV. Those infected with HIV have to take medication for the rest of their lives to combat the virus and side effects of the medication (CDC, 2010).

In the United States there are more than one million people living with HIV and as many as one in five people with HIV do not know their status. Every 9 ½ minutes someone is infected with HIV in the US (US Statistics, 2011). Men who have sex with men of all races are most affected by HIV and account for more than half of all new HIV infections in the US while 31 percent of all infection are through heterosexual contact and 12 percent among injection drug users. African Americans are most affected by HIV in the US; they represent approximately 12 percent of the population but almost half of people living with HIV and almost half of new infections each year. Hispanic/Latinos are also

disproportionately affected as they represent 15 percent of the US population but as much as 17 percent of people living with HIV and 17 percent of new infections. Furthermore, while the rate of HIV infections among blacks has been relatively stable, the rate of new infections among Hispanic men is more the double that of White men and the rate among Hispanic women is more than four times that of White women (US Statistics, 2011).

What is the Status in the Border Region?

California has the second highest number of AIDS cases in the US and San Diego County has the third highest number in California. Since April 17, 2006 HIV cases in California have been reported by name and prior HIV cases reported by non-name code are no longer counted in San Diego County. The majority of cases were White and between the ages of 30-39, and Hispanics have the second highest rate of HIV in San Diego County. Compared to the US San Diego County and California as a whole had lower rate of HIV among Blacks and a higher rate among Whites and Hispanics. San Diego County also has higher rate of HIV among men who have sex with men compared to the US (83 percent versus 54 percent) (Macchione, 2010).

From April 2006 to September 2010 there were 4,428 case reports of HIV in San Diego County and 56 cases in Imperial County. In this time, 11 percent of California's HIV cases were reported in either San Diego County or Imperial County. Since AIDS reporting began in March 1983, there have been 233 AIDS cases in Imperial County and 14,435 AIDS cases in San Diego County. As of September 2010, there were 7,188 individuals in San Diego County and 140 individuals in Imperial County living with AIDS, and 9% of California's AIDS cases were first reported in either San Diego County or Imperial County (CDPH – OA, 2010).

What is being done?

The California Department of Public Health, Center for Infectious Disease has an Office of AIDS that is responsible for coordinating state services, programs and activities relating to HIV/AIDS. The office is comprised of three branches: HIV Education and Prevention Services, HIV/AIDS Epidemiology and HIV Care. The office also has an AIDS drug assistance program. The HIV education and Prevention Services branch is responsible for developing and implementing education and prevention programs through its three sections: The HIV community Prevention section provides health education and risk-reduction, the HIV counseling, testing and training section provides anonymous and confidential testing and counseling services and has training programs for HIV counseling, rapid test training program, the neighborhoods geared toward high risk testing program and provides funding for the California AIDS hotline and the HIV prevention policy program oversees programs for high risk groups. The HIV care branch provides care, treatment and support for people living with HIV/AIDS. The three sections of the branch include CARE, which helps ensure medical care and support and housing opportunities for people living with AIDS, the Community based section provides home and community based services and the Early intervention section

provides multidisciplinary services for people infected with HIV through multiple programs. The AIDS Drug Assistance Program (ADAP) Section has two programs, the ADAP which provides HIV/AIDS drugs for people who could not otherwise afford them, and the CARE/HIPP unit which helps people living with HIV/AIDS keep their private insurance and have access to AIDS drugs. Lastly, the HIV/AIDS epidemiology branch is in charge of conducting epidemiologic studies, evaluating HIV/AIDS prevention and care programs and maintaining California's HIV/AIDS case registry. A complete list of programs run by CDPH can be found at www.cdph.gov/programs/AIDS. (California Department of Public Health, 2009)

The County of San Diego HIV, STD and Hepatitis Branch provides several prevention, counseling, testing and care/treatment programs. HIV prevention strategies focus on preventing the spread of HIV infections. San Diego County offers several education and prevention programs and a complete list can be found at www.sdcounty.ca.gov. San Diego County also offers counseling and testing services on a walk-in basis at several locations throughout the county. Testing can be done anonymously or confidentially and is offered free of charge. San Diego County offers medical care, treatment, early intervention, and support for housing, transportation, etc. for people living with HIV/AIDS. The goal of these services is to provide access to all people living with HIV/AIDS and reduce HIV/AIDS disparities to zero percent. These services provide free medication to those who otherwise could not afford them. San Diego County also has an HIV/AIDS epidemiology unit that collects data about the prevalence and incidence of HIV/AIDS (County of San Diego, 2010).

Imperial County, with the support of CDPH, offers education and prevention programs to help reduce the incidence and prevalence of HIV/AIDS. Imperial County also offers HIV testing and counseling at the public health department and provides drugs and treatment to those who otherwise could not afford them and the county offers housing assistance to people living with HIV/AIDS. The HIV/AIDS surveillance program works with CDPH to report all HIV/AIDS cases in Imperial County. A complete list of services offered can be found at www.ipchd.org (Imperial County Public Health Department, 2010).

CHAPTER 6

MENTAL HEALTH

Mental health according to Healthy People 2010 is the state of successful performance of mental function resulting in productive activities, fulfilling relationships with other people and the ability to adapt to change and to cope with challenges. Mental illnesses are medical conditions that affect a person's thinking, feeling and mood and might affect how they interact with others and function in daily activities. They range anywhere from relatively benign to severe. There are many conditions that are classified as mental illnesses including anxiety disorders, such as post-traumatic stress disorder or obsessive compulsive disorder, mood disorders, such as depression or bipolar disorder, psychotic disorders such as schizophrenia, eating disorders, impulse control, and addiction disorders and personality disorders.

Mental illnesses also disproportionately affect the homeless and incarcerated. Nationally, about 70 percent of the youth in the juvenile justice system experience mental illness with 20 percent of those having a severe mental condition. An additional 31 percent of female inmates and 14 percent of male inmates have a serious mental condition. In California, the public mental health system provides services to 34 percent of adults who live with a serious mental illness. California spent 2.6 percent of its total spending on mental health services in 2006 (NAMI, 2010).

Additional attention to mental health in the border region has been focused on chronic and multiple stress syndrome or Ulysses Syndrome. It is a mental condition that can affect immigrants who have been displaced from their origin. The name Ulysses syndrome is given to the condition relating to the odyssey of the Greek mythical character Ulysses and his long and difficult voyage. Symptoms often include headaches and other symptoms that can be similar to depression, including feelings of sadness, crying, tension, insomnia, irritability, fatigue, and feelings of confusion. It is thought that the condition develops as immigrants encounter greater obstacles during the migration process such as the danger of the journey, distance from their family, difficulty finding a job, food, housing, and racism in the host country (Mauro Giovanni Carta, 2005).

DEPRESSION

What Is It?

Depression is used to describe several forms of depressive disorders that can interfere with a person's daily life, change how they interact with those around them and alter their normal functioning. Depression is a common illness that can range from moderate to very serious. While most people occasionally feel down or sad this is distinct from depression because these feelings usually pass within a few days. The most common

forms of depressive disorders are major depressive disorder and dysthymic disorder. Major depressive disorder or major depression interferes with a person's ability to function, sleep, eat, work, study, and enjoy life. It is disabling and often reoccurs throughout a person's life. Dysthymic disorder (Dysthymia) is classified by less severe symptoms that last two years or longer. Dysthymia is not as disabling as major depression but can still prevent a person from normal functioning and/or feeling well on an everyday basis. People with dysthymia might also experience periods of major depression during their lifetime (Health, 2008).

The symptoms, severity, frequency, and duration of depression vary from person to person and depend on their particular illness. Some of the most common symptoms of depression include persistent sadness, anxiety, feelings of emptiness, irritability, restlessness, loss of interest in activities that were once pleasurable, and fatigue or decreased energy. Another consequence that will be discussed below is suicide, thoughts of suicide, and suicide attempts. There is no single cause of depression and it is likely a combination of genetic, biochemical, environmental and psychological factors, however, research indicates that depressive illnesses are disorders of the brain (Health, 2008).

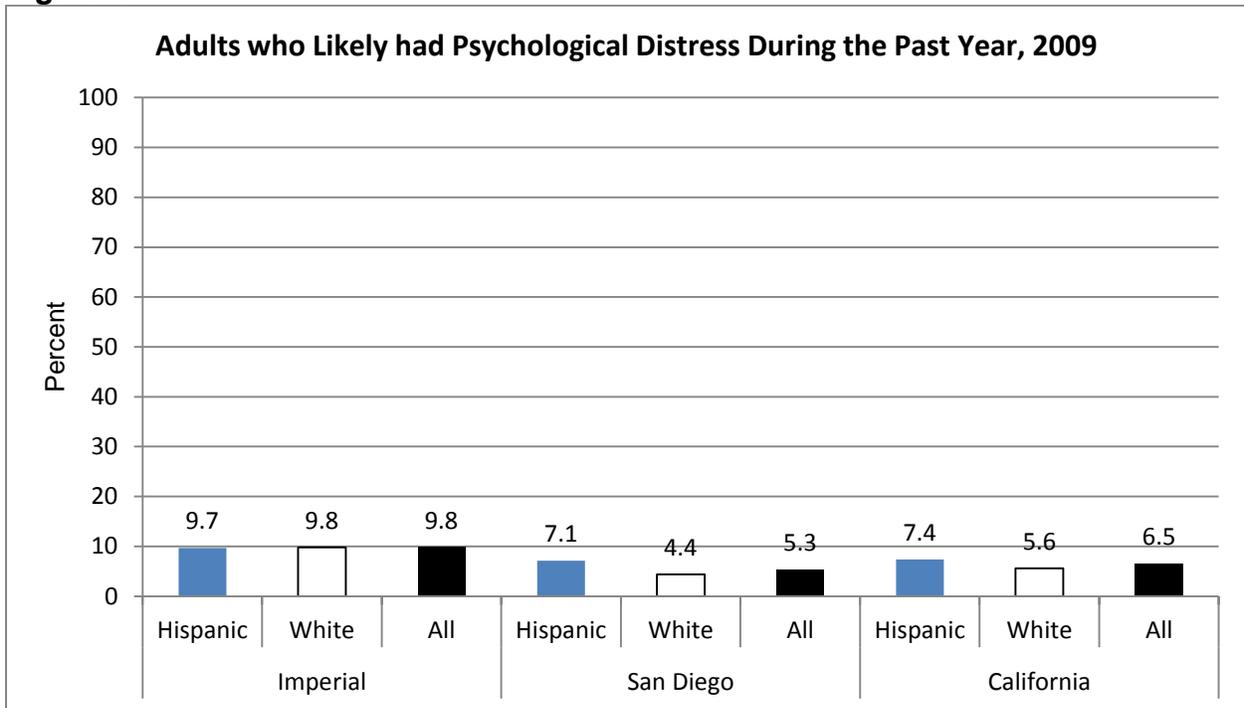
Why Is It Important?

Depression is a major cause of illness and death in the United States and is associated with reduced quality of life and social functioning. In 2006, the Center for Disease Control and Prevention Behavioral Risk Factor Surveillance System found that persons with depression were more likely to have cardiovascular disease, diabetes, asthma, obesity, a current smoker, physically inactive, and to drink heavily. They also found that females were more likely to be depressed than males (20.2% vs. 8.2%). Another study by the National Institute of Health found that 20 percent of teens age 13 to 18 reported having mental illness severe enough to affect their daily lives (CDC, 2009).

What Is the Status in the Border Region?

In 2009 close to 10% of Imperial County residents were likely to have had psychological distress during the last year compared to 5.3% in San Diego County and 6.5% statewide. In San Diego County and California statewide it appears that the Hispanic population was more likely than Whites to have likely had psychological distress during the last year, though the differences are not significantly different. (Figure 6.1, Appendix F; Table 6.1).

Figure 6.1



Source: California Health Interview Survey, 2009

In all regions examined there was a gap between those that needed help for psychological distress and those that received help for psychological distress. In San Diego County and California statewide the White population had the smallest percent difference between needing mental health services and receiving mental health services and the Hispanic population had the highest. Whites in Imperial County and the Hispanic population statewide had the highest percent differences between the need for mental health services and receiving mental health services (4.4% and 4.4%) (Figure 6.2, Appendix F; Table 6.5).

What is being done?

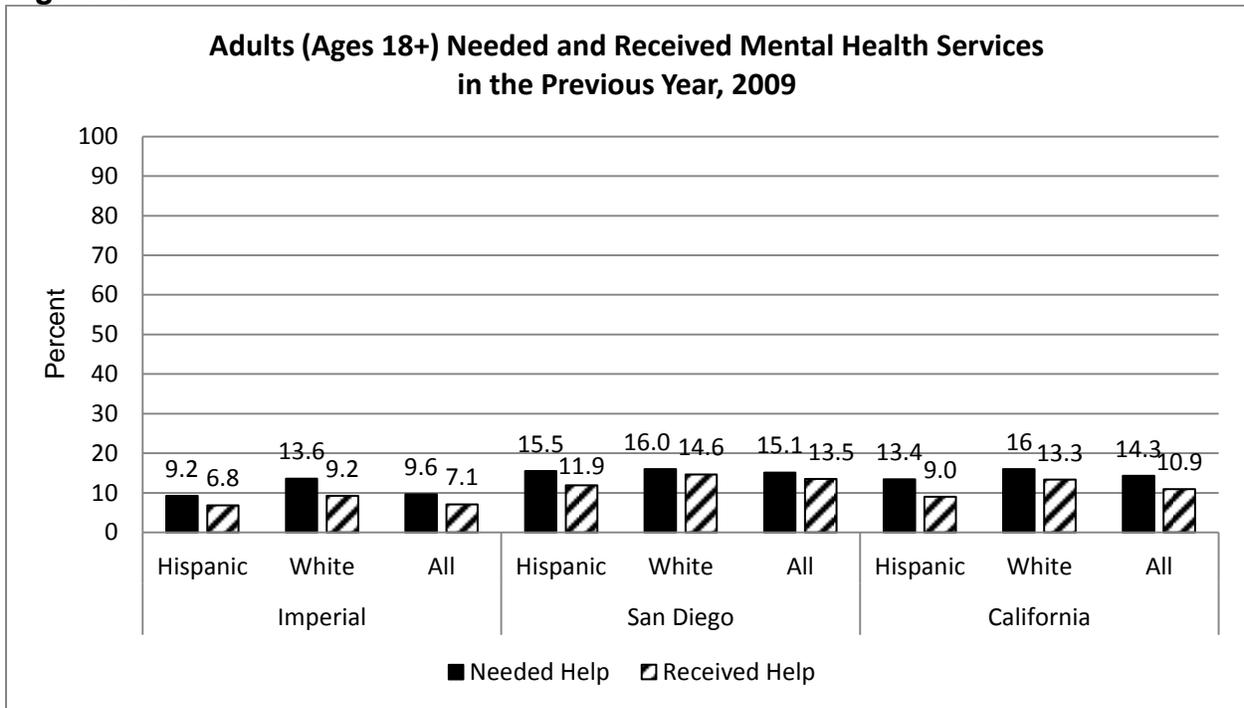
In November of 2004 the mental health services act (Proposition 63, MHSA) was passed that imposed a 1 percent tax on personal income to fund mental health services. The MHSA provides state funding to counties for expanded and innovative mental health programs. California’s mental health system offers community and hospital based mental health services to adults and children with serious mental illness and severe emotional disorder (Mental Health Services Act, 2011). California’s counties provide community based services that can be located through the county’s websites.

In San Diego County the “It’s Up to us” Campaign is designed to empower San Diegans to talk openly about mental illness to help recognize symptoms, seek help and support those who may be experiencing mental illness. San Diego County also produced *Moving Forward: How a Family Learns about Mental Illness*, a *fotonovela* or short story geared towards raising awareness about Mental Health in Latino families, in both

Spanish and English. Information about this fotonovela can be found at www.sandiego.networkofcare.org. San Diego County also offers several mental health services to adults, children and families who may be experiencing a mental health problem. A variety of treatment, rehabilitation and recovery services are offered to those with Medi-Cal or no insurance. The county has bilingual English/Spanish speaking counselors available 24 hours a day, 7 days a week and offers translation services in 140 languages.

Imperial County runs a website called Network of Care for Behavioral Health that provides information about the available mental health services to residents of Imperial County. The website provides links to services and gives information about insurance and how people can afford care for mental illnesses. The county provides mental health services including planning for and providing rehabilitation and supportive services including mental health assessment, monitoring progress, and individual and group therapy. The county also offers these services as well as medication support based on a sliding scale taking into factors gross household income, size and assets and runs a mental health 24 hour emergency crisis intervention helpline. Imperial County runs many outreach programs such as the MHSA outreach and engagement program and the community outreach program to provide outreach and education and increase the utilization of mental health services.

Figure 6.2



Source: California Health Interview Survey, 2009

SUICIDE

What Is It?

Suicide occurs when an individual intentionally ends their own life. Suicide affects everyone, although some groups are more at risk compared to others. Males are four times more likely to die from suicide compared to females and account for 78% of all U.S. suicides. However, females in the US are two to three times more likely to report attempting suicide during their lifetime. For males the most commonly used method of suicide is firearms (55.7%) and for females poisoning is the most commonly used method of suicide (40.2%). Risk factors for suicidal behaviors include: previous suicide attempt(s), a history of depression or other mental illness, alcohol or drug abuse, family history of suicide or violence, physical illness, and/or feelings of loneliness. (CDC,2010).

Why Is It Important?

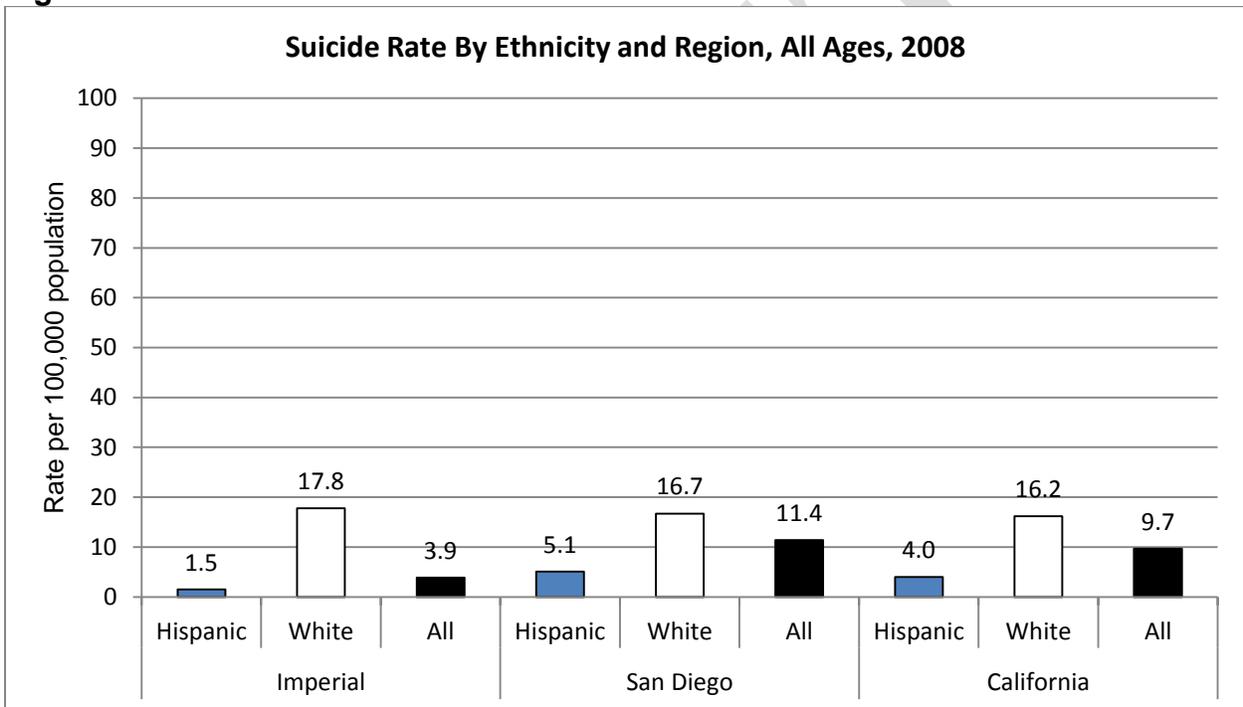
More people survive suicide attempts than actually die. These individuals are often seriously injured and require medical care. Frequently victims are blamed, and their friends, family, and communities are left devastated, in shock, angry, guilty, and depressed. There is approximately one suicide for every 25 attempted suicides. In 2008, 376,306 people treated in emergency rooms for self-inflicted injuries; 163,489 were hospitalized in the US. Suicide is the eleventh leading cause of death in the

United States (7th among males and 15th among females). Suicide is the 2nd leading cause of death among 25-34 year olds and 3rd leading cause of death among 15-24 year olds. In 2007, more than 34,000 suicides occurred in the U.S. (94 suicides per day, 1 suicide every 15 minutes, or 11.3 suicides per 100,000 population) (CDC, 2010).

What Is the Status in the Border Region?

Healthy People 2010 Objective 18-1 aims to reduce suicide deaths from 11.3 per 100,000 population to 5.0 per 100,000 population. In 2008, in San Diego County and California statewide suicide rates fail to meet Healthy People 2010 objectives. In all three regions the White population reported a higher rate than the population as a whole, while Hispanics reported a lesser rate. (Figure 6.3, Appendix F; Table 6.7).

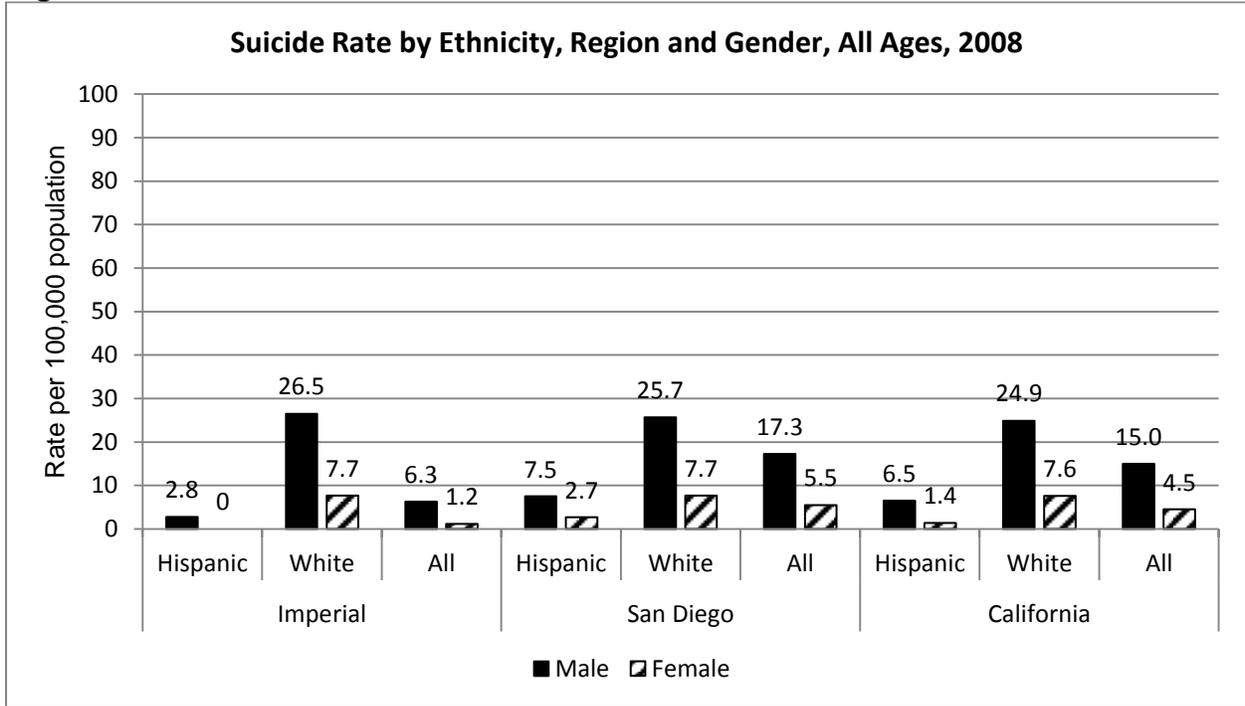
Figure 6.3



Source: California Department of Public Health, Death Statistical Data State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. July 2008.
HP 2010 Goal: 18-1, Reduce the suicide Rate to a target of 5.0 suicides per 100,000 pop.

In all regions examined, for all age groups and ethnicities examined, males reported higher rates of suicides than females. In most cases the rates for males are more than three times the rate for females with the highest rates being among non-Hispanic White males (26.5 per 100,000 in Imperial, 25.7 in San Diego County and 24.9 in California). (Figure 6.4, Appendix F; Table 6.7).

Figure 6.4

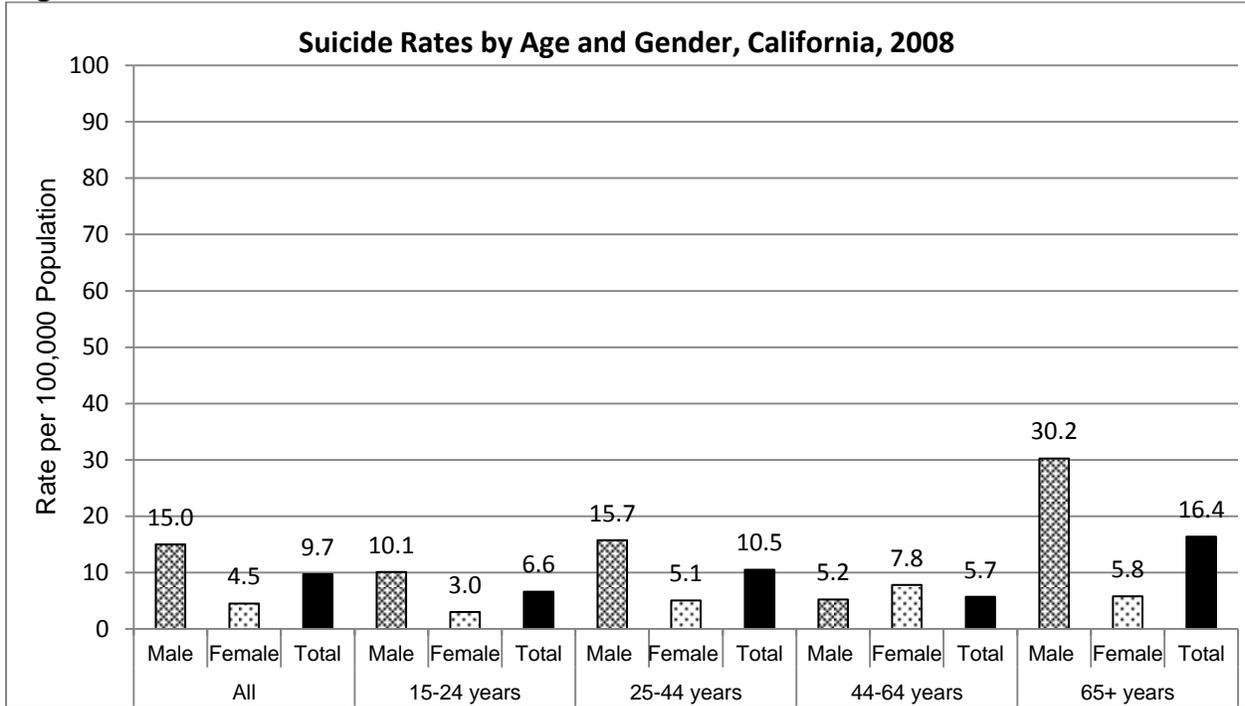


HP 2010 Goal: 18-1, Reduce the suicide Rate to a target of 5.0 suicides per 100,000 pop.

Source: California Department of Public Health, Death Statistical Data State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. July 2008.

In California, statewide individuals 65 and older reported the highest rates (16.4 suicides per 100,000 population), while in San Diego County individuals 45-64 years old reported the highest rates (19.1 suicides per 100,000 population). Of all regions, ethnicities and age groups examined in California, White males, 65 years and older are the most likely to have committed suicide in 2008 (39.6 suicides per 100,000 population) (Figure 6.5, Appendix F; Table 6.7).

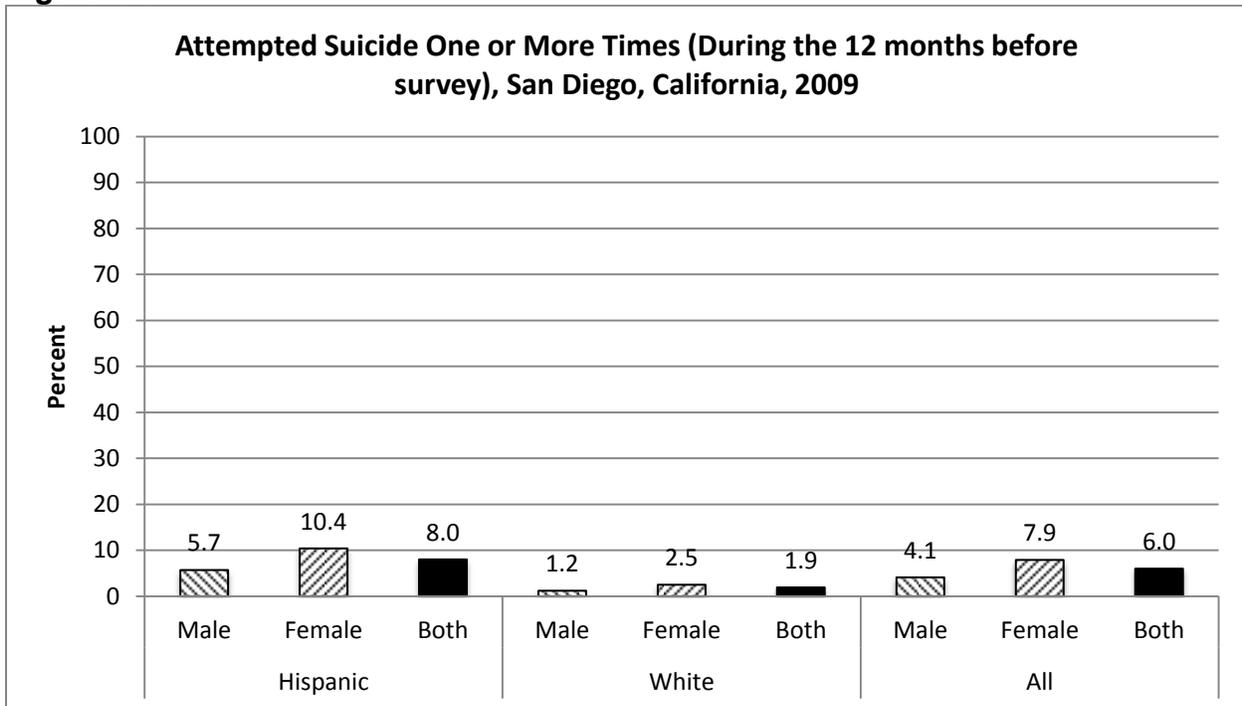
Figure 6.5



HP 2010 Goal: 18-1, Reduce the suicide Rate to a target of 5.0 suicides per 100,000 pop.
 Source: California Department of Public Health, Death Statistical Data - State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. July 2008.

Suicide attempts in San Diego County by race and gender are shown in figure 6.9. Though males have been shown to be successful in suicide more often, females attempt more suicide. The rate of suicide attempts in females is approximately two times higher for all ethnicities examined. Data for Suicide attempts is not available for California statewide or Imperial County. (Figure 6.6, Appendix F; Table 6.8).

Figure 6.6



Source: Centers for Disease Control and Prevention, Youth Behavior Surveillance System (YRBSS) 2009

What is being done?

The Community Health Improvement Partners (CHIP) is a collaboration of San Diego County health care systems, hospitals, community clinics, insurers, physicians, universities, community benefit organizations, and the County of San Diego with a variety of missions. One component of the program specifically addresses suicide. CHIP has created a suicide and school violence prevention phone guide, a resource to accessing relevant services. CHIP also has a designated Suicide Prevention Subcommittee that meets monthly to try to reduce suicide. San Diego County provides a suicide intervention program administrated through Mental Health Services. The county administers a bilingual suicide intervention hotline available to all residents of San Diego County, 24 hours/day, 7 days a week.

One of the community benefit organizations that participate in the CHIP is the Yellow Ribbon Suicide Prevention Program. This is a community-based program primarily developed to address youth/teen/young adult suicide (ages 10-25) through public awareness campaigns, education, and training specifically by helping communities build capacity. The program assists and empowers communities in identifying resources, building infrastructure, and educating adults and youth alike through safe and effective suicide prevention messaging to ask for self-help and how to respond to others asking for help. The program helps reduce the stigma associated with asking for help and strengthens the link between young consumers and professional help.

Imperial County provides a suicide intervention hotline through the Imperial County Behavioral Health Service branch. It is available 24 hours a day, 7 days a week. The Behavioral Health Services branch also provides a number of references and resources for local programs and services that can help those suffering from suicidal thoughts and behaviors.

BULLYING

What Is It?

Bullying is a major public health problem that can have serious effects on the health and wellbeing of everyone, especially adolescents. Bullying is a form of abuse that involves aggressive behavior and negative actions that are unwanted over a period of time involving an imbalance of power or strength. There are many different forms of bullying that can affect someone emotionally, physically or verbally. The forms of bullying include but are not limited to derogatory comments, name calling, social exclusion, hitting, kicking, shoving, starting false rumors, threatening, racial bullying, sexual bullying, and cyber bullying using the internet and cell phones. While it is hard to define why some people might bully it is thought that those who bully have a strong need for power and dominance and often find satisfaction in causing injury and suffering to others (Olweus, 2010).

Why is it important?

Bullying can have a wide range of impact on students who are bullied, school environments and others who observe another student getting bullied. Students who are bullied are more likely to have depression, low self-esteem, low self-worth, health problems, poor grades and suicidal thoughts. Boys are more likely to be involved in bullying than girls and are more likely to use physical bullying and be the victim of physical bullying. Girls are more likely to spread rumors and use social isolation as a form of bullying (Olweus, 2010). Students who are bullied may experience negative emotions. Feelings of discrimination prevail over feelings of safety and confidence. Fear, anger, frustration, and anxiety may lead to ongoing illness, mood swings, withdrawal from friends and family, an inability to concentrate, and loss of interest in school. If left unattended, the targeted student may develop attendance and/or discipline problems, fail at school altogether or, in the worst cases, become suicidal or retaliatory and violent. Although some students who bully are less likely to be trusted and may be seen as mean and manipulative, a bully who learns aggression toward others garners power and may find the behavior a difficult habit to break. Some acts of bullying result in suspension or expulsion of students and translate into child abuse and domestic violence in adulthood. Students who passively participate in bullying by watching may come to believe that the behavior is acceptable and that the adults at school either do not care enough or are powerless to stop it. Some students may join in with the bully; others who share common traits with the target may fear they will become the next target (Bullying Frequently Asked Questions, 2010).

What is being done?

In California safe school programs are developed by the School/Law Enforcement Partnership that requires school sites to write and develop comprehensive school safety plans relevant to the needs of that particular school. AB 86, passed in January of 2008 amended the partnership to add provisions related to bullying committed by means of electronic communication. San Diego County has a training program that teaches youth how to empower other young people to improve peer relationships and stop bullying. Imperial County has also started providing education sessions about bullying to students at after school programs. The department of public health also conducts a wellness radio show that provides segments about bullying.

DRAFT

Chapter 7

Diabetes and Risk Factors

DIABETES

What Is It?

Diabetes is a chronic medical condition marked by high levels of blood glucose (a form of sugar) resulting from defects in insulin production, insulin action, or both. There are several types of diabetes including:

- **Type 1 Diabetes**, previously known as juvenile diabetes, is an autoimmune disease in which the body does not produce the hormone insulin. There is no known way to prevent type 1 diabetes.
- **Type 2 Diabetes**, previously known as adult-onset diabetes, is a metabolic disease in which the body does not make enough insulin or use it effectively. Type 2 diabetes can be prevented or delayed by maintaining a healthy weight and exercising regularly.
- **Gestational Diabetes** occurs in pregnant women who have never had diabetes before but have higher than normal blood glucose levels during pregnancy. Without intervention, women with gestational diabetes have a 35-60 percent chance of developing type 2 diabetes within 10-20 years.
- **Prediabetes** is a condition that raises the risk of developing type 2 diabetes, heart disease, and stroke. People with prediabetes have blood glucose levels higher than normal but not high enough to be classified as diabetes. Without intervention, about 25 percent of people with pre-diabetes will develop diabetes within 3-5 years.

Diabetes, particularly Type 2 Diabetes, is a significant and growing health problem that affects both adults and children, causing a number of serious complications including blindness, amputations, and kidney failure, and is a major contributor to heart attacks and strokes. Overall, the risk for death among people with diabetes is about twice that of people of similar age without diabetes (CDC, 2011a).

Certain racial/ethnic groups have rates of diabetes that are higher than the national average. These include Hispanic/Latinos, African Americans, Native Americans, and Asian/Pacific Islanders. Hispanics of Mexican heritage have higher rates of diabetes than other Hispanics. Recent increases in the rates of diabetes nationally are attributed to the increase in obesity and lack of physical activity (Diamant, Babey, Brown, & Hastert, 2007). Along the border region, Mexican immigrants have significantly higher

rates of undiagnosed diabetes than do U.S.-born Hispanics or non-Hispanic Whites (Stoddard, He, & Vijayaraghavan, 2010).

Why Is It Important?

The number people diagnosed with diabetes in California continues to rise. In 2008, 2.3 million people, or 1 out of every 7 Californians, had been diagnosed with diabetes, up from 1.5 million in 2001. Apart from the 2.3 million diagnosed cases, 1.4 million Californians had diabetes but were not aware that they did (California Diabetes Program, Diabetes Information Resource Center, 2010). Total health care and related costs for the treatment of diabetes for the state of California is about \$24.5 billion per year. Direct medical costs (e.g. hospitalizations, medical care, and treatment supplies) account for about \$18.7 billion, with the other \$5.8 billion including indirect costs such as disability payments, time lost from work, and premature death (California Diabetes Program, Diabetes Information Resource Center, 2010). Diabetes is the seventh leading cause of death in the United States. It is also the leading cause of blindness, amputations, and kidney failure, in addition to being a contributing factor to cardiovascular disease such as hypertension, heart attacks, and stroke (CDC, 2011a). Cardiovascular disease is a leading cause of death among people with diabetes, and adults with diabetes have heart disease death rates that are 2-4 times higher than adults without diabetes (National Institute of Diabetes and Digestive and Kidney Diseases, 2011).

Prevalence rates of diabetes are consistently highest among individuals who are low income and have the least education. Diabetes prevalence is higher among those with a family income below 100% of the federal poverty level (FPL) (9.6%) compared with those whose income is about 300% of the FPL (5.1%). Diabetes prevalence is much higher among those with less than a ninth-grade education (13.7%) compared with those with a college degree or higher (4.7%) (Diamant, Babey, Brown, & Hastert, 2007).

In California, individuals can never be turned down for health insurance offered by an employer, however health insurance providers are allowed to refuse health insurance coverage for individuals based on their health status. In most cases, diabetes is considered an uninsurable condition (ADA, 2011).

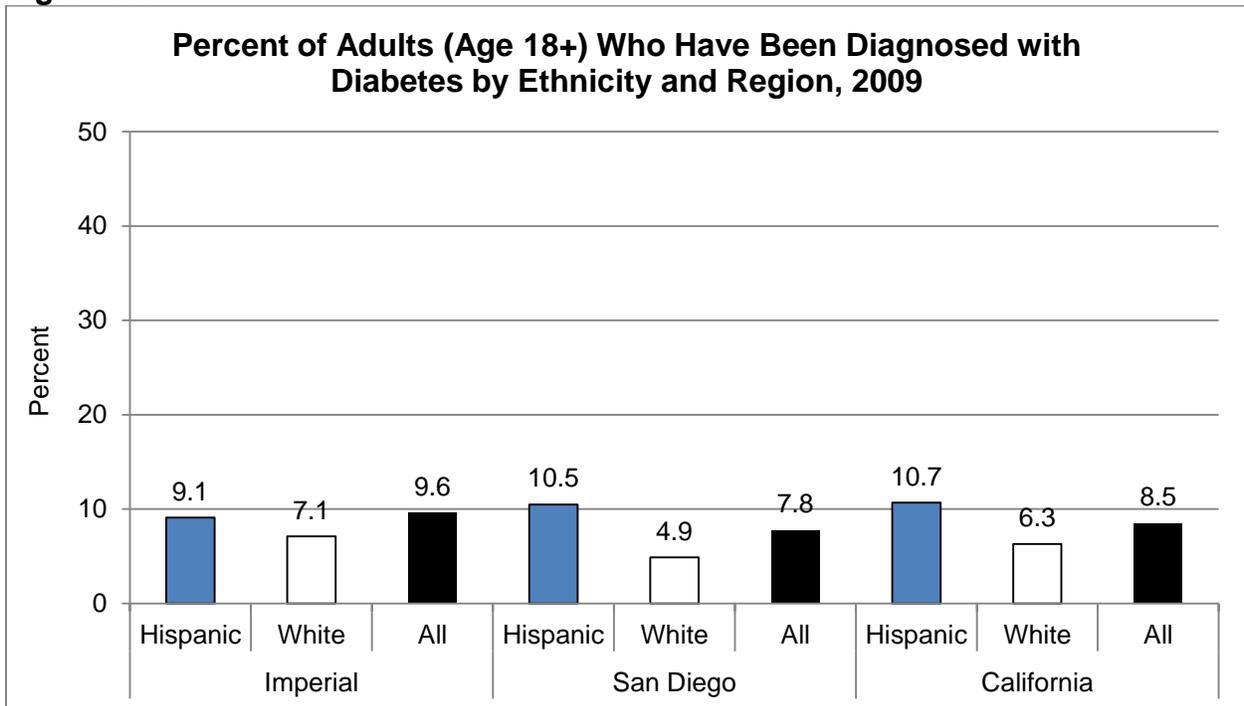
What Is the Status in the Border Region?

Diabetes prevalence among adults along the U.S./Mexico border region is 2-3 times higher than that in the United States (PAHO, 2010). The Healthy People 2010 national objective is to reduce the prevalence of clinically diagnosed diabetes to 25 cases per 1,000 populations (2.5%); Imperial County, San Diego County, and California have not met this objective.

In 2009, 9.6 percent of all adults in Imperial County had diagnosed diabetes. This appears to be higher than San Diego County (7.8%) and statewide (8.5%), though the differences are not significant. In California, Hispanic adults (10.7%) have a higher

prevalence of diabetes than non-Hispanic Whites (6.3%) and all ethnicities combined (8.5%). San Diego County follows the same trend, with Hispanic adults having significantly higher rates of diagnosed diabetes than non-Hispanic Whites and the population as a whole. In Imperial County, Hispanic adults also appear to have a higher prevalence of diabetes than non-Hispanic Whites, though this difference is not significant (Figure 7.1, Appendix F; Table 7.1).

Figure 7.1



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective:

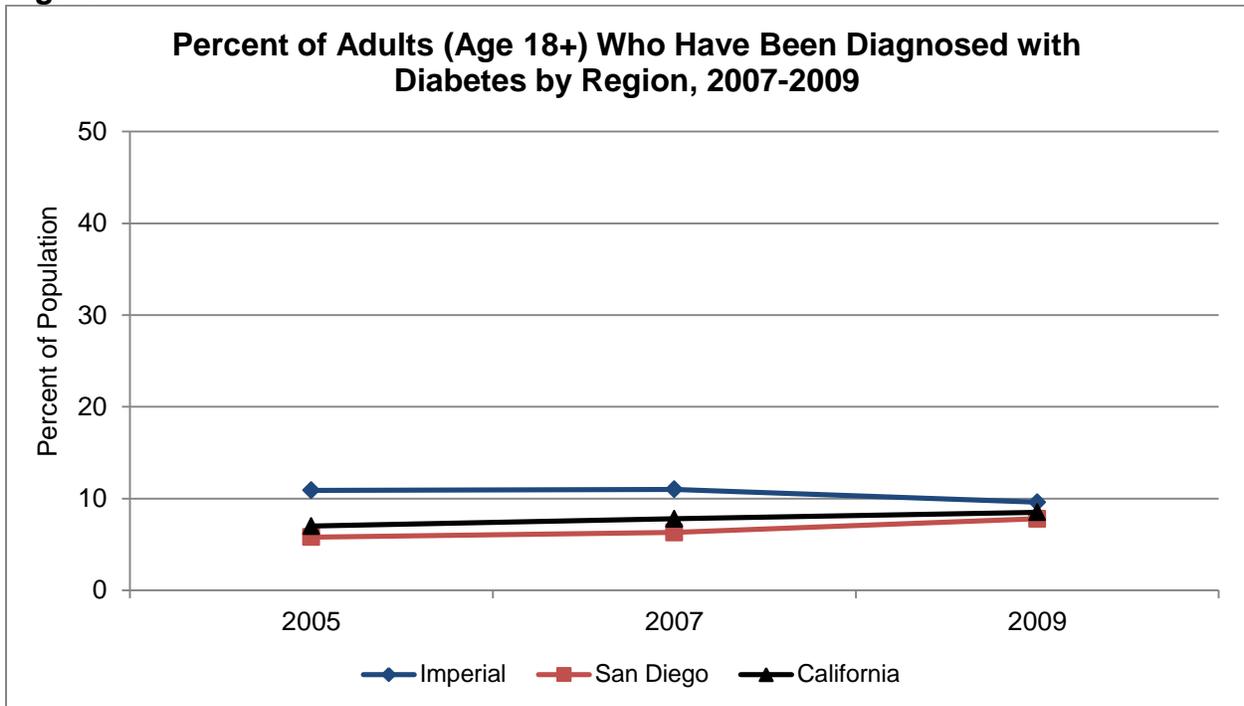
5-2: Prevent Diabetes, Target: 2.5 new cases per 1,000 population per year

5-3: Reduce the overall rate of diabetes that is clinically diagnosed, Target: 25 overall cases per 1,000 population

5-4: Increase the proportion of adults with diabetes whose condition has been diagnosed, Target: 80%

In California, from 2005 to 2009, there was a significant increase in adults who have been diagnosed with diabetes for all ethnicities combined and for Hispanics. The prevalence of diagnosed diabetes among non-Hispanic White adults also grew, though this increase was not statistically significant. In Imperial County, rates among Hispanic, non-Hispanic Whites, and all ethnicities appears to be decreasing, though no differences are statistically significant. In San Diego County, rates of diagnosed diabetes appear to be increasing for Hispanic and all-ethnicity adults, and decreasing for White adults. Again, none of these changes are statistically significant (Figure 7.2, Appendix F; Table 7.1).

Figure 7.2



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective:

5-2: Prevent Diabetes, Target: 2.5 new cases per 1,000 population per year

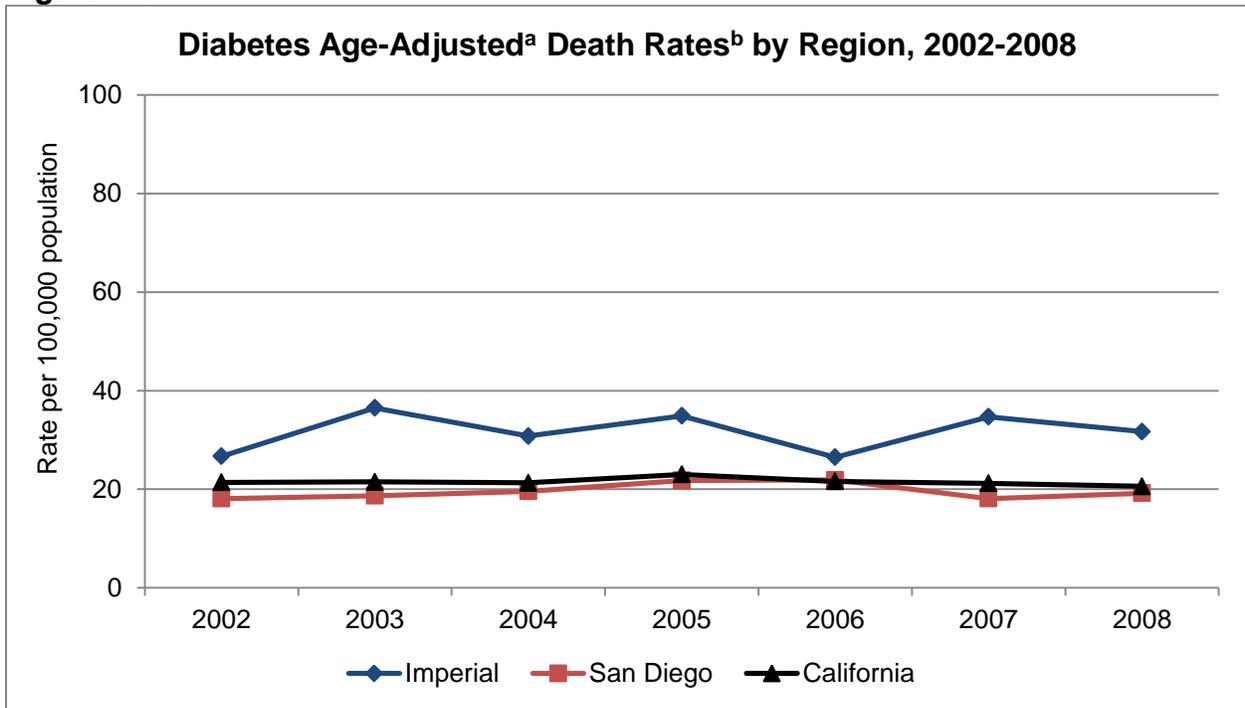
5-3: Reduce the overall rate of diabetes that is clinically diagnosed, Target: 25 overall cases per 1,000 population

5-4: Increase the proportion of adults with diabetes whose condition has been diagnosed, Target: 80%

DIABETES MORTALITY

Between 2002 and 2008, the age-adjusted death rate due to diabetes showed no sign of improvement in any of the regions examined. Throughout all years examined, the diabetes age-adjusted death rate in Imperial County persisted above the rates in San Diego County and California statewide (Figure 7.3, Appendix F; Table 7.2).

Figure 7.3



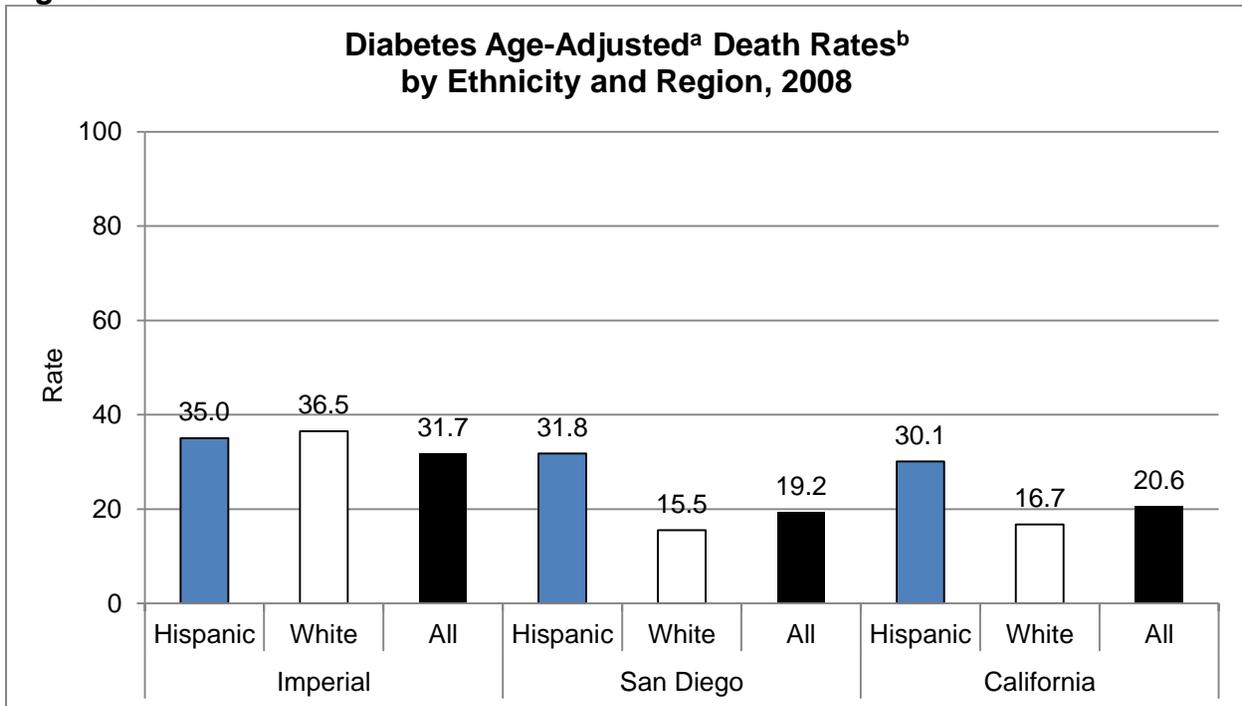
^a Age-adjusted to 2000 population

^b Rate per 100,000 population

Source: California Department of Public Health Vital Statistic Query System

In San Diego County and California statewide the Hispanic population reports a 50 percent higher diabetes age adjusted death rate than the rates for all ethnicities combined and double the rate of the White population. These disparities persist in San Diego County and California statewide for all years examined (Figure 7.4, Appendix F; Table 7.2).

Figure 7.4



^a Age-adjusted to 2000 population

^b Rate per 100,000 population

Source: California Department of Public Health Vital Statistic Query System

What Is Being Done?

CALIFORNIA DIABETES PROGRAM

The California Diabetes Program (CDP) is a partnership between the California Department of Public Health and the University of California, San Francisco and is funded primarily by the Centers for Disease Control and Prevention (CDC). The program is a coordinating leader for hundreds of multi-sector partners at the individual, community, health care, policy, and environmental levels. CDP works with partner organizations to conduct surveillance of diabetes and risk factors, promote awareness about diabetes, guide public policy, and support community and health care projects that focus on diabetes (California Diabetes Program, 2010). Through these partnerships, aspects such as disparities in undiagnosed diabetes, smoking behaviors, and hypertension have been analyzed in the U.S.-Mexico border region (Stoddard, He, & Schillinger, 2010; Stoddard, He, & Vijayaraghavan, 2010; Vijayaraghavan, He, Stoddard, & Schillinger, 2010). Articles are available to the public at <http://journal.paho.org/?issueID=162>.

CALIFORNIA DIABETES AND PREGNANCY PROGRAM

The California Diabetes and Pregnancy Program (CDAPP) provides comprehensive health services and promotes improved pregnancy outcomes for high-risk pregnant women with pre-existing diabetes and women who develop diabetes while pregnant;

gestational diabetes mellitus (GDM). The program's goal is to reduce maternal and infant morbidity and mortality for this high risk group to approximate the outcomes of the low-risk perinatal population (California Diabetes and Pregnancy Program, 2010).

U.S. - MEXICO BORDER DIABETES PREVENTION AND CONTROL PROJECT

The U.S.-Mexico Border Diabetes Prevention and Control Project aims to reduce the impact of diabetes among residents along the U.S.-Mexico border, through a model of participation and shared leadership throughout the U.S.-Mexico border region. The project was funded in 1999. As part of the project, collaborators designed and conducted a prevalence study of diabetes and related biological and behavioral factors, including pre-diabetes, overweight and obesity, and preventive health practices. A report with findings from this study is available to the public (Centers for Disease Control, Paso del Norte Health Foundation, California Endowment, and the Border Health Foundation, 2011).

DIABETES COALITION OF CALIFORNIA

The Diabetes Coalition of California (DCC) is an independent organization consisting of individuals and agencies dedicated to the recognition and reduction of the adverse personal and public impact of diabetes in the state's diverse communities. The Coalition is comprised of representatives from the general public, local health departments, universities, insurance and pharmaceutical companies, and a variety of community-based, voluntary, health and professional organizations (Diabetes Coalition of California, 2010).

OBESITY AND OVERWEIGHT

What Is It?

Obesity and overweight are terms used to define ranges of weight that are greater than what is considered healthy for a given height. There are a variety of methods to define these weight ranges and estimate body fat, including measurement of waist circumference, or techniques such as ultrasound and magnetic resonance imaging. For adults, obesity and overweight are most commonly measured in terms of a number called the body mass index (BMI). This is a calculated measure of weight in relation to height. Adults are considered obese when they have a BMI greater than 30 kg/m² and overweight when their BMI is between 25 and 29.9 kg/m². Corresponding BMI ranges for children and teens take into account normal differences in body fat between boys and girls and differences in body fat at various ages. Although BMI correlates well with the percentage of body fat, it does not directly measure body fat (CDC, 2010a).

Why Is It Important?

Over the last decade there has been a rapid increase in the prevalence of obesity and overweight, both nationwide and in California (Public Policy Institute of California, 2006).

According to the U.S. Surgeon General, obesity has reached epidemic proportions in adults, adolescents, and children (U.S. HHS, 2001). Overweight and obese people are at increased risk for disability, premature death, and many health conditions, including type 2 diabetes, hypertension, coronary heart disease, cardiovascular disease, and some cancers.

There are several complex causes of overweight and obesity, but no single identified cause or cure for the epidemic of obesity. Genes, metabolism, behavior, environment, culture, and socioeconomic status can all play an important role. Most frequently, an unhealthy weight is the result of an energy imbalance over a long period of time. This involves consuming too many calories and not getting enough physical activity (United States Department of Health and Human Services, 2001). Individuals with lower income and education levels and certain minority groups, such as African Americans and Hispanics, have a higher risk of obesity (California Center for Public Health Advocacy, 2009).

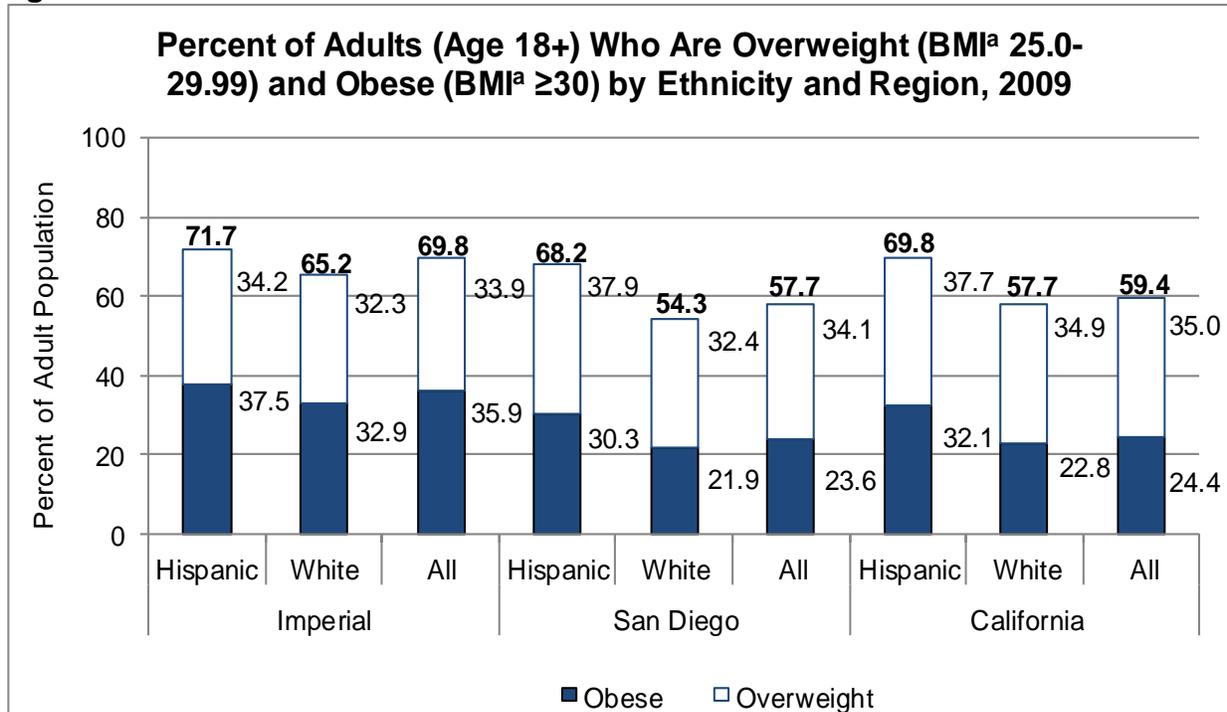
Latinos in California have many of the risk factors predisposing them to an unhealthy weight, especially unhealthy eating and inactivity. Many Latino communities have a low socioeconomic status and live in low-income, sometimes unsafe neighborhoods that have limited access to affordable healthy food and provide limited recreation and exercise opportunities (Latino Coalition for a Healthy California, 2006). There is evidence that acculturation has an impact on obesity in Mexican-origin residents in the United States. Mexican-origin residents born in the United States tend to be more obese than their Mexican-born counterparts. This may be due to differences in diet. Diets of Mexican-born persons who reside in the United States are lower in fat and generally more “heart healthy” than diets of Mexican-origin persons born in the United States (Dixon, Sundquist, & Winkleby, 2000).

What Is the Status in the Border Region?

The Healthy People 2010 Objective 19-3 sets a goal that no more than 15 percent of adults ages 20 and older will be obese (defined as a BMI equal to or greater than 30). All ethnicities examined in San Diego County, Imperial County and California exceed the Healthy People 2010 goal, and there is no noted improvement in any geographic or ethnic group.

In 2009, the majority of the population in San Diego County, Imperial County, and California are obese or overweight (57.7%, 69.8%, and 59.4% respectively). In all regions examined, the Hispanic population reported a higher rate of obesity and overweight than their non-Hispanic White counterparts, and all ethnicities combined. (Figure 7.5, Appendix F; Table 7.3).

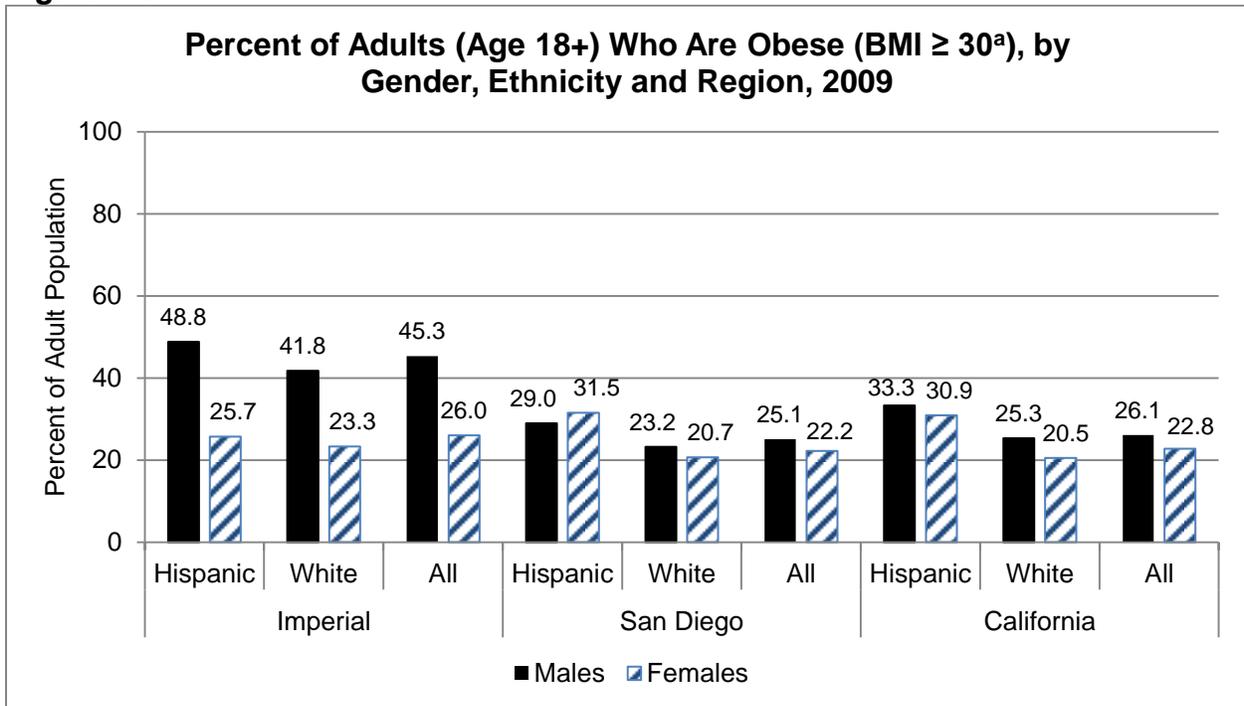
Figure 7.5



^aBody Mass Index (BMI) is calculated by dividing WEIGHT (in kilograms) by HEIGHT SQUARED (in meters)
 Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>
 Healthy People 2010 Objective 19-2: Reduce the proportion of adults who are obese to 15 percent

In California in general, men report a significantly higher percent of obesity than women. With the exception of the Hispanic population in San Diego County, this trend is mirrored in all regions and ethnicities examined. Men in Imperial County have statistically higher obesity rates than those in San Diego County and California in general. The obesity rate among Imperial County women is also higher, though not significantly, than women in San Diego County and California statewide. (Figure 7.6, Appendix F; Table 7.5).

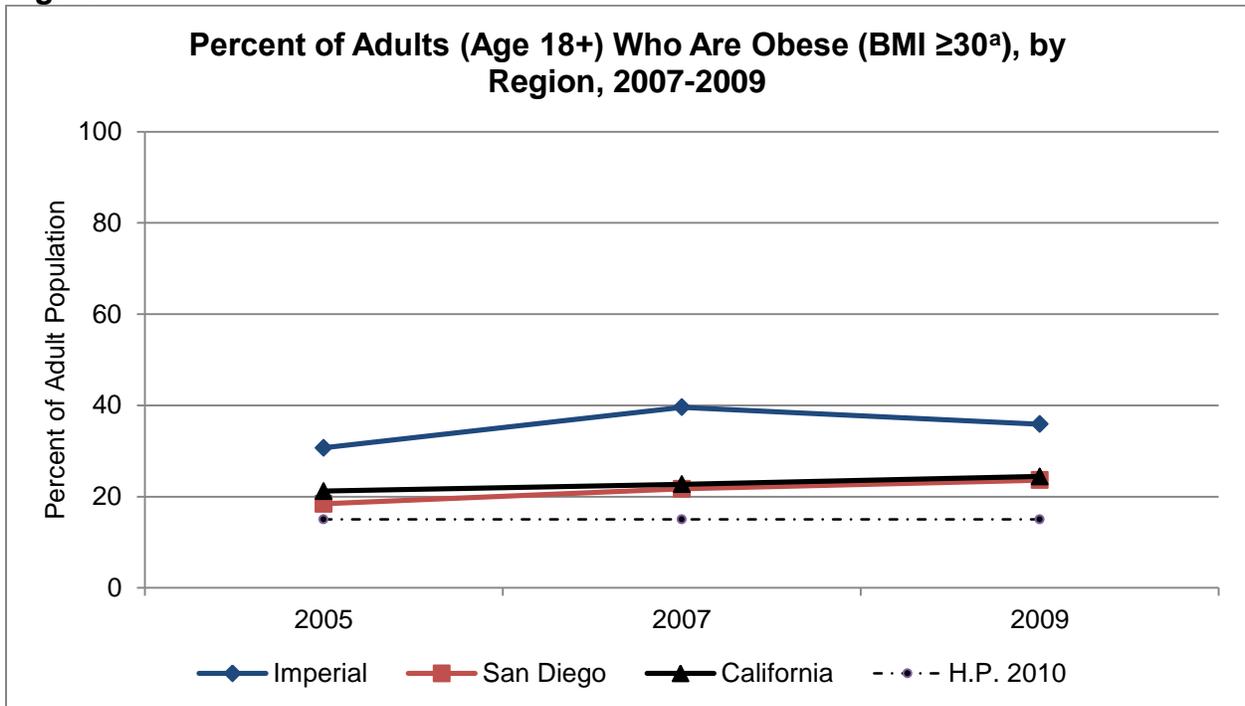
Figure 7.6



^a Body Mass Index (BMI) is calculated by dividing WEIGHT (in kilograms) by HEIGHT SQUARED (in meters)
 Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu>
 Healthy People 2010 Objective 19-2: Reduce the proportion of adults who are obese to 15 percent

None of the population groups have achieved the Healthy People 2010 objective. Instead, the rate of obesity in adults has increased from 2005 to 2009 in all regions (Figure 7.7, Appendix F; Table 7.3). Obesity rates for San Diego County and California, for all ethnicities examined, have significantly increased from 2007 to 2009. This trend is mirrored in Imperial County but the difference is not statistically significant.

Figure 7.7



^a Body Mass Index (BMI) is calculated by dividing WEIGHT (in kilograms) by HEIGHT SQUARED (in meters).

Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

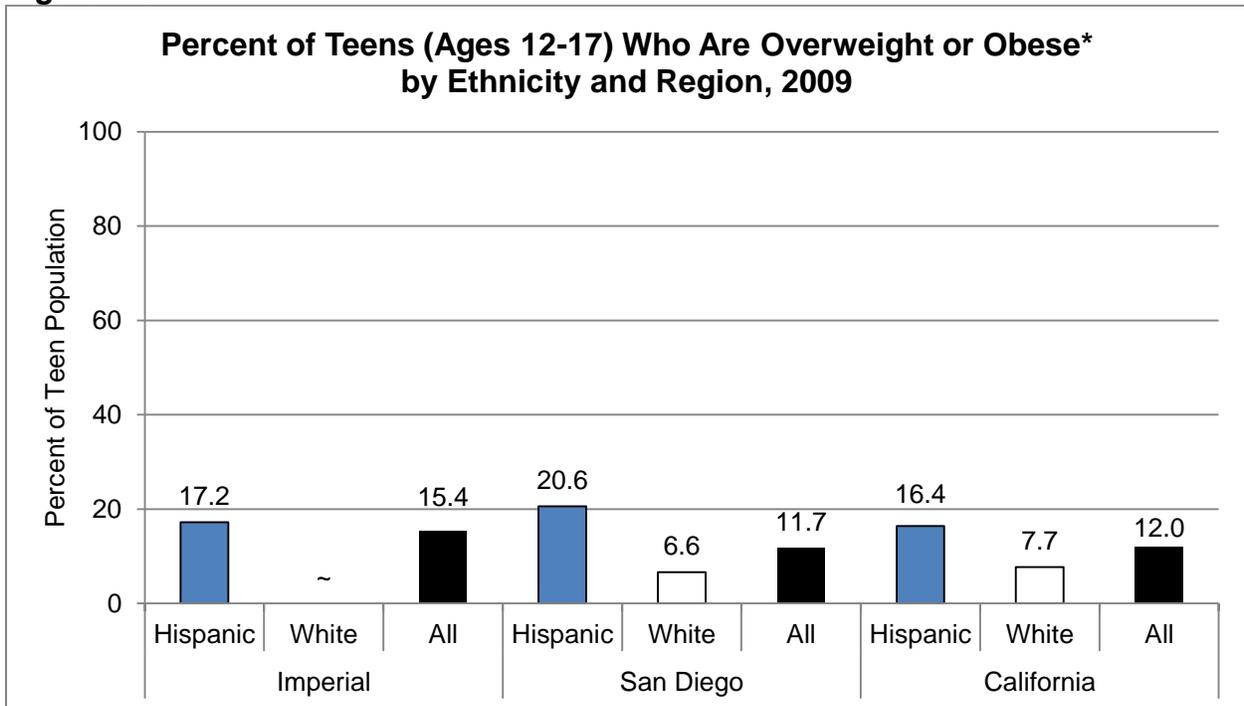
Healthy People 2010 Objective 19-2: Reduce the proportion of adults who are obese to 15 percent

OVERWEIGHT AND OBESITY IN ADOLESCENTS

Healthy People 2010 Objective 19-3 states that no more than 5 percent of children and adolescents ages 6-19 will be overweight or obese. For this report, an overweight adolescent is defined as a 12-17 year old with a BMI at or above the 95th percentile for age and sex.

In California, the rate of overweight and obesity in teenagers (12%) is more than double the Healthy People 2010 goal of 5 percent. None of the ethnic groups in any region meet the Healthy People 2010 goal. Hispanic teenagers in all three regions (17.2% and 20.6% in Imperial and San Diego Counties, and 16.4% in California) are significantly more overweight or obese than their White counterparts (6.6% in San Diego County and 7.7% in California) (Figure 7.8, Appendix F; Table 7.6).

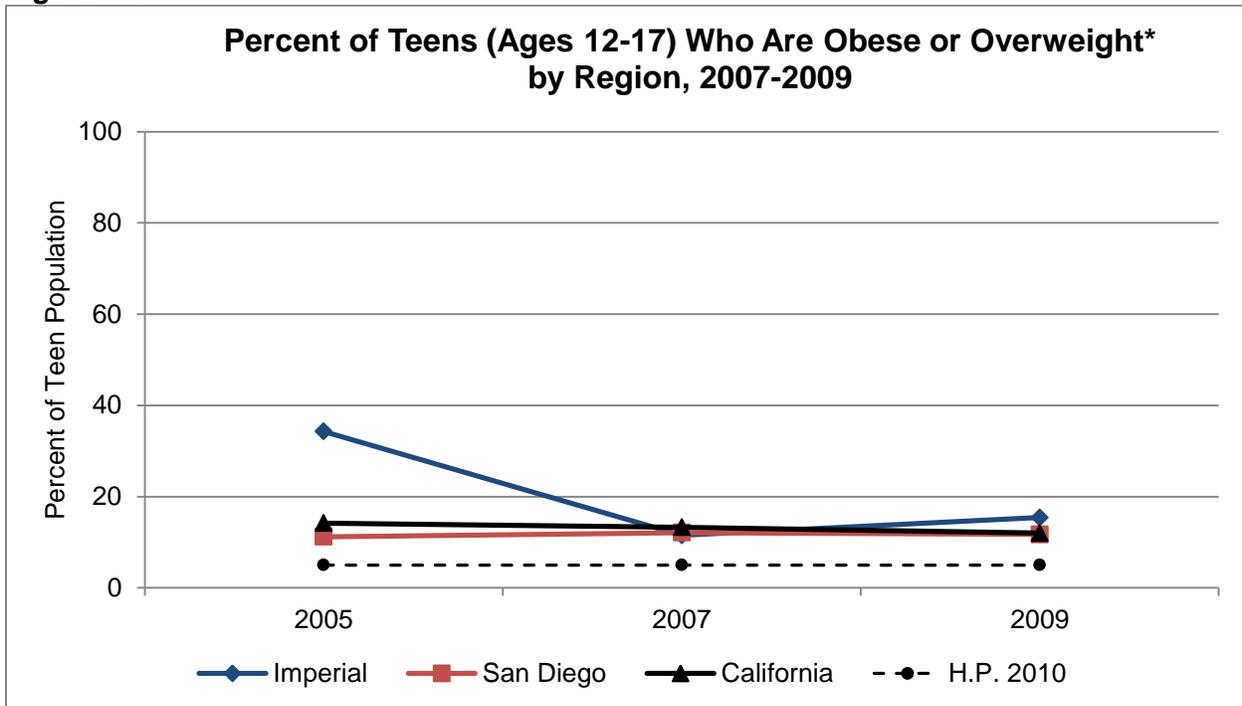
Figure 7.8



^a Overweight or obese is defined as at or above the gender- and age-specific 95th percentile of Body Mass Index (BMI)
 ~ Insufficient data to calculate an accurate percentage
 Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>
 Healthy People 2010 Objective 19-3: Reduce the proportion adolescents who are overweight or obese to 5%

There have been improvements; the rate in Imperial County as a whole has decreased from 34.3 percent in 2005 to 15.4 percent in 2009. Among Imperial County Hispanics, rates have also decreased from 38.0 percent to 17.2 percent. However, neither of these decreases is statistically significant. In San Diego County, overweight/obesity rates changed very little between 2007 and 2009. In California, rates appear to be decreasing, though these changes are not statistically significant (Figure 7.9, Appendix F; Table 7.6).

Figure 7.9



^a Obese or Overweight is defined as at or above the gender- and age-specific 95th percentile of Body Mass Index (BMI)
Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>
Healthy People 2010 Objective 19-3: Reduce the proportion adolescents who are overweight or obese to 5%

NUTRITION

What Is It?

Nutrition is essential for growth, development, health, and well-being (Healthy People 2010, 2000). Nutrition is the way in which the food we eat nourishes our bodies. Proper nutrition provides a balance of vitamins, minerals and nutrients for our bodies to function optimally. Different age groups have varying nutritional requirements but in general a healthy balanced diet that includes a variety of calcium rich foods, fruit and vegetables, whole grains, lean protein and reduced fat, sugars and salt can help people maintain a healthy weight and can help prevent obesity, diabetes, cardiovascular disease and many other chronic diseases (NICHD, 2011). A healthy lifestyle includes a balanced nutritional intake and adequate physical activity to maintain a healthy weight. Good nutrition is also important for the growth and development of children.

Why Is It Important?

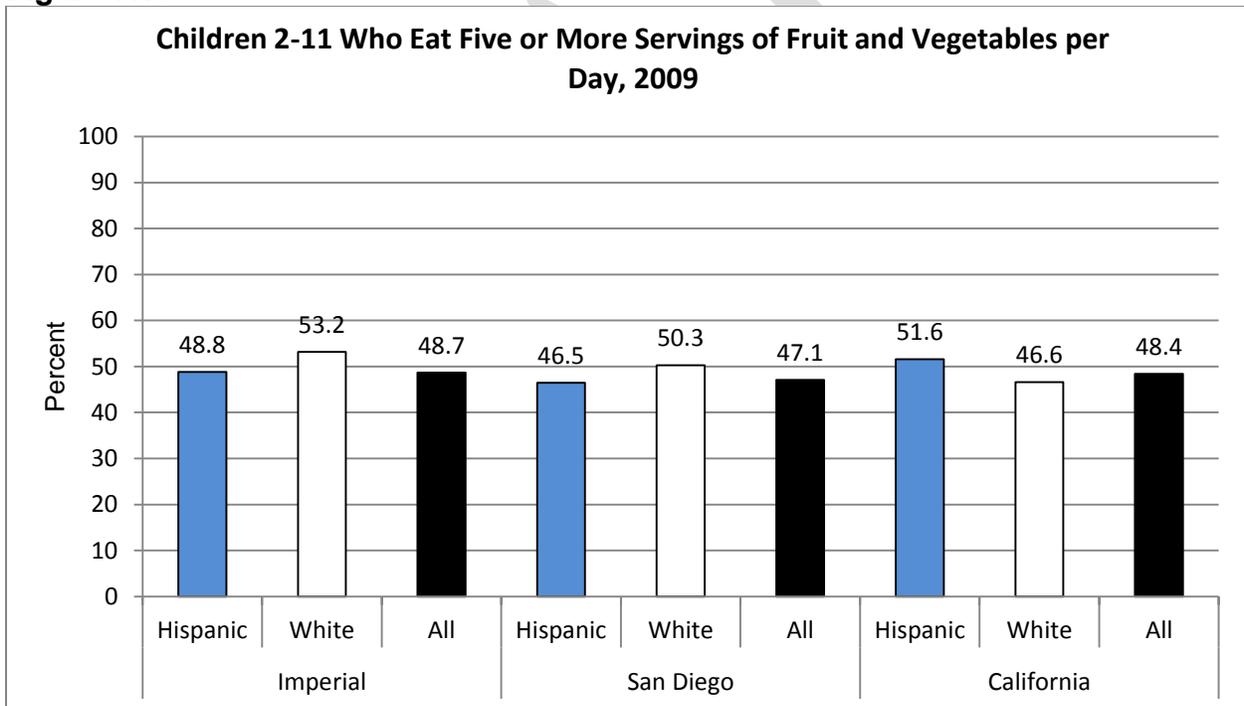
Poor diet or nutrition is one of the leading factors leading to the overweight and obesity in the United States. Even in the absence of overweight and obesity poor diet is associated with cardiovascular disease, hypertension, type 2 diabetes, osteoporosis, and some types of cancer. Poor nutrition significantly contributes to the burden of preventable illnesses and premature deaths in the United States (U.S. HHS & U.S.

Department of Agriculture, 2011). Disparities in health status indicators and risk factors for diet-related disease are evident in many segments of the population based on gender, age, race and ethnicity, and income. For example, overweight and obesity are observed in all population groups, but obesity is particularly common among Hispanic, African American, Native American, and Pacific Islander women. Furthermore, despite concerns about the increase in overweight and certain excesses in U.S. diets, segments of the population also suffer from malnutrition, including persons who are socially isolated and poor (Healthy People 2010).

What Is the Status in the Border Region?

In 2009, in all regions observed, Children ages 2-11 were significantly more likely to eat five or more servings of fruits and vegetables compared to teens age 13-17. In San Diego County and Imperial County the percent of White children who ate 5 of more fruits and vegetables was higher than Hispanics or all races combined but this difference was not significant. In California as a whole Hispanic children age 2-11 appeared more likely to eat 5 or more fruits and vegetables but, again, the difference was not statistically significant. (Figures 7.10 and 7.11, Appendix F; Table 7.7).

Figure 7.10



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective:

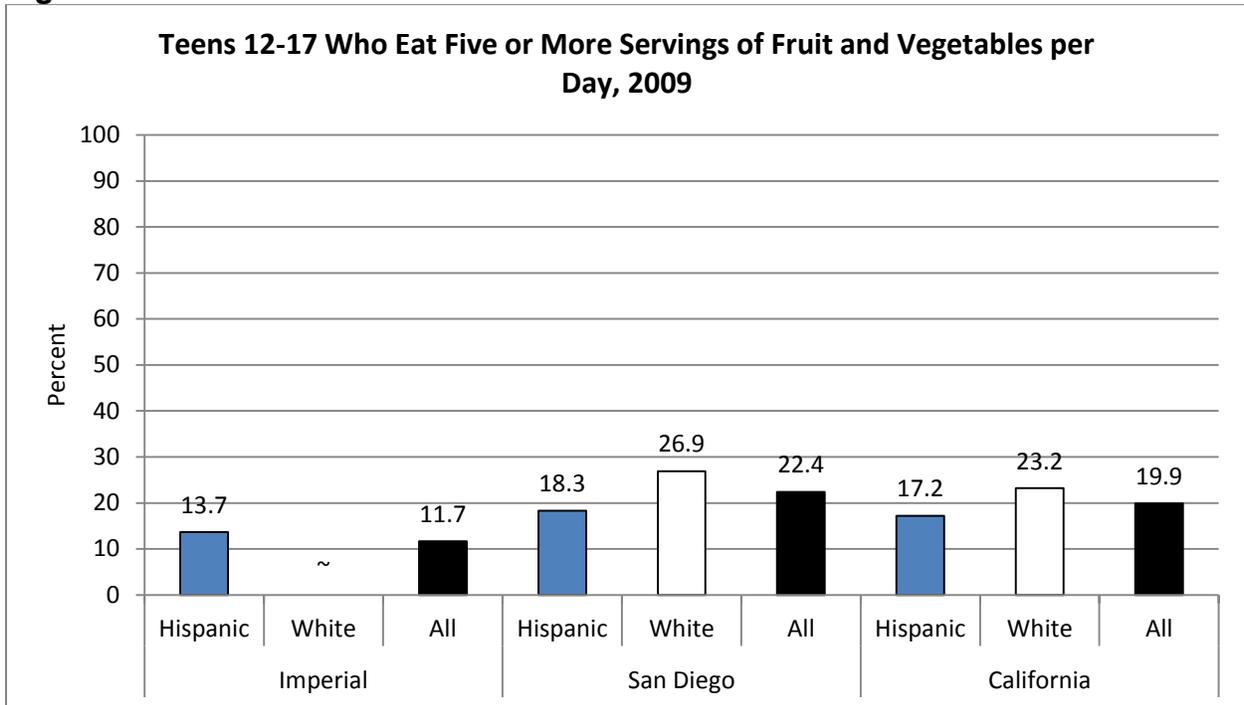
19-5: Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.

19-6: Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.

For teens age 12-17 in San Diego County and California as a whole White teens were appeared more likely to eat 5 or more fruits and vegetable compared to Hispanics and

all races combined although these findings were not statistically significant (Figure 7.11, Appendix F; Table 7.7).

Figure 7.11



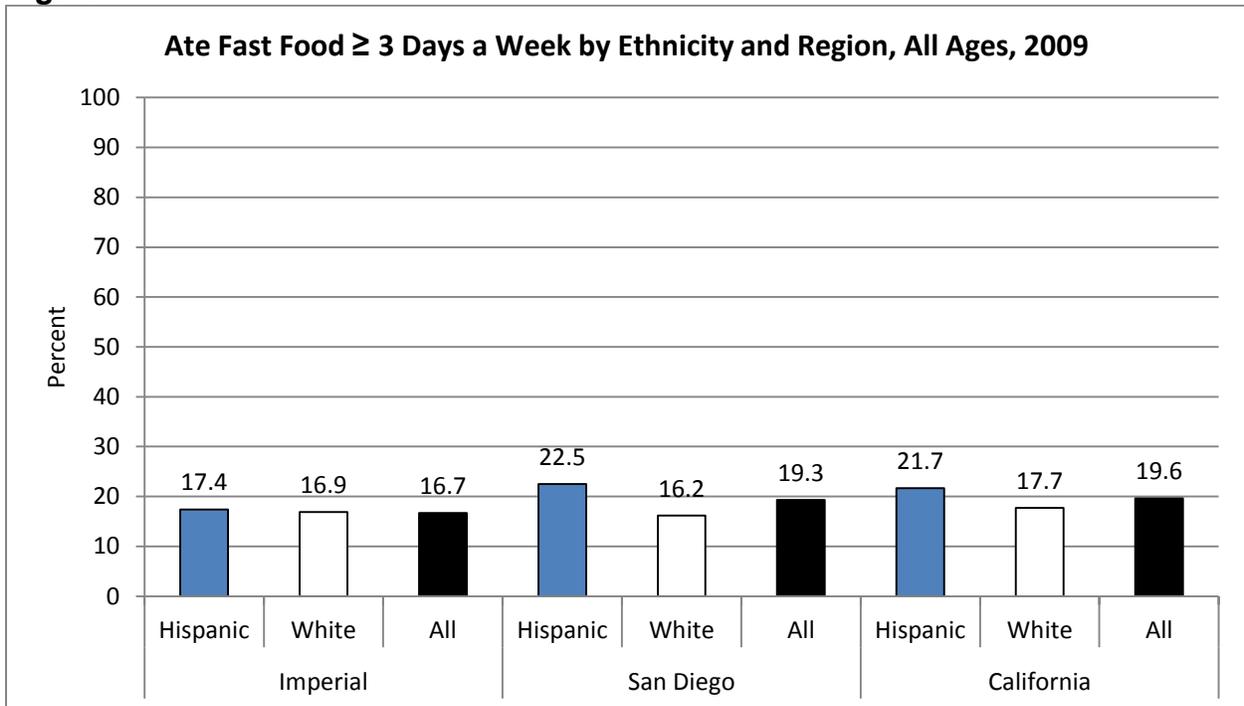
Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>
 Healthy People 2010 Objective:

19-5: Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.

19-6: Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.

In California, in 2009, 19.6 percent of the population reported eating fast-food 3 or more times per week. In all regions observed Hispanics reported eating fast food ≥ 3 times a week more often than Whites and all races combined, however, this finding was not significant. There are no significant differences between ethnicities in all regions observed (Figure 7.12, Appendix F; Table 7.8).

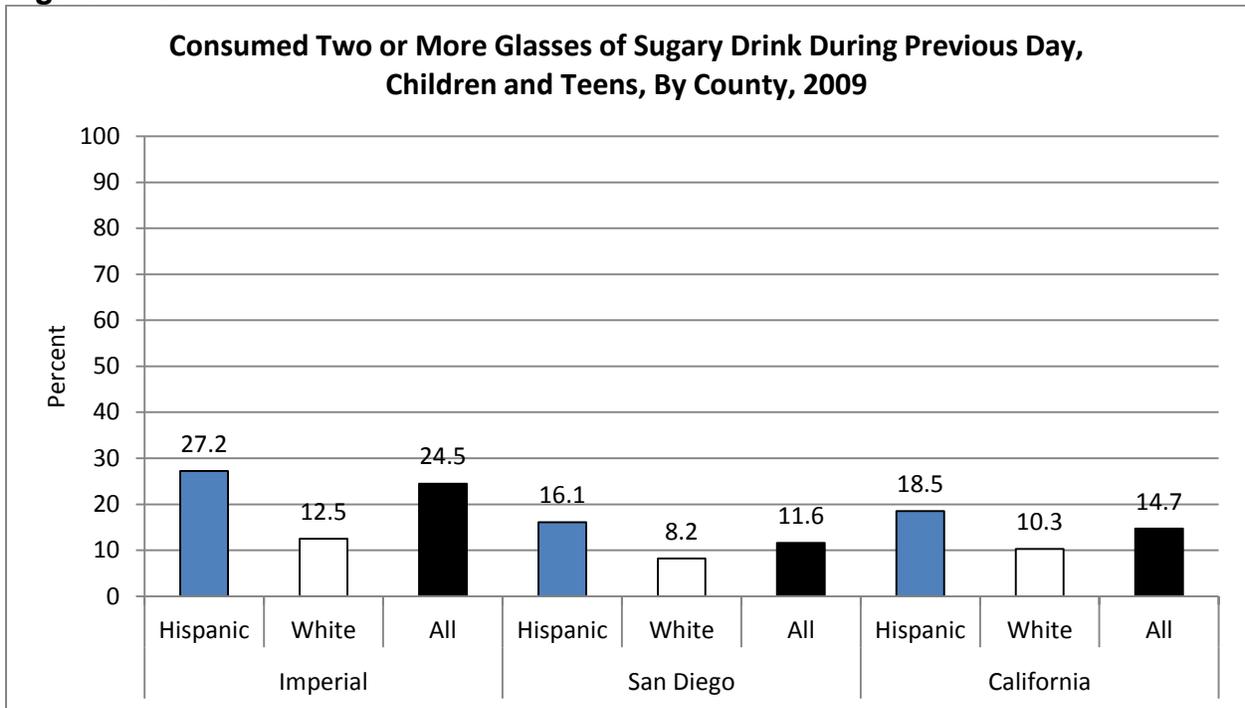
Figure 7.12



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

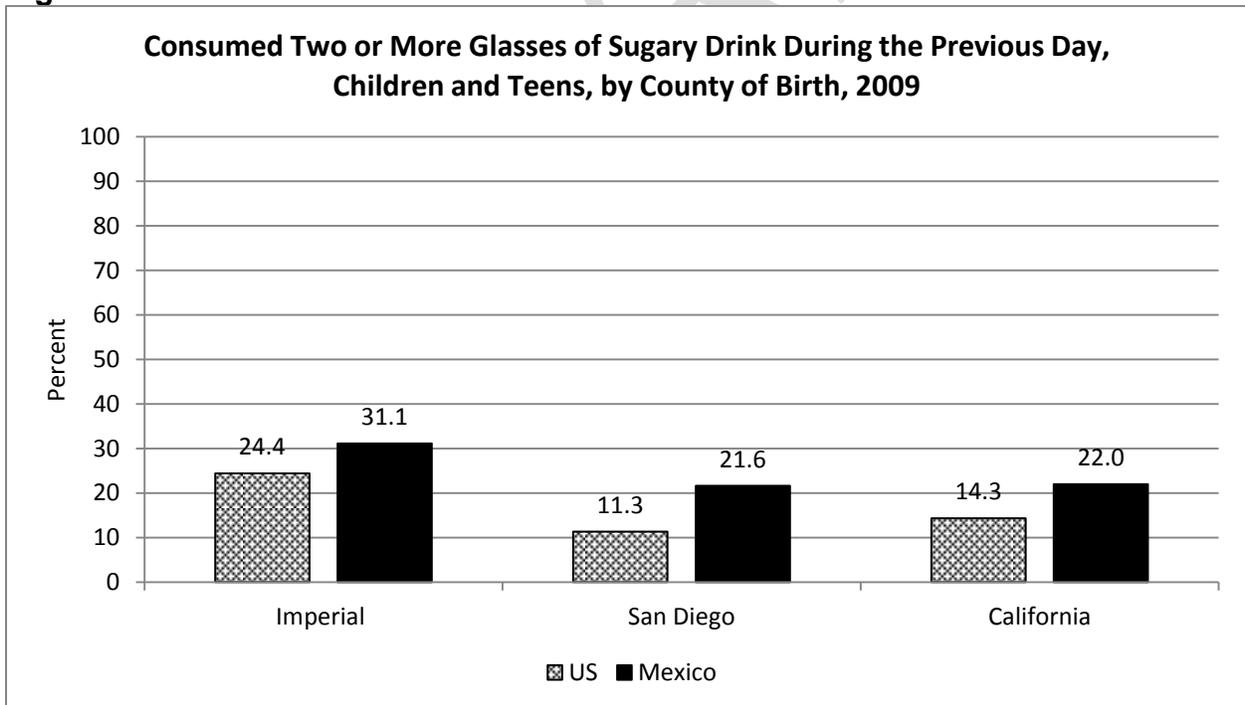
In all regions examined, in 2009, Hispanics were more likely to consume two or more glasses of sugary drink during the previous day compared to Whites and all races combined but this finding was only significant for California statewide. Furthermore, for all regions examined in 2009, those that were born in Mexico were more likely to consume two or more glasses of sugary drink compared to those in the US, however, this finding was only significant for California statewide (Figures 7.13 and 7.14, Appendix F; Table 7.9).

Figure 7.13



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Figure 7.14



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

PHYSICAL ACTIVITY

What Is It?

Physical activity is defined as movement of the body that uses energy. For health benefits, physical activity should be moderate or vigorous and add up to at least 30 minutes a day. Regular physical activity throughout life is important for maintaining a healthy body, enhancing psychological well-being, and preventing premature death (USDA, 2011). For children and adolescents, 60 minutes or more of physical activity is recommended per day (CDC, 2010b). Physical activity is often measured through self-report: people are asked how frequently and vigorously they exercised, and for how long. Research has shown, however, that individuals may overestimate their physical activity rates (National Center for Chronic Disease Prevention and Health Promotion, 2000).

Why Is It Important?

Research has demonstrated that virtually all individuals will benefit from regular physical activity. Regular physical activity is important for good health, it's especially important when trying to lose weight or to maintain a healthy weight. Physical activity reduces risks associated with cardiovascular disease and diabetes, beyond the reduction provided by weight reduction alone. Physical activity also helps reduce risk for several forms of cancer, reduce arthritis pain and associated disability, reduce risk for osteoporosis and falls, and reduce symptoms of depression and anxiety (CDC, 2011b). People who are physically active generally live longer lives than those who are not, and physical activity helps enhance quality of life (Healthy People 2010, 2000).

In the United States, researchers have found disparities in leisure-time physical activity. In general, women, African Americans and Hispanics, older adults, people with disabilities, and people with lower income and education levels report less leisure-time physical activity than do their counterparts (Healthy People 2010, 2000).

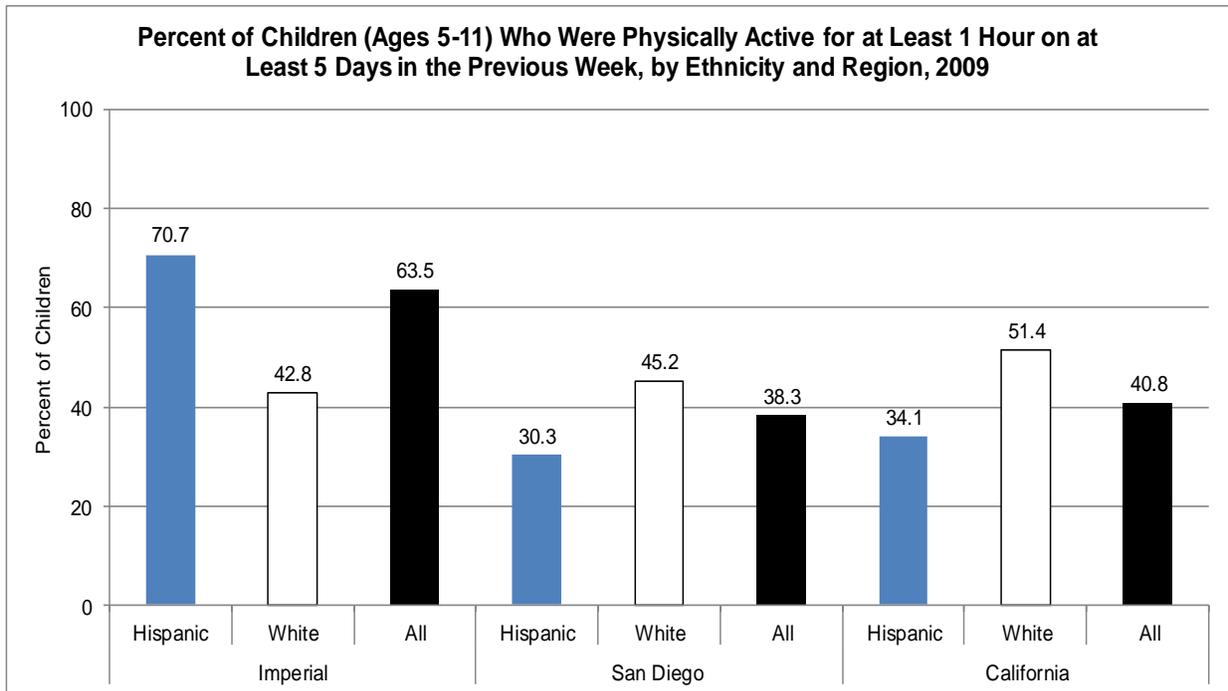
Factors that encourage physical activity in children and teens include support from friends and family, as well as safe and convenient locations to be active in (CDC, 2010b). Improving accessibility to park, recreation, fitness and sports facilities for people of all ages has been recommended as a priority strategy for increasing physical activity (National Physical Activity Plan, 2010). Studies have also shown that children and adolescents who regularly walk, bicycle, or use other forms of active transportation to school have higher overall levels of physical activity than children and adolescents who commute to school by car (McMillan, 2009).

What Is the Status in the Border Region?

In Imperial County, 63.5 percent of children between 5 and 11 years of age report being physically active for at least 1 hour on at least 5 days in the previous week. Among Hispanic children, the percentage is higher (70.7%). Hispanic children in Imperial

County have significantly higher physical activity percentages than children in San Diego County or in California in general. There is no significant difference in physical activity rates among White children in Imperial County (42.8%), San Diego County (45.2%) and California (51.4%). In California a significantly higher percentage of White teens (51.4%) compared with Hispanic teens (34.1%) report at least 5 days of at least 1 hour of physical activity (Figure 7.15, Appendix F; Table 7.10).

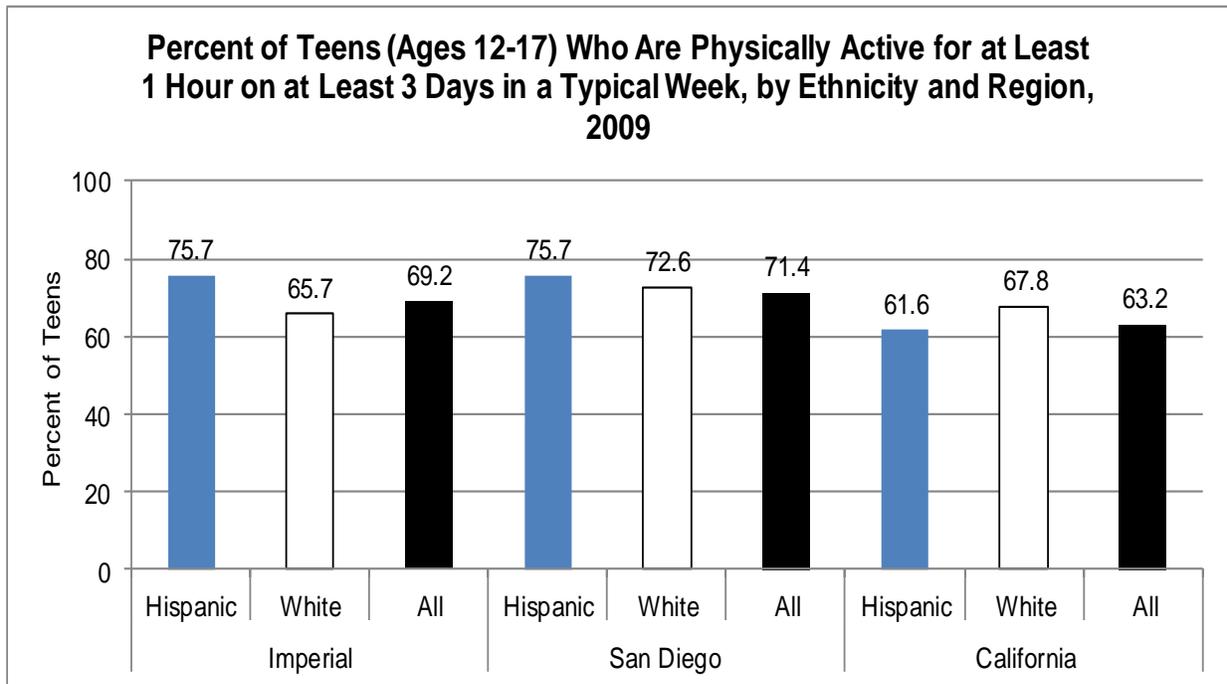
Figure 7.15



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

There are no significant differences in reported physical activity between ethnic groups or region among teens (ages 12-17) who report at least 1 hour of physical activity for at least 3 days in a typical week. About 63 percent of teens in California, 71 percent in San Diego County, and 69 percent in Imperial County, report this level of physical activity. In California, 61.6 percent of Hispanic teens and 67.8 percent of White teens report physical activity; the percentages for Hispanic and White teens in Imperial and San Diego Counties are 75.7 percent and 65.7 percent, and 75.5 percent and 72.6 percent, respectively (Figure 7.16, Appendix F; Table 7.11).

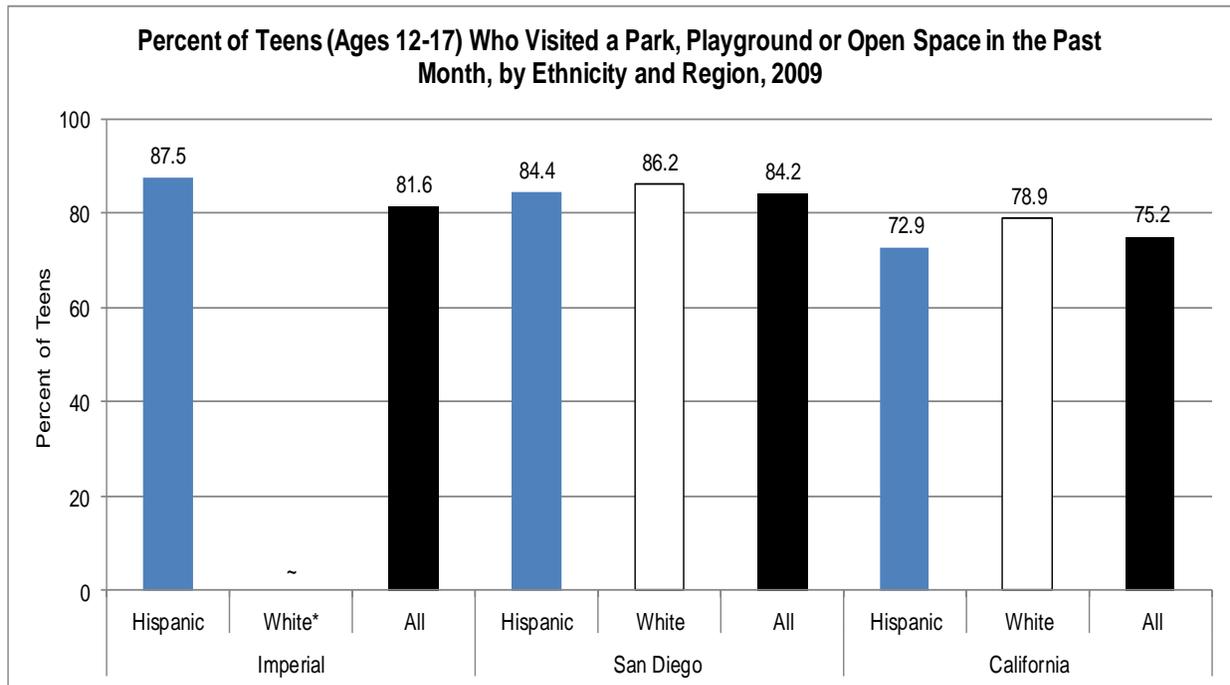
Figure 7.16



Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

In Imperial County, 81.6 percent of teens (ages 12-17) report having visited a park, playground or open space in the past month. Among Hispanic teens in Imperial County, the percent is higher (87.5%), though not statistically significant. Eighty-four percent of Hispanic teens in San Diego County, and 72.9 percent in California, report visiting a park, playground or open space in the past month; the percentage for Imperial County was significantly higher than that of California for Hispanic teens. Among White teens, 86.2 percent in San Diego County and 78.9 percent in California report having visited a park, playground or open space; this difference is not significant. There were no significant differences between ethnic groups in any region (Figure 7.17, Appendix F; Table 7.12).

Figure 7.17

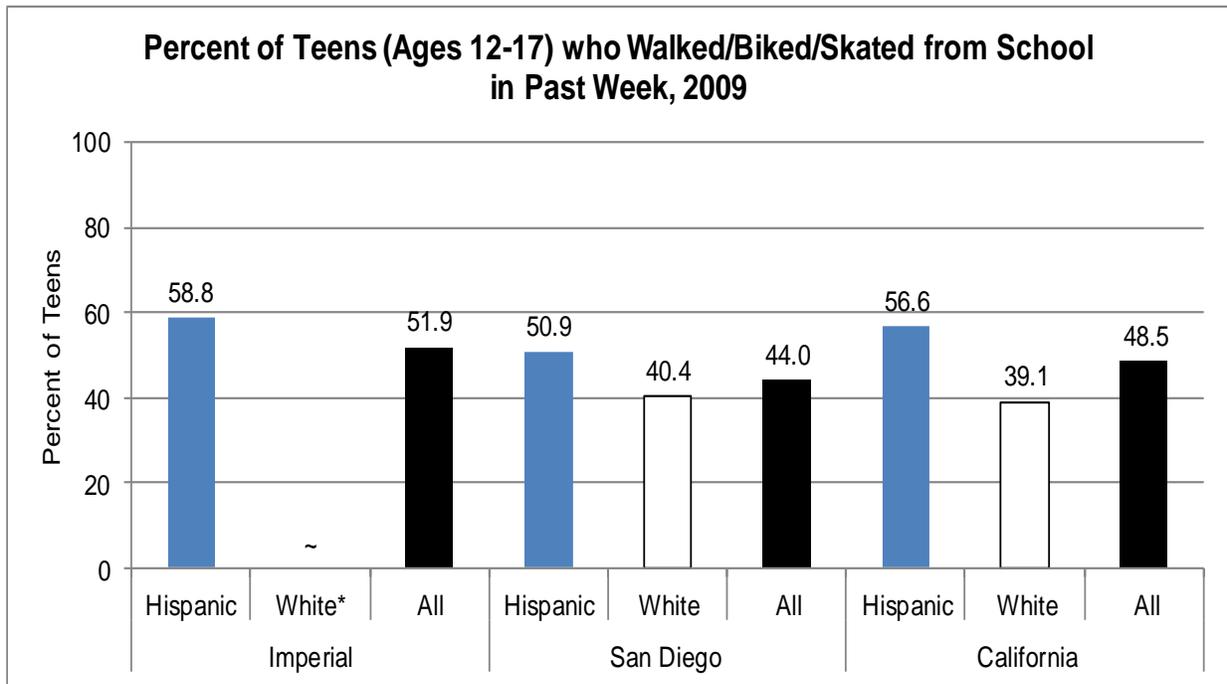


~: Data insufficient to report percentages

Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

In California, 56.6 percent of Hispanic teens reported walking, biking or skating from school at least once per week. This percentage is significantly higher than that of White teens (39.1%) and all teens (48.5%). This trend is also seen in San Diego County, where 50.9 percent of Hispanic teens, 40.4 percent of White teens, and 44.0 percent of all teens report actively commuting to school. However, in San Diego County these differences were not significant. (Figure 7.18, Appendix F; Table 7.13).

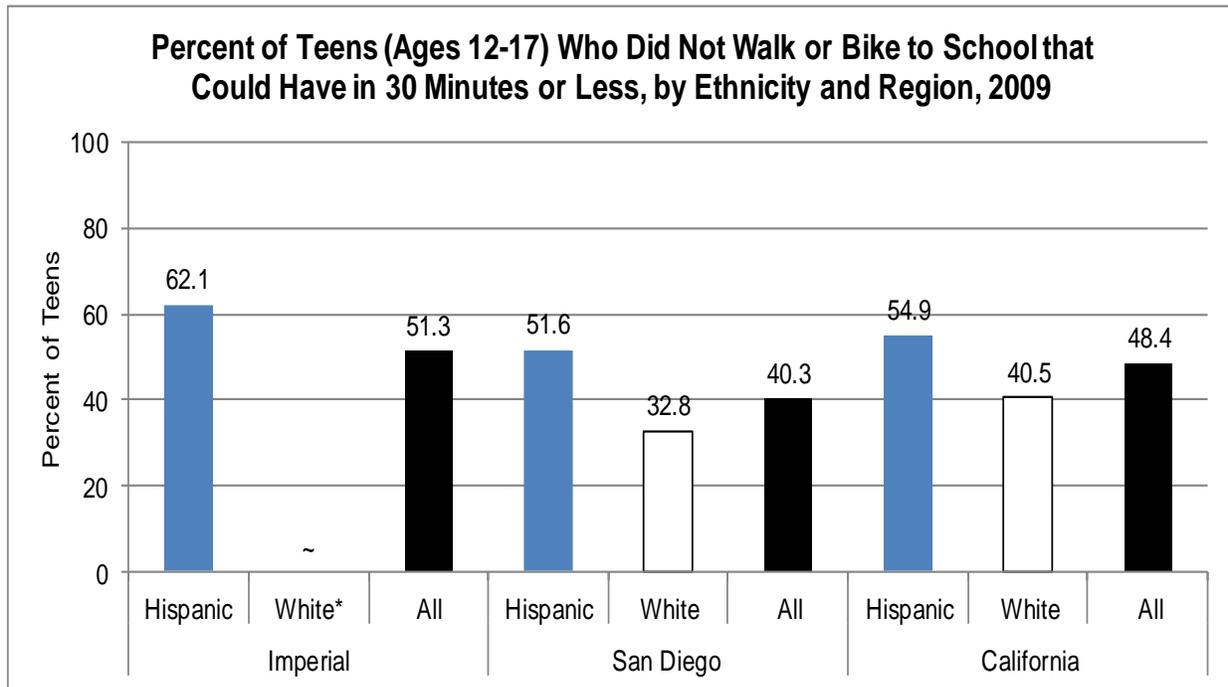
Figure 7.18



~: Data insufficient to report percentages
 Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Of California teens that did not walk or bike to school in the last week, 48.4 percent could have done so in 30 minutes or less. Among Hispanic and White teens that didn't actively commute, 54.9 and 40.5 percent, respectively, could have done so in 30 minutes or less. There were no significant differences between these groups. In San Diego County, 51.6 percent of Hispanic teens and 32.8 percent of White teens that did not actively commute could have done so in 30 minutes or less (Figure 7.19, Appendix F; Table 7.14).

Figure 7.19



~: Data insufficient to report percentages
 Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

What Is Being Done for Obesity/Overweight, Nutrition and Physical Activity?

Several public programs work to reduce risk factors for diabetes, including obesity, low physical activity, and poor nutrition.

WOMEN, INFANTS, AND CHILDREN

WIC is a federally-funded health and nutrition program for low-income and/or nutritionally at-risk women, infants, and children. WIC helps families by providing funding for buying healthy supplemental foods from WIC-authorized vendors, nutrition education and counseling at WIC clinics, and referrals to other health or social services. Participants must meet income guidelines and be pregnant women, new mothers, infants or children under age five. Foods that are eligible for WIC purchase are selected by nutritionists to emphasize healthy eating (USDA Food and Nutrition Service, 2010).

CALIFORNIA OBESITY PREVENTION PROGRAM, CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

In 2006, California Department of Public Health (CDPH) released the first California Obesity Prevention Plan. The 2010 plan has been revised and updated to incorporate previously implemented policies and new research. This plan contains a 10 step vision that includes increased public awareness of the benefits of healthy eating and physical activity, increased physical activity among children and adults, healthier food options in

schools and neighborhood locations, and schools, workplaces, and neighborhoods that encourage more physical activity. Building on successes of previous strategic plans, the 2010 plan designated specific objectives and strategies to address the 10-step vision (CDPH, California Obesity Prevention Program, 2010).

SAN DIEGO COUNTY CHILDHOOD OBESITY INITIATIVE

The San Diego County Childhood Obesity Initiative (Initiative) is a partnership through the County of San Diego and private funders. The mission of this organization is to address obesity in San Diego County by creating healthy environments for all children and families. The Initiative aims to increase access to healthy, culturally-appropriate foods and increase physical activity for children and families. The Initiative relies on collaboration from the agency to the neighborhood and individual levels to reduce and prevent childhood obesity (San Diego County Childhood Obesity Initiative, 2010)

COUNTY OF SAN DIEGO CHILD HEALTH AND DISABILITY PREVENTION PROGRAM NUTRITION UNIT

The County of San Diego Child Health and Disability Prevention (CHDP) Program Nutrition Unit provides resources and technical assistance to community-based organizations, schools, health professionals as well as the public, on childhood nutrition and overweight in children. The program also provides nutrition screening as part of a larger screening program for low-income and foster children (County of San Diego Child Health and Disability Prevention Program, 2010).

NETWORK FOR A HEALTHY CALIFORNIA – SAN DIEGO AND IMPERIAL REGION

The Network for a Health California is a statewide program of the California Department of Public Health that works to improve nutrition and physical activity in low-income communities. The Network provides support in the form of curriculum, training, and other resources to community organizations throughout California. In the San Diego and Imperial Region, the Network collaborates with the San Diego Nutrition Network (SDNN), and the Physical Activity & Healthy Eating (PAHE) programs, and provides support for several others (Network for a Healthy California - San Diego and Imperial Region, 2011).

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APPENDIX A

Technical Notes

Race/Ethnicity

The race/ethnicity categories used in this report are mutually exclusive and are the same as the ones used by the California Department of Finance (2007) for producing California population estimates, and by the UCLA Center for Health Policy Research (Holtby et al., 2006). The UCLA method defines “Latino” as a mutually exclusive race category, along with White, African American, American Indian/Alaska Native, and Asian. In this report, the terms “Hispanic” and “Latino” are used interchangeably. Additionally, “White” and “non-Hispanic White” are used interchangeably and refer to the same population.

Rates

A **crude rate** is defined as the number of cases of vital events (e.g., cases or deaths) divided by the population at risk, and then multiplying by some convenient basis (e.g., 100,000). The age composition of communities may greatly influence their rates for certain health events. For example, older communities will likely have higher death rates than younger communities. Rates were calculated by gender, race, age, and county using yearly population estimates by the California Department of Finance (2007).

Age-adjusted rates can be used to make fair comparisons among communities with different age compositions. Age-adjusted rates were calculated using the 2000 United States Standard Million Population.

Reliability of Rates

Statistical rates are subject to random variation. Rate estimates based on a small number of events (e.g., cases or deaths) are more unstable and, therefore, unreliable, and should be interpreted with caution.

Most of the tables in this report include the upper and lower 95% confidence interval limits, which provide a means for assessing the degree of stability of the estimated rates. The upper and lower limits define the range within which the rate probably would occur in 95 out of 100 independent sets of data similar to the present set. The wider the intervals, the less reliable the rates. For example, Table 1.8 shows that 81.9% of the population in Imperial County had health insurance in 2007. Also, the confidence interval for this population group is 77.0%-86.8%. This means we are 95% certain that the true percent of adults in Imperial County who had health insurance is somewhere

between the lower and upper limits. We estimate that it is 81.9%, but it may be as low as 77.0% or as high as 86.8%.

If the sample size is small, the confidence interval may be very wide and in some cases it is so wide that the result is not a stable estimate. An estimate is considered unstable (i.e., unreliable) if the coefficient of variation (CV) is equal to or greater than 30%. In this report, unreliable estimates are replaced with a dash in the tables (“-”).

Assessing Statistically Significant Differences

Confidence intervals provide an easy way to determine if differences among groups (or years) are statistically significant:

- If the 95% confidence intervals of two different estimates (i.e., the percent or rates) do not overlap, it can be safely concluded that the difference is statistically significant and not due to chance. However, if the intervals do overlap, the difference between the two percent is assumed not to be statistically significant. However, the reader should be aware that according to the National Center for Health Statistics (2003) “this is a conservative test for statistical significance. Thus, caution needs to be observed when interpreting a non-significant difference between rates or proportions, especially when the lower and upper limits being compared overlap only slightly.”
- If the 95% confidence intervals of two different estimates share a boundary, it means the lower boundary of one confidence interval is the same as the upper boundary of a confidence interval with which it is being compared. In these cases, we took a conservative approach and did not consider the differences significant because the confidence intervals did overlap, albeit at one point only.

Healthy People 2010 Objectives

Healthy People 2010 is a set of health objectives for the United States to achieve over the first decade of the new century. The specific objectives for each health topic and other useful background information can be found at www.healthypeople.gov/Data/midcourse/html/default.htm. Healthy People 2020 are currently being developed.

The narrative describes whether the objective was met overall and whether it was met among specific demographic groups. To meet the objective, both the point estimate and the estimate’s 95% confidence interval must be equal to or better than the percent or rate associated with the Healthy People objective.

California Health Interview Survey (CHIS): Data Limitations

Information for many health indicators in this report was obtained from the California Health Interview Survey (CHIS), using the interactive Web-based tool “AskCHIS” (CHIS, 2008). CHIS is the largest state health survey and one of the largest health surveys in the United States. The CHIS data are self-reported by respondents to the survey. Therefore, the data may be subject to error, such as from respondent failure to recall information about existing health conditions or behavior. Only persons living in households with telephones are included in the survey. Participation is voluntary; persons who refused to participate may be different from those who were interviewed. Details on response rates and other survey information can be obtained at the CHIS website (CHIS, 2008).

Tables

For tables developed using CHIS data, the **population estimates** are the estimated number of Californians in each population group that has the health condition or behavior described in the title of the table. CHIS calculated the population estimates by multiplying the weighted sample percent by the Department of Finance figure for each row in the table, after adjusting for sampling error. The numbers are rounded to the nearest thousand.



**California Department of Public Health
Office of Binational Border Health
Core Program**



Overview and Accomplishments for 2010

The California Office of Binational Border Health (COBBH) was created in 1999 by legislation (AB 63, Ducheny) as a unit of the California Department of Public Health. Its mission is “to protect and improve the health of California communities by facilitating communication, coordination and collaboration among California and Mexico health officials and health professionals.” COBBH accomplishes this mission by serving as a liaison to Baja California State and other Mexican health officials, fostering binational partnerships with other U.S. Mexico border states, assessing the health status of border communities, assisting in border health program development, informing and educating the general public about border health, and serving as an information clearinghouse. The goals of the office are as follows:

- I. Assess and monitor border and binational public health issues
- II. Optimize border and binational communication, coordination, and collaboration
- III. Build capacity in California and Baja California (BC) to effectively address public health issues
- IV. Increase awareness among state and local agencies, policy makers, the public, and other stakeholders about border and binational public health issues, and the role of COBBH

COBBH has accomplished the following activities per its scope of work:

I. Collaboration with the U.S.-Mexico Border Health Commission (USMBHC) – as required by AB 63.

- COBBH facilitated a radio interview in Spanish on Childhood Obesity, conducted by Estacion Radio Mexicana – “San Diego Hoy” during Border Binational Health Week (BBHW) 2010.
- COBBH collaborated with nine local agencies including USMBHC-COO to organize the Promotores Conference: “Mind, Body, Spirit: A Celebration for Promotores” on October 16, 2010. Over 120 Promotores of Health from San Diego, Imperial and Tijuana were in attendance and participated on educational and holistic health workshops.
- COBBH coordinated with USMBHC-COO and other partners for the event, “Brinca por tu salud/jump for your health” for BBHW on October 8, 2010.
- COBBH coordinated and MC’d the BBHW/BHW Inaugural Event at Centro Cultural de La Raza at Balboa Park on October 2, 2010. Over

38 community health agencies participated and provided information, resources and health screenings to over 400 participants.

- In collaboration with ISESALUD, COBBH presented “Congenital Syphilis at California Mexico Border” at the BorderMACH meeting in El Paso on August 11, 2010.
- COBBH collaborated with USMBHC-COO by providing technical assistance on the U.S.-Mexico border-wide status report on obesity and diabetes in children. This report was submitted on August 31, 2010.

II. Border Health Status Annual Report – Prepare and submit an annual border health status report to the Director of Public Health, the Legislature, and the Governor.

- COBBH conducted a short survey for border health partners to identify public health priority issues in the California / Baja California Border Region. These priority issues will be addressed in the Annual Border Health Status Report 2010.
- Completed the Annual Border Health Status Report 2009.

III. COBBH Advisory Group – Convene meetings to review and discuss strategic plan and prioritize program activities.

- Convened Advisory Group meeting on April 30, 2010 in San Diego to revise the COBBH Strategic Plan.
- Convened Advisory Group meeting on March 2, 2010 in Sacramento, CA.

IV. Liaison Activities – Act as liaison between CDPH and officials from border counties in the U.S., as well as local, state and federal health officials in Mexico on border health matters.

- COBBH updated a list of key contacts in Mexico (governmental, non-governmental, and academic).

V. Communication – Enhance communication between stakeholders by developing and distributing health related information, promotional materials, and maintaining a COBBH website.

- COBBH distributed published health information and outreach materials for the following events:
 - BBHW/BHW Inaugural Event and Health Fair at the Mexican Consulate in San Diego, CA on October 1, 2010.
 - BBHW/BHW Inaugural Event at Centro Cultural de la Raza in San Diego, CA on October 2, 2010.
 - BBHW/BHW event: Farm worker Breakfast in Calexico, CA on October 8, 2010 at 3 a.m. - 5 a.m.
 - Project Concern International – California Border Healthy Start Baby Shower in National City, CA on October 13, 2010.

- 2010 Women's Conference on October 22-25, 2010 in Long Beach, CA coordinated by CDPH Office of Women's Health.
- 6th "Annual Kick the Flu Summit" event on September 3, 2010, organized by the San Diego Immunization Coalition (SDIC).
- Taking Care of Your Diabetes (TCOYD) Tri-City Hospital in Escondido on June 5, 2010 and at San Ysidro Health Center in Chula Vista on June 26, 2010.
- CDPH Public Health Week Event, "A Healthier California: One Step at a Time, on Tuesday April 6th 2010, Sacramento, CA.
- COBBH has submitted two border health briefs for approval to CDPH. The topics of each brief were obesity and diabetes in the border region.

VI. Partnerships - Partner with universities, non-governmental organizations, State and county public health laboratories, and federal agencies to develop programs aimed at improving the health status of border residents.

- COBBH hired two SDSU Graduate School of Public Health students to work on special projects for the office.
- COBBH organized two trainings in Baja California in order to educate physicians about recognizing the signs and symptoms of pesticide illness and the procedure for reporting cases to the health department.
- COBBH presented the California-Baja California Integrated Pesticide Illness Surveillance and Exposure Prevention Protocol Project outreach efforts at the Western Migrant Stream Forum in Seattle, WA on 2/19/10.
- COBBH is the lead on the CDC Border MACH (Border Maternal and Child Health) project. COBBH is collaborating with CDPH STD Control Branch, and ISESALUD to address congenital syphilis in the border region.

VII. Technical Assistance – Provide consultation, evaluation and technical assistance to California-Mexico border health jurisdiction and other border health providers related to public and environmental health issues.

- COBBH facilitated collaboration with ISESALUD Health Jurisdiction in Mexicali, BC, to participate in BBHW on October 8, 2010. ISESALUD provided vaccinations at the BBHW/BHW "Farmworkers' Breakfast" in the port of entry in Calexico.
- COBBH facilitated collaboration between La Maestra Health Centers and Ventanillas de Salud through the Mexican Consulate in San Diego to provide glucose testing and blood pressure monitoring at the

BBHW/BHW Inaugural Event at the Centro Cultural de la Raza on October 8, 2010.

- COBBH participated in the Fiestas Patrias Event in El Monte (near Los Angeles), in a celebration commemorating the Mexican proclamation of independence. This event took place on Sunday, October 12, 2010, with over 100,000 Hispanic families in attendance. COBBH and ISESALUD health professionals worked together to provide health information and resources to the community on lead prevention, consumption of safe cheese, immunizations, pertussis, influenza, TB, Women's Health, and HIV/AIDS. COBBH representatives were present along with Dr. Jose Angel Cordova, Secretary of Health in Mexico and Dr. Jose Guadalupe Bustamante, Secretary of Health and Director for the State of Baja California Health Department (ISESALUD). Several other health officials were also in attendance including Dr. Remedios Lozada, HIV/STD Coordinator, ISESALUD, and Dr. Gudelia Rangel, representing the U.S. Mexico Border Health Commission-Mexico section.
- COBBH Co-Chaired the quarterly Border 2012 Environmental Health Task Force meeting on March 15, 2010, April 27, 2010, July 28, 2010 and August 25, 2010.
- COBBH is the lead for the San Diego Immunization Coalition-Advocacy Workgroup. COBBH staff presented on the SDIC – Advocacy Workgroup activities for the SDIC General Meeting on July 28, 2010.
- COBBH presented “Challenges on the Border” for the *Treatment of TB, STDs, HIV, Hepatitis C and Substance Abuse: Keeping Patients in Care ...with Fewer Resources* summit on June 25, 2010. The event was sponsored by the Pacific AIDS Education and Resource Training Center.
- COBBH collaborated with the Environmental Health Investigations Branch and Center for Chronic Disease Prevention and Health Promotion in the planning of developing and distributing a health alert for public health professionals and the public on the recent cases of mercury poisoning in face cream manufactured in Mexico. COBBH translated the CDPH Mercury Poisoning Investigation Summary, CDPH health alert on mercury-containing skin cream, and the health education sheet for the public. COBBH also facilitated communication between CDPH and ISESALUD about the recent cases and the distribution of the health alert in California.
- Conducted four focus groups (two in Imperial County and two in Alameda County) on the Cervical Cancer DVD produced by COBBH and partners. Results of the focus groups will be included in a comprehensive outreach report once the DVD is completed.

VIII. Projects on Binational and Border Health Priority Issues – In collaboration with County, State, and Federal programs, assist CDPH in planning activities and responding to issues relative to on-going and emerging health issues impacting the border.

- In collaboration with Comité Civico del Valle, National Latino Research Center, Calexico New River Committee, Clinicas de Salud del Pueblo, Clean Air initiative, Department of Toxic Substances Control, COBBH assisted in the planning and implementation of the 3rd Annual Environmental Health Leadership Summit. The Summit was held in Brawley, CA on May 21, 2010.
- COBBH organized a Promotores Conference during Binational Health Week in October 2009 and completed the project with the summary report in November 2009.
- COBBH organized “Mind, Body, Spirit: A Celebration for Promotores” Conference during Binational Health Week on October 16, 2010 and completed the project with the summary report in December 2010.
- COBBH coordinated participants from Mexico to attend the Vision y Compromiso Promotores Conference in Burbank, CA in 2009.



California Department of Public Health
Office of Binational Border Health (COBBH)

Strategic Plan 2010-2013

<p style="text-align: center;">Our Vision Healthy Binational and Border Communities</p>
<p style="text-align: center;">Our Mission To facilitate communication, coordination, and collaboration between California and Mexico health officials, health professionals and communities in order to optimize border and binational health.</p>
<p style="text-align: center;">Our Goals and Objectives</p> <p>Goal 1. Assess, monitor and report on border and binational public health issues</p> <ul style="list-style-type: none">a. Annually, select the top 3-5 critical public health issues by October 2010, October 2011, and October 2012b. Annually, prepare, and disseminate Border Health Status Reports regarding critical public health issues by April 2011, April 2012, and April 2013 <p>Goal 2. Promote and optimize communication, coordination, and collaboration on border and binational health issues and policies</p> <ul style="list-style-type: none">a. Increase collaboration with border and binational key partners to address at least 2 public health issues per yearb. By 1st quarter 2011, begin scheduled quarterly in-person meetings with the Chief of COBBH and the Baja California Health Official (or their authorized representative).c. By July 2011, create a binational cross-border contact list by program and issue to be updated annuallyd. By July 2010, establish monthly COBBH coordination and information sharing meetings with program managers of all programs within COBBHe. Beginning in 2011, the Chief and designated staff will meet with appropriate counterparts within CDPH on an ongoing basis to collaborate on top priority public health issues <p>Goal 3. Build capacity to effectively address border and binational public health issues</p> <ul style="list-style-type: none">a. By November 2011, identify gaps in capacity that address the top 3-5 critical binational public issuesb. Improve capacity by addressing at least one public health issue identified by July 2013 <p>Goal 4. Increase awareness about border and binational public health issues and the role of COBBH in addressing them</p> <ul style="list-style-type: none">a. Annually, create and implement Communication Plans by July 2011, July 2012, and July 2013

Attachment A

California Assembly Bill No. 63

CHAPTER 765

An act to add Part 3 (commencing with Section 475) to Division of the Health and Safety Code, relating to public health.

[Approved by Governor October 7, 1999. Filed
with Secretary of State October 10, 1999]

LEGISLATIVE COUNSEL'S DIGEST

AB 63, Ducheny. Office of Binational Border Health

Under existing law, the State Department of Health Services generally regulates issues of public health. Under existing federal law, the United States-Mexico Border Health Commission exists to address specified issues related to border health.

This bill would create the state Office of Binational Border Health, to facilitate cooperation between California and Mexican health officials and health professionals to reduce the risk of disease in the California border region. The bill would require the office to convene a voluntary community advisory group of representatives of border community-based stakeholders to develop a strategic plan, and would require the office to report its resulting recommendation to the California members of the federal commission, and to prepare an annual border health status report for submission to the Director of Health Services, the Legislature, and the Governor.

The people of the State of California do enact as follows:

Section 1. The Legislature finds and declares all of the following:

(a) Tuberculosis (TB) disease rates in southern California counties, including Los Angeles, San Diego, and Imperial, are higher than the rest of the state and the nation. Mexican-born patients comprise approximately 30 percent of southern California's reported TB cases, and rates of drug-resistant TB strains have been documented by the United States Public Health Services in a study of border counties to be almost seven times higher among foreign-born Hispanic patients than among United States-born non-Hispanic patients.

(b) Rates of hepatitis A and gastrointestinal illnesses such as shigella are higher in southern California than in the rest of the state and the nation, with the highest rates seen in Hispanics.

(c) Communicable disease tracking by public health authorities is often severely hampered by the movement of infections cases across the border.

(d) Imperial County does not meet California Environmental Protection Agency standards for ambient ozone levels, at least in part due to increasing traffic at the Calexico-Mexicali border, and Imperial County childhood asthma hospitalization rates have increased annual since 1989.

(e) The New River in Imperial County is the most polluted in the nation, containing more than 100 chemicals and receiving 76 million liters of raw sewage each day.

(f) Recent outbreaks of mercury poisoning related to a beauty cream, and hepatitis A related to contaminated strawberries, underscore the need for better notification systems between United State and Mexican health authorities regarding contaminated commercial products and related investigations.

SEC. 2. Part 3 (commencing with Section 475) is added to Division 1 of the Health and Safety Code, to read:

PART 3. OFFICE OF BINATIONAL BORDER HEALTH

475. (a) (1) The State Department of Health Services shall establish a permanent Office of Binational Border Health to facilitate cooperation between health officials and health professionals in California and Mexico, to reduce the risk of disease in the California border region, and in those areas directly affected by border health conditions.

(2) The department shall administer the office, and shall seek available public or private funding, or both, to support the activities of the office.

(b) The office of Binational Border Health shall convene a voluntary community advisory group of representatives of border community-based stakeholders to develop a strategic plan with short-term, intermediate, and long-range goals and implementation actions. The advisory group shall include no more than 12 California representatives. The advisory group shall include, but not be limited to, members from local government, hospitals, health plans, community-based organizations, universities, Los Angeles, San Diego, and Imperial County health departments, and a representative from an association of local health officers specializing in border health issues. The office shall invite and request appropriate participation from representatives of the Baja California health department and other Mexican health departments affected by border health issues. Recommendations resulting from the strategic plan shall be developed and shared in consultation with the California appointees to the United States-Mexico Border Health Commission established pursuant to Section 290n of Title 22 of the United States Code, including the Director of Health Services. The office shall prepare an annual border health status report, and shall submit it to the Director of Health Services, the Legislature, and the Governor.

Attachment B

**California Office of Binational Border Health
Advisory Group**

2010-2011

Jim Arriola, MBA

President/Chief Executive Officer
Sekure Healthcare

Sylvia Barron Ramírez

Senior Director of Binational Affairs
Planned Parenthood of San Diego and Riverside Counties

Cástulo De La Rocha, JD

President and CEO
AltaMed Health Services

Alvaro Garza, MD, MPH

Deputy Public Health Officer
San Mateo County Health Department

Mario Gutiérrez, MPH

Consultant
Binational Health Programs

Paula Kriner, MPH

Senior Epidemiologist
Imperial County Public Health Department

Blanca Lomelí, MD

Regional Director, North America
Project Director TB Solution
I am Stopping TB/Yo Puedo Frenar la TB
Project Concern International

Mary Maddux-González, MD, MPH

Public Health Officer
Sonoma County Department of Health Services

Carmen Nevarez, MD, MPH

Vice President of External Relations and Preventative Medicine Advisor
Public Health Institute

Gilbert Ojeda

Board President
Latino Coalition for a Healthy California

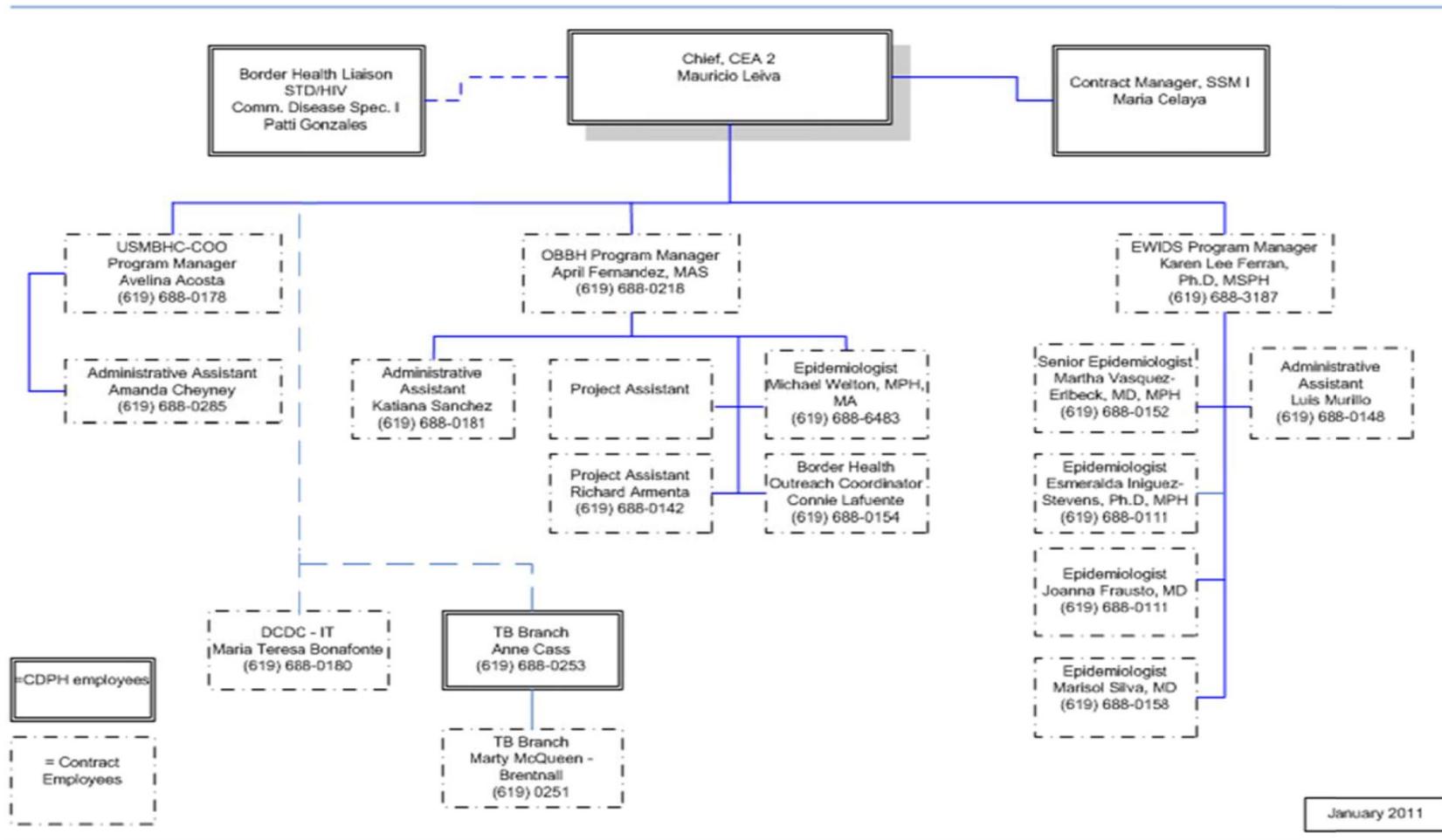
René Santiago, MPH, MCP

Deputy Director for Central and South Regions
San Diego County Health and Human Services Agency

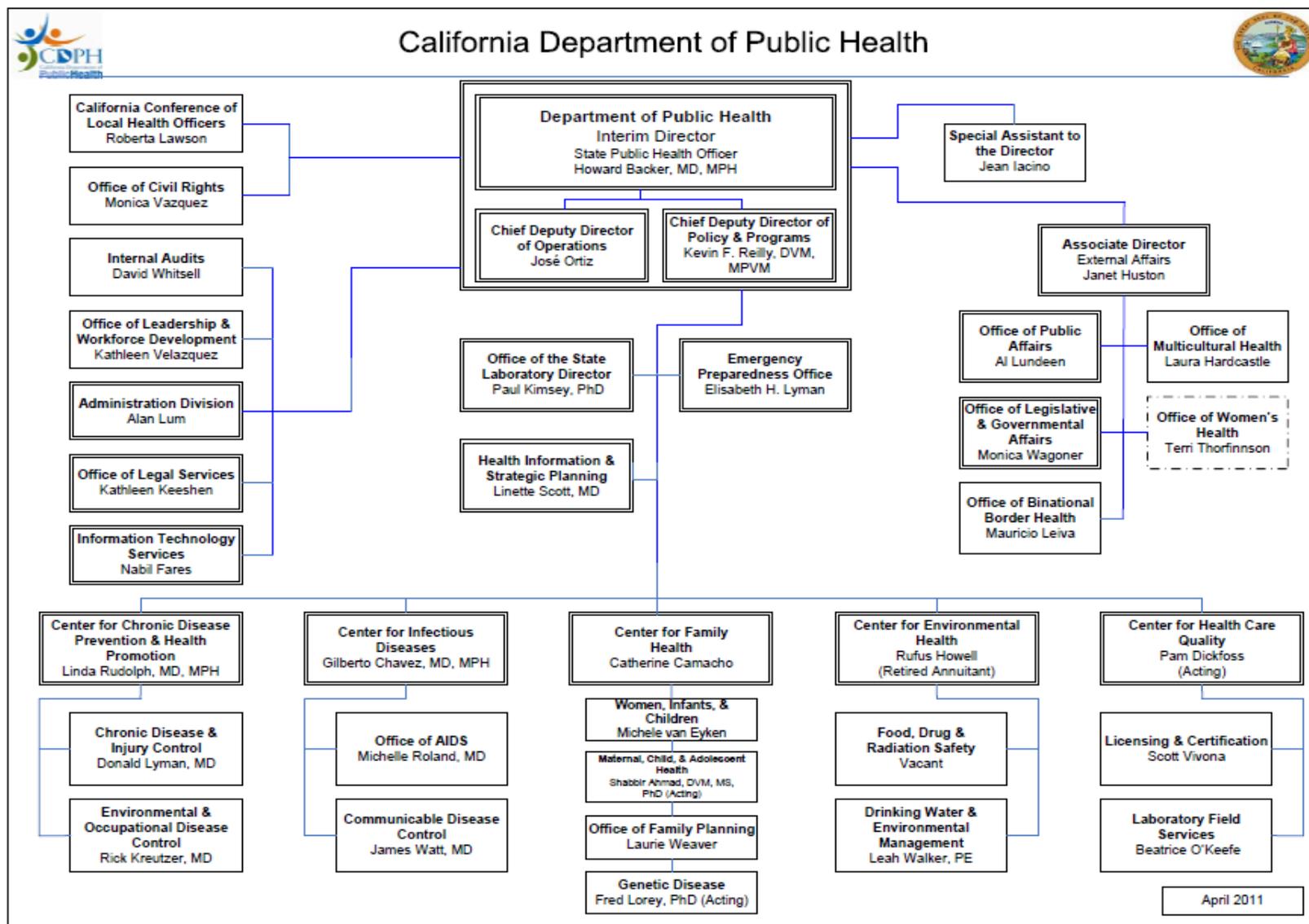
2010 Border Health Status Report
Appendix D - COBBH Organizational Chart



California Department of Public Health
External Affairs
California Office of Binational Border Health



2010 Border Health Status Report
Appendix E - CDPH Organizational Chart



2010 Border Health Status Report

Appendix F – Additional Tables

Chapter 1: Demographics

Table 1.2

California Border Counties and Statewide Population by Race and Percent of Total Population, 2001-2010																						
Population	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	Pop	%	Pop	%	Pop	%	Pop	%														
Imperial																						
Asian/PacIs ^b	2,746	2	2,855	2	3,041	2	3,304	2	3,526	2	3,769	2	4,011	2	4,216	2	4423	2	4632	3	4840	3
Black	5,214	4	5,221	4	5,327	4	5,454	4	5,570	3	5,678	3	5,884	3	6,036	3	6191	3	6351	3	6511	3
Hispanic	104,267	73	107,081	73	110,783	74	115,418	74	119,888	75	124,520	76	129,336	76	133,559	76	137841	77	142193	77	146600	77
Multi	754	1	783	1	822	1	850	1	895	1	940	1	950	1	960	1	970	1	980	1	990	1
NAAN ^c	1,817	1	1,843	1	1,888	1	1,955	1	2,018	1	2,076	1	2,155	1	2,220	1	2284	1	2348	1	2412	1
White	28,965	20	28,652	20	28,358	19	28,175	18	27,947	17	27,757	17	27,897	16	27,990	16	28089	16	28200	15	28322	15
All ^d	143,763	100	146,435	100	150,219	100	155,156	100	159,844	100	164,740	100	170,233	100	174,981	100	179798	100	184704	100	189675	100
San Diego																						
Asian/PacIs ^b	263,964	9	272,369	9	280,772	9	287,516	10	292,792	10	296,073	10	300,863	10	306,824	10	312699	10	318494	10	324208	10
Black	159,068	6	158,280	5	157,394	5	155,440	5	152,515	5	148,610	5	144,991	5	142,972	5	140930	4	138865	4	136769	4
Hispanic	757,055	27	776,674	27	796,451	27	815,741	27	834,197	28	852,606	28	870,415	28	888,277	29	906152	29	924066	29	941997	29
Multi	62,195	2	64,472	2	66,886	2	68,405	2	69,270	2	69,597	2	67,044	2	67,245	2	67459	2	67694	2	67950	2
NAAN ^c	15,713	1	18,078	1	20,490	1	22,165	1	23,372	1	23,891	1	24,574	1	25,624	1	26675	1	27726	1	28776	1
White	1,578,308	56	1,602,696	55	1,627,704	55	1,645,920	55	1,658,909	55	1,664,001	54	1,668,460	54	1,676,535	54	1684467	54	1692281	53	1700006	53
All ^d	2,836,303	100	2,892,569	100	2,949,697	100	2,995,187	100	3,031,055	100	3,054,778	100	3,076,347	100	3,107,477	100	3138382	100	3169126	100	3199706	100
California																						
Asian/PacIs ^b	3,872,349	11	4,015,633	11	4,138,163	11	4,246,858	11	4,335,235	11	4,393,010	12	4,475,811	12	4,566,530	12	4656623	12	4745770	12	4833883	12
Black	2,218,281	7	2,238,187	6	2,250,093	6	2,258,478	6	2,260,877	6	2,255,281	6	2,256,432	6	2,263,690	6	2271258	6	2279118	6	2287190	6
Hispanic	11,057,467	32	11,454,400	33	11,824,231	33	12,203,091	34	12,565,010	34	12,905,840	35	13,227,047	35	13,539,990	36	13858454	36	14182666	37	14512817	37
Multi	637,010	2	667,937	2	696,735	2	725,341	2	752,782	2	779,784	2	782,242	2	791,915	2	801827	2	811951	2	822281	2
NAAN ^c	185,996	1	194,178	1	201,293	1	207,284	1	211,919	1	215,044	1	219,683	1	224,927	1	230198	1	235471	1	240721	1
White	16,134,334	47	16,219,400	47	16,286,490	46	16,353,679	45	16,400,124	45	16,408,477	44	16,419,655	44	16,423,530	43	16428238	43	16433317	42	16438784	42
All ^d	34,105,437	100	34,766,730	100	35,361,187	100	35,944,213	100	36,454,471	100	36,896,220	100	37,332,976	100	37,810,582	100	38246598	100	38688293	100	39135676	100

Appendix F – Additional Tables

Chapter 1: Demographics

Table 1.3

English Speaking Ability (ages +18), by Region and Ethnicity, 2009		
Population	Well/Very Well	
	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	56.7	(48.0, 65.4)
<i>White</i>	100	(100.0, 100.0)
<i>All</i>	58.7	(50.5, 66.9)
San Diego		
<i>Hispanic</i>	62.3	(56.0, 68.5)
<i>White</i>	99.3	(98.4, 100.0)
<i>All</i>	73.5	(68.9, 78.0)
California		
<i>Hispanic</i>	53.2	(50.7, 55.8)
<i>White</i>	97.4	(96.6, 98.2)
<i>All</i>	64.2	(62.2, 66.1)

^a 95% Confidence Interval

Source: 2009 California Health Interview Survey, Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 1: Demographics

Table 1.4

Education Level Completed by Ethnicity and Region (2009)								
Population	Less than High School		Graduated High School		Some College, Vocational School, or AA/AS Degree		BA/BS, MA/MS or PhD degree	
	%	95% C.I.	%	95% C.I.	%	95% C.I.	%	95% C.I.
Imperial								
<i>Hispanic</i>	30.7	(23.4, 38.0)	31.8	(23.1, 40.5)	25.1	(16.4, 33.8)	12.4	(8.1, 16.6)
<i>White</i>	5.2	(1.4, 9.0)	36.5	(24.0, 49.0)	28.0	(15.8, 40.2)	30.3	(19.7, 40.9)
<i>All</i>	26.6	(20.7, 32.4)	31.2	(24.1, 38.4)	26.0	(18.8, 33.1)	16.2	(12.2, 20.3)
San Diego								
<i>Hispanic</i>	27.1	(22.7, 31.4)	33.3	(27.6, 39.1)	22.7	(16.7, 28.7)	17.0	(13.3, 20.6)
<i>White</i>	2.2	(22.7, 31.4)	22.8	(19.5, 26.2)	25.3	(22.3, 28.2)	49.7	(46.1, 53.3)
<i>All</i>	9.6	(8.2, 11.1)	25.5	(22.7, 28.2)	25.5	(22.7, 28.2)	39.4	(36.6, 42.2)
California								
<i>Hispanic</i>	37.3	(35.0, 39.6)	29.2	(27.2, 31.3)	20.4	(18.5, 22.4)	13.0	(11.6, 14.5)
<i>White</i>	4.5	(4.0, 5.1)	25.0	(23.8, 26.1)	26.9	(25.6, 28.1)	43.6	(42.3, 44.9)
<i>All</i>	16.3	(15.3, 17.3)	26.0	(25.1, 27.0)	23.7	(22.7, 24.7)	33.9	(32.9, 35.0)

^a 95% Confidence Interval

Source: 2009 California Health Interview Survey, Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 1: Demographics

Table 1.5

Poverty Level by Ethnicity and Region, 2009						
Population	0-199% FPL		200-300% FPL		300% FPL and Above	
	%	95% C.I.	%	95% C.I.	%	95% C.I.
Imperial						
<i>Hispanic</i>	53.5	(45.7, 61.3)	22.9	(14.5, 31.2)	23.6	(17.1, 30.2)
<i>White</i>	25.3	(15.5, 35.1)	10.7	(4.5, 16.8)	64.1	(53.4, 74.7)
<i>All</i>	48.9	(42.6, 55.2)	21.0	(14.2, 27.9)	30.0	(24.3, 35.8)
San Diego						
<i>Hispanic</i>	57.2	(53.0, 61.5)	15.9	(12.5, 19.3)	26.8	(23.3, 30.4)
<i>White</i>	12.5	(10.7, 14.3)	12.7	(10.5, 14.9)	74.8	(72.2, 77.4)
<i>All</i>	29.0	(26.7, 31.3)	14.1	(12.4, 15.8)	56.9	(54.5, 59.4)
California						
<i>Hispanic</i>	60.4	(58.7, 62.2)	14.3	(13.0, 15.5)	25.3	(23.8, 26.8)
<i>White</i>	17.4	(16.3, 18.5)	13.3	(12.5, 14.0)	69.4	(68.2, 70.5)
<i>All</i>	36.4	(35.5, 37.4)	13.8	(13.2, 14.5)	49.7	(48.8, 50.7)

^a 95% Confidence Interval

Source: 2009 California Health Interview Survey, Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 1: Demographics

Table 1.6

Percent Unemployed by Region, (2000-2009)										
Population	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Imperial										
<i>All</i>	15.8	15.9	15.0	15.6	17.1	16.1	15.4	18.0	22.4	28.2
San Diego										
<i>All</i>	3.9	4.2	5.2	5.2	4.7	4.3	4.0	4.5	6.0	9.7
California										
<i>All</i>	4.9	5.4	6.7	6.8	6.2	5.4	4.9	5.3	7.2	11.4

Source: Local Area Unemployment Statistics (LAUS), Labor Market Information Division, California Employment

Appendix F – Additional Tables

Chapter 1: Demographics

Table 1.7

Border Crossings/Entries^a in California by Year, 2001-2009									
	2001	2002	2003	2004	2005	2006	2007	2008	2009
Train Passengers	7,204	4,154	2,072	2,162	1,972	2,190	1,340	3,184	1,935
Bus Passengers	1,402,404	1,813,716	1,576,737	1,315,400	1,289,332	1,425,872	1,230,642	1,022,271	644,907
Personal Vehicle Passengers	67,410,517	68,180,103	70,757,903	66,393,907	66,531,176	65,345,181	57,991,451	53,228,320	48,911,130
Pedestrians	21,699,797	18,628,200	18,193,283	18,197,094	16,462,335	15,517,700	16,553,220	15,064,432	14,124,387
Total Crossings	90,519,922	88,626,173	90,529,995	85,908,563	84,284,815	82,290,943	75,776,653	69,318,207	63,682,359

^aTotal is the sum of pedestrian, bus, train, and personal vehicle individual crossings.
 Source: California Department of Finance <http://www.dof.ca.gov/>, accessed April 6 2011

Appendix F – Additional Tables

Chapter 2: Overall Health

Table 2.1

General Health by Ethnicity and Region (2009)		
Population	Excellent/Very Good	
	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	49.3	(41.4, 57.2)
<i>White</i>	54.6	(42.9, 66.2)
<i>All</i>	48.6	(41.9, 55.3)
San Diego		
<i>Hispanic</i>	50.8	(46.4, 55.2)
<i>White</i>	70.5	(67.7, 73.3)
<i>All</i>	62.9	(60.5, 65.2)
California		
<i>Hispanic</i>	45.8	(44.1, 47.6)
<i>White</i>	66.3	(65.2, 67.4)
<i>All</i>	56.7	(55.8, 57.7)

^a95% Confidence Interval
 Source: 2009 California Health Interview Survey,
 Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 2: Overall Health

Table 2.2

Health Insurance Coverage for All Ages by Ethnicity, Region and Country of Birth (2009)				
Population	Born in U.S.		Born in Mexico	
	%	95% C.I. ^a	%	95% C.I. ^a
Imperial				
<i>Hispanic</i>	86.0	(76.5,95.6)	79.1	(72.6,85.6)
<i>White</i>	87.4	(76.7,98.1)	-	~
<i>All</i>	86.9	(79.5,94.3)	79.1	(72.6,85.6)
San Diego				
<i>Hispanic</i>	82.1	(76.5,87.7)	58.2	(50.9,65.4)
<i>White</i>	94.5	(92.7,96.3)	91	(73.2,100)
<i>All</i>	90.9	(88.8,93.0)	58.5	(51.3,65.6)
California				
<i>Hispanic</i>	86.6	(84.9, 88.3)	65.2	(62.0, 68.4)
<i>White</i>	91.1	(90.0,92.2)	94.2	(86.9,100)
<i>All</i>	89.3	(88.5,90.2)	65.5	(62.3,68.7)

^a95% Confidence Interval

~Insufficient information to calculate

Source: 2009 California Health Interview Survey, Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 2: Overall Health

Table 2.3

Health Insurance Coverage for All Ages by Ethnicity and Region (2001-2007)										
Population	2001		2003		2005		2007		2009	
	%	95% C.I. ^a								
Imperial										
<i>Hispanic</i>	76.9	(73.1, 80.7)	82.0	(78.1, 85.9)	79.1	(74.2, 84.0)	79.1	(73.0, 85.1)	74.5	(70.6,78.3)
<i>White</i>	95.5	(92.4, 98.7)	95.9	(92.4, 99.4)	87.6	(79.7, 95.5)	95.5	(92.4, 98.7)	94.5	(92.9,96.2)
<i>All</i>	81.0	(77.9, 84.1)	85.2	(82.1, 88.3)	80.8	(76.7, 84.9)	81.9	(77.0, 86.8)	87.8	(85.6,89.2)
San Diego										
<i>Hispanic</i>	69.5	(65.4, 73.6)	70.4	(65.7, 75.1)	75.6	(72.2, 79.0)	76.6	(72.5, 80.6)	73.2	(68.9,77.5)
<i>White</i>	92.2	(90.4, 94.0)	92.7	(91.1, 94.3)	92.5	(91.1, 93.9)	92.2	(90.4, 94.0)	94.6	(92.9,96.4)
<i>All</i>	85.3	(83.6, 87.0)	85.2	(83.3, 87.1)	86.9	(85.5, 88.3)	87.5	(85.9, 89.2)	87.6	(85.7,89.5)
California										
<i>Hispanic</i>	74.0	(73.1, 74.9)	75.8	(74.8, 76.8)	77.3	(76.2, 78.3)	78.5	(77.3, 79.7)	78.0	(76.4,79.5)
<i>White</i>	92.4	(92.0, 92.8)	92.6	(92.2, 93.1)	92.9	(92.5, 93.4)	92.8	(92.2, 93.3)	91.0	(90.0,92.1)
<i>All</i>	85.4	(85.0, 85.8)	86.0	(85.5, 86.4)	86.5	(86.0, 87.0)	86.8	(86.3, 87.4)	85.5	(84.7,86.3)

^a95% Confidence Interval

Source: 2009 California Health Interview Survey, Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 2: Overall Health

Table 2.4

Usual Source of Care for All Ages by Ethnicity and Region(2009)						
Population	Doctor's Office		Community Clinic		No Usual Source of Care/ Emergency Room	
	%	95% C.I. ^a	%	95% C.I. ^a	%	95% C.I. ^a
Imperial						
<i>Hispanic</i>	57.6	(49.8,65.3)	24.8	(17.8,31.9)	17.6	(12.7,22.5)
<i>White</i>	70.6	(58.9,82.2)	9.1	(2.7,15.4)	20.4	(9.3,31.5)
<i>All</i>	59.0	(52.4,65.5)	23.2	(17.3,29.1)	17.9	(13.6,22.1)
San Diego						
<i>Hispanic</i>	48.2	(43.9,52.6)	34.8	(30.5,39.1)	16.9	(13.7,20.2)
<i>White</i>	75.4	(72.2,78.6)	16.3	(13.5,19.1)	8.3	(6.3,10.4)
<i>All</i>	64.1	(61.6,66.7)	24.4	(22.0,26.9)	11.4	(9.7,13.1)
California						
<i>Hispanic</i>	44.3	(42.6,46.0)	34.7	(32.9,36.4)	21.1	(19.5,22.6)
<i>White</i>	75.8	(74.6,77.0)	13.0	(12.1,14.0)	11.2	(10.3,12.0)
<i>All</i>	61.2	(60.2,62.2)	22.7	(21.8,23.6)	16.2	(15.4,17.0)

^a95% Confidence Interval

Source: 2009 California Health Interview Survey, Askchis: <http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.1

Rate of Births to Teen Mothers (ages 15-17) by Ethnicity and Region, 2001-2009															
Population	2001			2003			2005			2007			2009		
	Total Births	Rate ^a	95% C.I. ^b	Total Births	Rate ^a	95% C.I. ^b	Total Births	Rate ^a	95% C.I. ^b	Total Births	Rate ^a	95% C.I. ^b	Total Births	Rate ^a	95% C.I. ^b
Imperial															
<i>Hispanic</i>	134	42.5	(35.3, 49.7)	143	40.6	(33.9, 47.3)	168	42.1	(35.7, 48.5)	142	33.9	(28.3, 39.5)	3918	39.6	(33.4, 45.8)
<i>White</i>	7	12.4	(5.0, 25.5)	6	11.4	(4.2, 24.8)	2	3.8	(0.5, 13.7)	2	3.8	(0.5, 13.7)	6	13.3	(4.9, 28.9)
<i>All</i>	144	36.7	(30.7, 42.7)	153	35.4	(29.8, 41.0)	170	35.6	(30.2, 41.0)	148	29.6	(24.8, 34.4)	163	35.0	(29.6, 40.4)
San Diego															
<i>Hispanic</i>	909	43.4	(40.6, 46.2)	836	34.7	(32.3, 37.1)	904	40.0	(37.4, 42.6)	943	38.5	(36.0, 41.0)	829	33.4	(31.1, 35.7)
<i>White</i>	160	6.5	(5.5, 7.5)	157	6.3	(5.3, 7.3)	180	5.8	(5.0, 6.6)	165	5.0	(4.2, 5.8)	138	4.2	(3.5, 4.9)
<i>All</i>	1223	21.4	(20.2, 22.6)	1131	18.3	(17.2, 19.4)	1225	18.6	(17.6, 19.6)	1226	17.7	(16.7, 18.7)	69480	15.2	(14.3, 16.1)
California															
<i>Hispanic</i>	12525	42.9	(42.1, 43.7)	12024	37.4	(36.7, 38.1)	12782	36.9	(36.3, 37.5)	13660	34.4	(33.8, 35.0)	12003	28.6	(28.1, 29.1)
<i>White</i>	2377	8.6	(8.3, 8.9)	2012	7.2	(6.9, 7.5)	1894	6.2	(5.9, 6.5)	1820	5.9	(5.6, 6.2)	1515	5.3	(5.0, 5.6)
<i>All</i>	17307	23.8	(23.4, 24.2)	16193	21.1	(20.8, 21.4)	16740	20.3	(20.0, 20.6)	17582	19.9	(19.6, 20.2)	15418	17.5	(17.2, 17.8)

^aRate per 1,000 females (Ages 15-17)

^b95% Confidence Interval

Source: California Department of Public Health Vital Statistic Query <http://www.apps.cdph.ca.gov/vsq/default.asp>

Health People 2010 Goal: Reduce the rate of teenage pregnancies (15-17 years old) to 43 per 1,000 females ages 15-17

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.2

Percent of Women who gave birth to their first child ages 19 and under, by Ethnicity and Region, 2009		
	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	28.6	(21.0, 36.2)
<i>White</i>	22.9	(8.8, 36.6)
<i>All</i>	28.9	(22.4, 35.5)
San Diego		
<i>Hispanic</i>	27.4	(21.2, 33.5)
<i>White</i>	10.8	(8.2, 13.4)
<i>All</i>	15.6	(13.2, 18.1)
California		
<i>Hispanic</i>	24.6	(22.3, 26.9)
<i>White</i>	12.5	(10.9, 14.1)
<i>All</i>	16.2	(15.1, 17.3)

^a 95% Confidence Interval

Source: 2009 California Health Interview Survey (CHIS), <http://www.chis.ucla.edu/default.asp>

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.3

Infant Deaths (< 1 year old) Rates by Ethnicity and Region, 2005-2008					
	Total Neonatal Deaths (<28 days old)	Total Postneonatal Deaths (≥28 days old)	Total Infant Deaths (<1 year old)	Total Births	Infant Death Rate^a
Imperial					
<i>Hispanic</i>	23	24	47	11258	4.2
<i>White</i>	4	1	5	1013	4.9
<i>All</i>	27	29	56	12554	4.5
San Diego					
<i>Hispanic</i>	304	131	435	83167	5.2
<i>White</i>	176	94	270	72885	3.7
<i>All</i>	633	282	915	187060	4.9
California					
<i>Hispanic</i>	4154	1860	6014	1160339	5.2
<i>White</i>	1843	871	2714	641432	4.2
<i>All</i>	7835	3654	11489	2228561	5.2

^aRate per 1,000 live births

Source: CA Dept. of Public Health, Infant Death Statistics Tables, Infant, Neonatal, and Postneonatal Deaths by Sex and Race/Ethnic Group of Child, California Counties. <http://www.cdph.ca.gov/data/statistics/Pages/InfantDeathDataTables.aspx>

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.4

Infant Mortality Count and Percent by Top Causes by Region, 2008											
Population	Total	Congenital Malform., Deform., and Chrom., Abnorm.		Disorders of Short Gestation and Low Birth Weight		Sudden Infant Death Syndrome		Effect of Maternal Complication of Pregnancy		Complic. Of Placenta, Cord and Membrane	
		#	%	#	%	#	%	#	%	#	%
Imperial*	14	4	28.6	0	0.0	0	0.0	0	0.0	0	0.0
San Diego	228	52	22.8	21	9.2	34	14.9	21	9.2	22	4.1
California	2806	725	25.8	367	13.1	201	7.2	196	7.0	114	4.1

* 1 death from Neonatal Hemorrhage and 8 from all other causes (residual)

Source: CDPH, Leading Causes of Infant Death by Race/Ethnicity, California 2008. <http://www.cdph.ca.gov/data/statistics/Pages/InfantDeathDataTables.aspx>

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.5

Low Birth Weight (LBW) (<2500 grams) by Ethnicity and Region (2003-2009)												
Population	2003			2005			2007			2009		
	LBW Infants	Total Births	%									
Imperial												
<i>Hispanic</i>	134	2,576	5.2	162	2,741	5.9	169	2,803	6.0	170	2,843	6.0
<i>White</i>	20	266	7.5	20	248	8.1	26	268	9.7	13	229	5.7
<i>All</i>	161	2,908	5.5	190	3,058	6.2	202	3,148	6.4	186	3,145	5.9
San Diego												
<i>Hispanic</i>	1,051	19,966	5.3	1,201	20,300	5.9	1,323	21,444	6.2	1,173	19,669	6.0
<i>White</i>	1,023	17,395	5.9	1,252	17,972	7.0	1,256	18,418	6.8	1,152	17,662	6.5
<i>All</i>	2,782	45,368	6.1	3,091	45,897	6.7	3,285	47,545	6.9	2,991	44,960	6.7
California												
<i>Hispanic</i>	16,196	269,691	6.0	17,588	282,823	6.2	18,713	296,917	6.3	16,633	269,953	6.2
<i>White</i>	10,458	168,875	6.2	10,783	163,360	6.6	10,502	159,431	6.6	9,653	151,144	6.4
<i>All</i>	35,659	540,827	6.6	37,653	548,700	6.9	38,923	566,137	6.9	35,835	526,774	6.8

Source: CDPH Center for Health Statistics, Vital Statistic Query System, <http://www.apps.cdph.ca.gov/vsq/default.asp>
 Healthy People 2010 Goal 16-10: Reduce low birth weight to 5 percent

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.6

Very Low Birth Weight (LBW)(<1500 grams) by Ethnicity and Region (2003-2009)												
Population	2003			2005			2007			2009		
	VLBW Infants	Total Births	%									
Imperial												
<i>Hispanic</i>	21	2,576	0.8	21	2,741	0.8	32	2,803	1.1	32	2,843	1.1
<i>White</i>	4	266	1.5	4	248	1.6	2.0	268	0.7	8	229	3.5
<i>All</i>	29	2,908	1.0	27	3,058	0.9	42.0	3,148	1.3	42	3,145	1.3
San Diego												
<i>Hispanic</i>	198	19,966	1.0	231	20,300	1.1	225	21,444	1.0	225	19,669	1.1
<i>White</i>	188	17,395	1.1	208	17,972	1.2	198	18,418	1.1	198	17,662	1.1
<i>All</i>	509	45,368	1.1	559	45,897	1.2	554	47,545	1.2	554	44,960	1.2
California												
<i>Hispanic</i>	2,952	269,691	1.1	3,220	282,823	1.1	3,318	296,917	1.1	3,318	269,953	1.2
<i>White</i>	1,816	168,875	1.1	1,834	163,360	1.1	1,787	159,431	1.1	1,787	151,144	1.2
<i>All</i>	6,344	540,827	1.2	6,790	548,700	1.2	6,805	566,137	1.2	6,805	526,774	1.3

Source: CDPH Center for Health Statistics, Vital Statistic Query System, <http://www.apps.cdph.ca.gov/vsq/default.asp>
 Healthy People 2010 Goal 16-10: Reduce very low birth weight to 0.9 percent

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.7

Breastfeeding Initiation During Early Postpartum by Ethnicity and Region, 2009					
Population	Total New Borns Screened	Any Breast Feeding		Exclusive Breast Feeding	
		%	95% C.I. ^a	%	95% C.I. ^b
Imperial					
<i>Hispanic</i>	1530	90.4	(88.8, 91.8)	9.4	(8.0, 11.0)
<i>White</i>	106	85.8	(78.0, 91.2)	23.6	(16.5, 32.5)
<i>All</i>	1721	89.7	(88.1, 91.0)	10.5	(9.1, 12.0)
San Diego					
<i>Hispanic</i>	14059	93.7	(93.3, 94.1)	56.7	(55.9, 57.5)
<i>White</i>	9903	94.0	(93.6, 94.5)	76.4	(75.5, 77.2)
<i>All</i>	30286	93.4	(93.1, 93.7)	64.0	(63.5, 64.6)
California					
<i>Hispanic</i>	173599	89.0	(88.8, 89.1)	43.0	(42.8, 43.3)
<i>White</i>	82917	92.3	(92.1, 92.5)	70.8	(70.5, 71.1)
<i>All</i>	335435	89.6	(89.5, 89.7)	51.9	(51.8, 52.1)

^a 95% Confidence Interval

Source: California In-Hospital Breastfeeding as Indicated on the Newborn Screening Test Form Statewide, County and Hospital of Occurrence by Type of Newborn Screening Test Form and Race/Ethnicity: 2009.

<http://www.cdph.ca.gov/data/statistics/Documents/MO-BFP-HospitalRaceEthnicityReport2009.pdf>

Healthy People 2010 Goal: 75% initiate breastfeeding, 50% to continue breastfeeding for six months, 25% to continue for 12 months, 40% to exclusively breastfeed to 3 months, and 17% to exclusively breastfeed to 6 months.

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.8

Vaccination Coverage with 4:3:1:3:3:1 ^a among Children 19-35 Months of Age by Ethnicity, 2009																
	2002		2003		2004		2005		2006		2007		2008		2009	
	%	95% C.I.														
California																
<i>Hispanic</i>	70.5	(65.0, 76.0)	74.5	(69.4, 79.6)	80	(75.5, 84.9)	70.7	(63.8, 77.6)	78.8	(73.1, 84.5)	78.8	(73.1, 84.5)	78.7	(74.5, 82.9)	74.0	(66.5, 81.5)
<i>White</i>	64.9	(57.9, 71.9)	74.8	(68.0, 81.6)	75	(67.5, 81.9)	76.1	(67.9, 84.3)	79.1	(72.1, 86.1)	79.1	(72.1, 86.1)	73.1	(64.7, 73.1)	78.1	(69.3, 86.9)
<i>All</i>	67.1	(63.1, 71.1)	75.6	(71.9,79.3)	79	(75.1, 82.1)	74.0	(69.2, 78.8)	78.5	(74.2, 82.8)	77.1	(72.4, 81.8)	79.8	(74.2, 85.4)	74.9	(69.7, 80.1)

^a4 or more doses of DTaP, 3 or more doses of poliovirus, 1 or more doses of MMR, 3 or more doses of Hib (regardless of brand type), 3 or more doses of Hepatitis B, and 1 or more doses of Varicella.

Source: CDC National Immunization Survey 2009, <http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nis>

HP2010 Goal: 90 percent coverage for each of the following individual vaccines: 4 doses DtaP, 3 doses Hib, 3 doses Hep b, 1 dose MMR, 3 doses of polio and 1 dose varicella, and 80 percent coverage for all childhood vaccine series by 19-35 months of age

Appendix F – Additional Tables

Chapter 3: Maternal and Child Health

Table 3.9

Kindergarten Students Adequately Immunized by Region (2009)															
Population	Total Students	All Required		DTaP 4+		Polio 3+		MMR 1		MMR2		Hep B 3+		Var 1+	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Imperial	2691	2473	91.9	2569	95.5	2575	95.7	2645	98.3	2554	94.9	2640	98.1	2640	98.1
San Diego	41003	37955	92.6	38354	93.5	38510	93.9	39500	96.3	38532	94.0	39332	95.9	39503	96.3
California	507,191	461976	91.1	474811	93.6	474811	93.6	490572	96.7	474682	93.6	487552	96.1	489723	96.6

Source: California Department of Health Services, Immunization Branch: 2009 Kindergarten Assessment
<http://www.cdph.ca.gov/programs/immunize/Documents/2009KindergartenAssessmentReport.pdf>

HP2010 Goal: 90 percent coverage for each of the following individual vaccines: 4 doses DtaP, 3 doses Hib, 3 doses Hep b, 1 dose MMR, 3 doses of polio and 1 dose varicella, and 80 percent coverage for all childhood vaccine series by 19-35 months of age

Appendix F – Additional Tables

Chapter 4: Environmental Health

Table 4.2

Number of Days Exceeding State PM10 Standards 1989-2009											
	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
San Diego Air Basin	113.7	38.4	84.2	12.1	133.5	133.6	122.3	12.2	125.1	106.9	123.7
Salton Sea Air Basin	221.3	253.6	230.3	142.5	151.2	135.7	217.9	244.4	293.7	226.6	289.4
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
San Diego Air Basin	108.6	129.3	172.9	150.7	174.5	52.7	159.4	158.6	163.4	146.4	
Salton Sea Air Basin	313.2	311.9	305.4	284.3	219.5	160.1	240.6	219.1	186.8	207.4	

Source: California Air Resources Board (CARB): <http://www.arb.ca.gov/adam/topfour/topfour1.php>

Appendix F – Additional Tables

Chapter 4: Environmental Health

Table 4.3

Number of Days Exceeding State and National Ozone Standards 1992-2009										
		1992	1993	1994	1995	1996	1997	1998	1999	2000
San Diego Air Basin	State	133	127	122	127	89	73	88	74	75
	National	66	58	46	48	31	16	35	17	16
Salton Sea Air Basin	State	125	145	173	151	120	158	111	138	100
	National	75	80	75	79	62	63	40	35	33
		2001	2002	2003	2004	2005	2006	2007	2008	2009
San Diego Air Basin	State	64	56	59	43	51	68	50	69	47
	National	17	13	6	8	5	14	7	11	4
Salton Sea Air Basin	State	111	117	101	108	102	94	99	85	82
	National	54	55	47	37	43	32	25	21	25

Source: California Air Resources Board (CARB): <http://www.arb.ca.gov/adam/topfour/topfour1.php>

Appendix F – Additional Tables

Chapter 4: Environmental Health

Table 4.4

Major Sources of Daily PM ₁₀ Air Pollution Emissions for Border Air Basins, 2008															
Air Basin	Total PM10 (Tons/Day)	Fugitive Windblown Dust		Road Dust (Paved and Unpaved)		Construction and Demolition		On-Road Motor Vehicles		Industrial Processes		Farming Operations		Major Sources Combined	
		Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%
Salton Sea	252.11	174.05	69.0%	44.25	17.6%	10.99	4.4%	2.68	1.1%	3.22	1.3%	10.75	4.3%	245.94	97.6%
San Diego	127.87	0.33	0.3%	59.58	46.6%	27.48	21.5%	5.59	4.4%	6.69	5.2%	0.41	0.3%	100.08	78.3%

Appendix F – Additional Tables

Chapter 4: Environmental Health

Table 4.5

Major Sources of Daily PM _{2.5} Air Pollution Emissions for Border Air Basins, 2008															
Air Basin	Total PM _{2.5} (Tons/Day)	Fugitive Windblown Dust		Road Dust (Paved and Unpaved)		Construction and Demolition		On-Road Motor Vehicles		Industrial Processes		Farming Operations		Major Sources Combined	
		Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%	Tons/Day	%
Salton Sea	44.79	26.84	59.9%	4.79	10.7%	1.11	2.5%	2.21	4.9%	1.08	2.4%	3.08	6.9%	39.11	87.3%
San Diego	42.82	0.05	0.1%	7.82	18.3%	2.75	6.4%	3.99	9.3%	4.4	10.3%	0.08	0.2%	19.09	44.6%

Appendix F – Additional Tables

Chapter 4: Environmental Health

Table 4.6

Lifetime Asthma Prevalence by Age, Ethnicity, and Region, 2005 - 2009																		
	All Ages						Adults (18+)						Kids (0-17)					
	2005		2007		2009		2005		2007		2009		2005		2007		2009	
Population	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a
Imperial																		
<i>Hispanic</i>	12.4	(8.6, 16.7)	14.5	(6.6, 22.5)	10.5	(7.0, 14.1)	8.4	(4.6, 12.1)	15.3	(4.3, 26.3)	8.9	(4.9, 12.9)	21.2	(11.2, 31.3)	12.7	(7.3, 18.1)	14.7	(6.9, 22.4)
<i>White</i>	20.6	(12.6, 28.7)	20.3	(13.0, 27.6)	17.7	(9.0, 26.5)	22.2	(13.0, 31.5)	22.7	(14.4, 31.0)	18.9	(9.0, 28.8)	13.8	(0, 27.8)	~	~	13.0	(0, 27.9)
<i>All</i>	14.7	(11.0, 18.4)	15.5	(8.8, 22.2)	13.0	(9.5, 16.5)	12.8	(9.0, 16.5)	18.0	(9.4, 26.7)	11.6	(7.7, 15.4)	19.4	(10.7, 28.1)	12.7	(7.7, 17.7)	17.0	(8.9, 25.2)
San Diego																		
<i>Hispanic</i>	9.4	(7.3, 11.5)	10.6	(8.2, 13.0)	10.0	(7.5, 12.4)	7.7	(5.2, 10.3)	8.6	(5.8, 11.3)	8.7	(5.4, 12.0)	12.5	(8.9, 16.1)	14.4	(10.1, 18.8)	12.2	(8.7, 15.7)
<i>White</i>	13.2	(11.5, 15.0)	13.5	(11.6, 15.4)	13.2	(11.1, 15.2)	12.7	(10.8, 14.6)	13.8	(11.5, 16.0)	13.2	(10.7, 15.7)	15.4	(11.2, 19.6)	12.5	(9.3, 15.8)	13.1	(9.5, 16.6)
<i>All</i>	12.4	(11.1, 13.7)	12.8	(11.5, 14.2)	12.2	(10.7, 13.6)	11.8	(10.3, 13.3)	12.3	(10.7, 14.0)	11.6	(9.8, 13.4)	14.1	(11.6, 16.7)	14.2	(11.7, 16.8)	13.7	(11.1, 16.3)
California																		
<i>Hispanic</i>	11.2	(10.4, 11.9)	11.2	(10.4, 12.0)	11.0	(10.0, 12.0)	9.6	(8.8, 10.5)	9.6	(8.7, 10.5)	10.2	(8.9, 11.5)	14.2	(12.8, 15.6)	14.3	(12.8, 15.7)	12.5	(6.3, 20.3)
<i>White</i>	15.1	(14.5, 15.7)	14.8	(14.1, 15.4)	14.7	(13.9, 15.5)	14.7	(14.1, 15.3)	14.7	(14.0, 15.4)	15.0	(14.1, 16.0)	16.7	(15.2, 18.2)	14.9	(13.6, 16.3)	13.2	(0, 34.1)
<i>All</i>	13.6	(13.2, 14.0)	13.6	(13.2, 14.1)	13.5	(12.9, 14.1)	12.7	(12.3 - 13.2)	13.0	(12.5, 13.5)	13.5	(12.8, 14.3)	16.1	(15.2, 17.1)	15.4	(14.5, 16.4)	13.4	(8.4, 20.6)

Source: 2009 California Health Interview Survey, askchis: <http://www.chis.ucla.edu>

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Table 4.7

Age-adjusted Asthma Emergency Department Visit Rates for Ages 0-4, by Ethnicity and Region (2005-2009)						
Population	2005		2007		2009	
	Rate ^a	95% C.I.	Rate	95% C.I.	Rate	95% C.I.
Imperial						
<i>Hispanic</i>	184.4	(176.37, 202.02)	186.3	(163.17, 211.85)	158.6	(137.94, 181.53)
<i>White</i>	193.1	(122.42, 289.77)	211.1	(139.12, 307.14)	229.6	(156.02, 325.94)
<i>All</i>	185.3	(162.89, 209.89)	185.4	(163.78, 209.06)	167.7	(147.76, 189.52)
San Diego						
<i>Hispanic</i>	103.5	(97.16, 110.04)	112.9	(106.37, 119.75)	119.8	(113.08, 126.82)
<i>White</i>	52.4	(47.60, 57.59)	62.0	(56.77, 67.65)	65.5	(60.06, 71.32)
<i>All</i>	90.2	(86.30, 94.21)	105.7	(101.42, 110.02)	109.9	(105.58, 114.41)
California						
<i>Hispanic</i>	91.7	(90.08, 93.29)	97.2	(95.51, 98.82)	107.7	(105.95, 109.40)
<i>White</i>	83.3	(81.30, 85.38)	73.0	(71.15, 74.93)	79.5	(77.59, 81.49)
<i>All</i>	102.0	(100.76, 103.17)	101.5	(100.29, 102.70)	109.9	(108.69, 111.17)

^a age-adjusted rate per 10,000 population

^b 95% confidence interval

Source: 2010 Environmental Health Investigations Branch Asthma Query (http://www.ehib.org/page.jsp?page_key=24)

HP 2010 Goal: Reduce the rate of asthma emergency department visits in Children under age 5 years to 150 per 10,000 population

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Chapter 4: Environmental Health

Table 4.8

Age-adjusted Asthma Hospitalization Rates for Ages 0-4, by Ethnicity and Region (2005-2009)						
Population	2005		2007		2009	
	Rate^a	95% C.I.	Rate	95% C.I.	Rate	95% C.I.
Imperial						
<i>Hispanic</i>	56.01	(43.22, 71.38)	50.38	(38.71, 64.46)	54.88	(43.02, 69.00)
<i>White</i>	~	~	~	~	~	~
<i>All</i>	57.76	(45.58, 72.19)	49.48	(38.65, 62.42)	55.67	(44.47, 68.84)
San Diego						
<i>Hispanic</i>	18.27	(15.68, 21.16)	17.68	(15.15, 20.52)	21.94	(19.12, 25.06)
<i>White</i>	15.70	(13.12, 18.64)	12.50	(10.21, 15.16)	14.65	(12.14, 17.54)
<i>All</i>	17.72	(16.02, 19.55)	18.61	(16.86, 20.49)	21.65	(19.74, 23.69)
California						
<i>Hispanic</i>	20.75	(20.00, 21.53)	21.21	(20.45, 22.00)	20.82	(20.07, 21.59)
<i>White</i>	23.89	(22.82, 25.01)	19.50	(18.54, 20.50)	19.15	(18.21, 20.13)
<i>All</i>	23.80	(23.22, 24.38)	22.83	(22.26, 23.40)	22.71	(22.15, 23.28)

^a age-adjusted rate per 10,000 population

^b 95% confidence interval

Source: 2010 Environmental Health Investigations Branch Asthma Query (http://www.ehib.org/page.jsp?page_key=24)

HP 2010 Goal: Reduce the rate of asthma hospitalizations in Children under age 5 years to 25 per 10,000 population

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Table 4.9

Percent of Tested Blood Lead Levels that were 4.5 to <9.5 µg/dL in Children, by Age and Region, 2007- 2009												
Population	Ages up to 6						All Ages 0-21					
	2007		2008		2009		2007		2008		2009	
	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a
Imperial	6.4	(5.8, 7.2)	8.4	(7.7, 9.2)	11.2	(10.4, 12.0)	6.1	(5.5, 6.7)	7.9	(7.2, 8.6)	10.8	(10.0, 11.5)
San Diego	4.7	(4.5, 4.9)	3.9	(3.7, 4.1)	3.8	(3.7, 4.0)	4.6	(4.4, 4.8)	3.9	(3.7, 4.1)	3.7	(3.6, 3.9)
California	6.4	(6.3, 6.5)	3.7	(3.6, 3.7)	3.6	(3.5, 3.6)	6.4	(6.4, 6.5)	3.6	(3.6, 3.7)	3.5	(3.5, 3.6)

^a 95% Confidence Interval

Source: EHIB Lead Poisoning Data Query http://www.ehib.org/page.jsp?page_key=457

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Table 4.10

Percent of Tested Blood Lead Levels that were 9.5 or More µg/dL in Children, by Age and Region, 2007-2009												
Population	Ages up to 6						All Ages 0-21					
	2007		2008		2009		2007		2008		2009	
	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a	%	95% CI ^a
Imperial	0.7	(0.5, 0.9)	0.7	(0.5, 0.9)	0.5	(0.3, 0.7)	0.6	(0.4, 0.8)	0.6	(0.5, 0.9)	0.4	(0.3, 0.6)
San Diego	0.7	(0.7, 0.8)	0.6	(0.5, 0.7)	0.5	(0.4, 0.6)	0.8	(0.7, 0.8)	0.6	(0.5, 0.7)	0.5	(0.4, 0.6)
California	0.6	(0.5, 0.6)	0.4	(0.4, 0.4)	0.4	(0.4, 0.4)	0.6	(0.6, 0.6)	0.4	(0.4, 0.5)	0.4	(0.4, 0.4)

^a 95% Confidence Interval

Source: EHIB Lead Poisoning Data Query http://www.ehib.org/page.jsp?page_key=457

Appendix F – Additional Tables

Chapter 5: Infectious Diseases

Table 5.1

Amebiasis Rates by Ethnicity and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²
<i>Imperial</i>	1	0.6	(0.0, 3.3)	0	0.0	~	1	0.6	(0.0, 3.3)	0	0.0	~	0	0.0	~	1	0.5	(0.0, 2.8)
<i>San Diego</i>	12	0.4	(0.2, 0.7)	21	0.7	(0.4, 1.1)	70	2.3	(1.8, 2.9)	96	3.1	(2.5, 3.8)	79	2.5	(2.0, 3.1)	65	2.0	(1.5, 2.5)
<i>California</i>	377	1.0	(0.9, 1.1)	341	0.9	(0.8, 1.0)	449	1.2	(1.1, 1.3)	453	1.2	(1.1, 1.3)	392	1.0	(0.9, 1.1)	392	1.0	(0.9, 1.1)

¹Rate Per 100,000 population

²95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Chapter 5: Infectious Diseases

Table 5.2

Campylobacteriosis Rates by Ethnicity and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²
<i>Imperial</i>	23	14.0	(8.9, 21.0)	8	4.7	(2.0, 9.3)	24	13.7	(8.8, 20.4)	19	10.6	(6.4, 16.6)	17	9.2	(5.4, 14.7)	34	17.9	(12.4, 25.0)
<i>San Diego</i>	487	15.9	(14.5, 17.3)	418	13.6	(12.3, 14.9)	462	14.9	(13.5, 16.3)	443	14.1	(12.8, 15.4)	489	15.4	(13.4, 17.4)	587	18.3	(16.8, 19.8)
<i>California</i>	4780	13.0	(12.6, 13.4)	4640	12.4	(12.0, 12.8)	5163	13.7	(13.3, 14.1)	5548	14.5	(14.1, 14.9)	5989	15.5	(15.1, 15.9)	6735	17.2	(16.8, 17.6)

¹Rate Per 100,000 population

²95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Chapter 5: Infectious Diseases

Table 5.3

Cryptosporidiosis Rates by Ethnicity ¹ and Region 2005-2010																		
Population	2005			2006			2007			2008			2009			2010		
	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³
Imperial																		
<i>Hispanic</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~
<i>White</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~
<i>All</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	1	0.5	(0.0, 2.8)
San Diego																		
<i>Hispanic</i>	11	1.3	(0.6, 2.3)	14	1.6	(0.9, 2.7)	9	1.0	(0.5, 1.9)	5	0.6	(0.2, 1.4)	8	0.9	(0.4, 1.8)	4	0.4	(0.1, 1.0)
<i>White</i>	5	0.3	(0.1, 0.7)	2	0.1	(0.0, 0.4)	10	0.6	(0.3, 1.1)	7	0.4	(0.2, 0.8)	8	0.5	(0.2, 1.0)	13	0.8	(0.4, 1.4)
<i>All</i>	24	0.8	(0.5, 1.2)	27	0.9	(0.6, 1.3)	23	0.7	(0.4, 1.1)	20	0.6	(0.4, 0.9)	26	0.8	(0.5, 1.2)	23	0.7	(0.4, 1.1)
California																		
<i>Hispanic</i>	48	0.4	(0.3, 0.5)	64	0.5	(0.4, 0.6)	54	0.4	(0.3, 0.5)	57	0.4	(0.3, 0.5)	49	0.3	(0.2, 0.4)	55	0.4	(0.3, 0.5)
<i>White</i>	62	0.4	(0.3, 0.5)	101	0.6	(0.5, 0.7)	122	0.7	(0.6, 0.8)	76	0.5	(0.4, 0.6)	125	0.8	(0.7, 0.9)	132	0.8	(0.7, 0.9)
<i>All</i>	214	0.6	(0.5, 0.7)	340	0.9	(0.8, 1.0)	303	0.8	(0.7, 0.9)	275	0.7	(0.6, 0.8)	459	1.2	(1.1, 1.3)	379	1.0	(0.9, 1.1)

¹Due to missing ethnicity data, it is not appropriate to compare ethnicity data across regions.

²Rate Per 100,000 population

³95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Table 5.4

Cysticercosis Rates by Ethnicity ¹ and Region 2005-2010																		
Population	2005			2006			2007			2008			2009			2010		
	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³
Imperial																		
<i>Hispanic</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	1	0.7	(0.0, 3.9)	0	0.0	~
<i>White</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~		0.0	~	0	0.0	~
<i>All</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	1	0.5	(0.0, 2.8)	0	0.0	~
San Diego																		
<i>Hispanic</i>	2	0.2	(0.0, 2.8)	1	0.1	(0.0, 0.6)	2	0.2	(0.0, 2.8)	3	0.3	(0.41, 0.9)	3	0.3	(0.1, 0.9)	1	0.1	(0.0, 0.6)
<i>White</i>	0	0.0	~	0	0.0	~	2	0.1	(0.0, 0.4)	0	0.0	~	0	0.0	~	1	0.1	(0.0, 0.6)
<i>All</i>	2	0.1	(0.0, 0.4)	2	0.1	(0.0, 0.4)	4	0.1	(0.0, 0.3)	4	0.1	(0.0, 0.3)	5	0.2	(0.1, 0.5)	3	0.1	(0.0, 0.3)
California																		
<i>Hispanic</i>	43	0.3	(0.2, 0.4)	41	0.3	(0.2, 0.4)	28	0.2	(0.1, 0.3)	37	0.3	(0.2, 0.4)	28	0.2	(0.1, 0.3)	24	0.2	(0.1, 0.3)
<i>White</i>	1	0.0	~	3	0.0	~	4	0.0	~	1	0.0	~	2	0.0	~	2	0.0	~
<i>All</i>	53	0.1	(0.1, 0.1)	50	0.1	(0.1, 0.1)	36	0.1	(0.1, 0.1)	42	0.1	(0.1, 0.1)	34	0.1	(0.1, 0.1)	28	0.1	(0.1, 0.1)

¹ Due to missing ethnicity data, it is not appropriate to compare ethnicity data across regions.

²Rate Per 100,000 population

³95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

Appendix F – Additional Tables

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Table 5.5

E. Coli Rates¹ by Ethnicity and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³
Imperial																		
<i>Hispanic</i>	1	0.8	(0.0, 4.5)	1	0.8	(0.0, 4.5)	0	0.0	~	1	0.7	(0.0, 3.9)	1	0.7	(0.0, 3.9)	1	0.7	(0.0, 3.9)
<i>White</i>	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~
<i>All</i>	1	0.6	(0.0, 3.3)	2	1.2	(0.1, 4.3)	0	0.0	~	2	1.1	(0.1, 4.0)	1	0.5	(0.0, 2.8)	2	1.1	(0.1, 4.0)
San Diego																		
<i>Hispanic</i>	3	0.4	(0.1, 4.0)	2	0.2	(0.0, 0.7)	7	0.8	(0.3, 1.6)	5	0.6	(0.2, 1.4)	3	0.3	(0.1, 0.9)	4	0.4	(0.1, 1.0)
<i>White</i>	9	0.5	(0.2, 0.9)	8	0.5	(0.2, 1.0)	13	0.8	(0.4, 1.4)	4	0.2	(0.1, 0.5)	12	0.7	(0.4, 1.2)	14	0.8	(0.4, 1.3)
<i>All</i>	15	0.5	(0.3, 0.8)	11	0.4	(0.2, 0.7)	23	0.7	(0.4, 1.1)	13	0.4	(0.2, 0.7)	21	0.7	(0.4, 1.1)	24	0.8	(0.5, 1.2)
California																		
<i>Hispanic</i>	29	0.2	(0.1, 0.3)	57	0.4	(0.3, 0.5)	65	0.5	(0.4, 0.6)	83	0.6	(0.5, 0.7)	68	0.5	(0.4, 0.6)	100	0.7	(0.6, 0.8)
<i>White</i>	101	0.6	(0.5, 0.7)	151	0.9	(0.8, 1.0)	167	1.0	(0.9, 1.1)	144	0.9	(0.8, 1.0)	145	0.9	(0.8, 1.0)	131	0.8	(0.7, 0.9)
<i>All</i>	196	0.5	(0.4, 0.6)	304	0.8	(0.7, 0.9)	364	1.0	(0.9, 1.1)	321	0.8	(0.7, 0.9)	325	0.8	(0.7, 0.9)	338	0.9	(0.8, 1.0)

¹ Due to missing ethnicity data, it is not appropriate to compare ethnicity data across regions.

²Rate Per 100,000 population

³95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

Appendix F – Additional Tables

Chapter 5: Infectious Diseases

Table 5.6

Giardiasis Rates by Ethnicity¹ and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³
Imperial																		
<i>Hispanic</i>	1	0.8	(0.0, 4.5)	2	1.5	(0.2, 5.4)	0	0.0	~	1	0.7		0	0.0	~	0	0.0	~
<i>White</i>	1	3.6	(0.1, 20.1)	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~	0	0.0	~
<i>All</i>	4	2.4	(0.7, 6.1)	3	1.8	(0.4, 5.3)	2	1.1	(0.1, 4.0)	3	1.7	(0.4, 5.0)	0	0.0	~	1	0.5	(0.0, 2.8)
San Diego																		
<i>Hispanic</i>	28	3.3	(2.2, 4.8)	37	4.3	(3.0, 5.9)	47	5.3	(3.9, 7.0)	41	4.5	(3.2, 6.1)	34	3.7	(2.6, 5.2)	25	2.7	(1.7, 4.0)
<i>White</i>	104	6.2	(5.0, 7.4)	106	6.4	(5.2, 7.6)	113	6.7	(5.5, 7.9)	113	6.7	(5.5, 7.9)	101	6.0	(4.8, 7.2)	84	4.9	(3.9, 5.9)
<i>All</i>	166	5.4	(4.6, 6.2)	231	7.5	(6.5, 8.5)	271	8.7	(7.7, 9.7)	301	9.6	(8.5, 10.7)	287	9.1	(8.0, 10.2)	272	8.5	(7.5, 9.5)
California																		
<i>Hispanic</i>	367	2.8	(2.5, 3.1)	412	3.1	(2.8, 3.4)	411	3.0	(2.7, 3.3)	332	2.4	(2.1, 2.7)	273	1.9	(1.7, 2.1)	241	1.7	(1.5, 1.9)
<i>White</i>	688	4.2	(3.9, 4.5)	671	4.1	(3.8, 4.4)	676	4.1	(3.8, 4.4)	599	3.6	(3.3, 3.9)	447	2.7	(2.4, 3.0)	422	2.6	(2.4, 2.8)
<i>All</i>	2404	6.5	(6.2, 6.8)	2305	6.2	(5.9, 6.5)	2336	6.2	(5.9, 6.5)	2017	5.3	(5.1, 5.5)	1833	4.7	(4.5, 4.9)	1748	4.5	(4.3, 4.7)

¹ Due to missing ethnicity data, it is not appropriate to compare ethnicity data across regions.

² Rate Per 100,000 population

³ 95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Table 5.7

Hepatitis A Rates by Ethnicity and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²
<i>Imperial</i>	3	1.8	(0.4, 5.3)	7	4.1	(1.6, 8.1)	3	1.7	(0.4, 5.0)	12	6.7	(3.5, 11.7)	6	3.2	(1.2, 7.0)	4	2.1	(0.6, 5.4)
<i>San Diego</i>	76	2.5	(2.0, 3.1)	82	2.7	(2.1, 3.4)	82	2.6	(2.1, 3.2)	66	2.1	(1.6, 2.7)	26	0.8	(0.5, 1.2)	19	0.6	(0.4, 0.9)
<i>California</i>	971	2.6	(2.4, 2.8)	992	2.7	(2.5, 2.9)	603	1.6	(1.5, 1.7)	446	1.2	(1.1, 1.3)	273	0.7	(0.6, 0.8)	216	0.6	(0.5, 0.7)

¹Rate Per 100,000 population

²95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Table 5.8

Listeriosis Rates by Ethnicity and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²
<i>Imperial</i>	0	0.0	~	0	0.0	~	2	1.1	(0.1, 4.0)	0	0.0	~	0	0.0	~	0	0.0	~
<i>San Diego</i>	17	0.6	(0.3, 1.0)	25	0.8	(0.5, 1.2)	17	0.5	(0.3, 0.8)	14	0.4	(0.2, 0.7)	13	0.4	(0.2, 0.7)	7	0.2	(0.1, 0.4)
<i>California</i>	132	0.4	(0.3, 0.5)	124	0.3	(0.2, 0.4)	102	0.3	(0.2, 0.4)	88	0.2	(0.1, 0.3)	106	0.3	(0.2, 0.4)	94	0.2	(0.1, 0.3)

¹Rate Per 100,000 population

²95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Table 5.9

Salmonella Rates by Ethnicity and Region 2005-2010

Population	2005			2006			2007			2008			2009			2010		
	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²	#	Rate ¹	95% C.I. ²
Imperial	48	29.1	(21.5, 38.6)	27	15.9	(10.5, 23.1)	34	19.4	(13.4, 27.1)	29	16.1	(10.8, 23.1)	42	22.7	(16.4, 30.7)	43	22.7	(16.4, 30.6)
San Diego	443	14.5	(13.1, 15.9)	520	16.9	(15.4, 18.4)	467	15.0	(13.6, 16.4)	457	14.6	(13.3, 15.9)	468	14.8	(13.5, 16.1)	505	15.8	(14.4, 17.2)
California	4546	12.3	(11.9, 12.7)	4940	13.2	(12.8, 13.6)	4571	12.1	(11.7, 12.5)	5034	13.2	(12.8, 13.6)	5003	12.9	(12.5, 13.3)	5021	12.8	(12.4, 13.2)

¹Rate Per 100,000 population

²95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Table 5.10

Shigella Rates by Ethnicity ¹ and Region 2005-2010																		
	2005			2006			2007			2008			2009			2010		
	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³	#	Rate ²	95% C.I. ³
Imperial																		
<i>Hispanic</i>	15	12.0	(6.7, 19.8)	3	2.3	(0.5, 6.7)	5	3.7	(1.2, 8.6)	14	10.2	(5.6, 17.1)	14	9.8	(5.4, 16.4)	18	12.3	(7.3, 19.4)
<i>White</i>	3	10.8	(2.2, 31.6)	3	10.8	(2.2, 31.6)	0	0.0	~	1	3.6	(0.1, 20.1)	0	0.0	~	2	7.1	(0.9, 25.6)
<i>All</i>	36	21.9	(15.3, 30.3)	25	14.7	(9.5, 21.7)	19	10.9	(6.6, 17.0)	25	13.9	(9.0, 20.5)	20	10.8	(6.6, 16.7)	50	26.4	(19.6, 34.8)
San Diego																		
<i>Hispanic</i>	102	12.0	(9.7, 14.3)	158	18.2	(15.4, 21.0)	73	8.2	(6.4, 10.3)	120	13.2	(10.8, 15.6)	75	8.1	(6.4, 10.2)	5	0.5	(0.2, 1.2)
<i>White</i>	59	3.5	(2.7, 4.5)	107	6.4	(5.2, 7.6)	50	3.0	(2.2, 4.0)	36	2.1	(1.5, 2.9)	40	2.4	(1.7, 3.3)	15	0.9	(0.5, 1.5)
<i>All</i>	207	6.8	(5.9, 7.7)	325	10.6	(9.4, 11.8)	140	4.5	(3.8, 5.2)	181	5.8	(5.0, 6.6)	133	4.2	(3.5, 4.9)	23	0.7	(0.4, 1.1)
California																		
<i>Hispanic</i>	1185	9.2	(8.7, 9.7)	963	7.3	(6.8, 7.8)	621	4.6	(4.2, 5.0)	996	7.2	(6.8, 7.6)	498	3.5	(3.2, 3.8)	454	3.1	(2.8, 3.4)
<i>White</i>	425	2.6	(2.4, 2.8)	416	2.5	(2.3, 2.7)	313	1.9	(1.7, 2.1)	245	1.5	(1.3, 1.7)	253	1.5	(1.3, 1.7)	274	1.7	(1.5, 1.9)
<i>All</i>	2278	6.2	(5.9, 6.5)	1873	5.0	(4.8, 5.2)	1331	3.5	(3.3, 3.7)	1665	4.4	(4.2, 4.6)	1066	2.8	(2.6, 3.0)	1034	2.6	(2.4, 2.8)

¹ Due to missing ethnicity data, it is not appropriate to compare ethnicity data across regions.

² Rate Per 100,000 population

³ 95% Confidence Interval

Note: Rates Calculated using California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050. Sacramento, CA, July 2007

Source: CA Dept. of Public Health, Center for Infectious Disease, Division of Communicable Disease control, Infectious Disease Branch, Surveillance and Statistics Section

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Table 5.11

Chlamydia Rates by Ethnicity and Region, 2005-2009										
	2005		2006		2007		2008		2009	
	Rate ¹	95% C.I. ²								
Imperial										
<i>Af. Ame.</i>	203.2	(87.7, 400.4)	252.6	(121.1, 464.5)	283.8	(136.2, 521.9)	487.1	(278.4, 791.0)	396.3	(197.9, 709.0)
<i>Hispanic</i>	295.4	(259.2, 331.6)	417.1	(374.2, 460.1)	461.6	(414.0, 509.2)	413.0	(366.5, 459.6)	383.0	(334.3, 431.7)
<i>White</i>	46.7	(21.3, 88.7)	90.5	(52.8, 144.9)	140.8	(89.2, 211.2)	194.5	(130.3, 279.4)	113.5	(62.0, 190.3)
<i>All</i>	246.0	(221.9, 270.1)	348.1	(319.9, 376.3)	392.0	(362.5, 421.5)	378.6	(350.0, 407.2)	341.7	(314.8, 368.6)
San Diego										
<i>Af. Ame.</i>	1347.9	(1258.6, 1437.3)	1369.2	(1276.1, 1462.2)	1492.9	(1395.8, 1590.0)	1840.4	(1635.9, 1828.3)	1911.7	(1807.6, 2015.8)
<i>Hispanic</i>	586.5	(561.9, 611.0)	642.7	(616.7, 668.8)	661.7	(635.9, 687.5)	684.1	(620.7, 666.9)	707.4	(678.7, 732.0)
<i>White</i>	188.1	(178.3, 198.0)	188.0	(177.7, 198.3)	203.6	(193.0, 214.1)	242.9	(218.4, 238.8)	258.7	(247.6, 269.8)
<i>All</i>	365.7	(358.9, 372.5)	386.1	(379.2, 393.0)	405.6	(398.5, 412.7)	445.7	(438.4, 453.0)	447.1	(439.8, 454.4)
California										
<i>Af. Ame.</i>	1273.7	(1255.7, 1291.8)	1406.1	(1387.1, 1425.1)	1462.5	(1443.0, 1482.0)	1565.0	(1544.8, 1585.2)	1536.7	(1516.8, 1556.6)
<i>Hispanic</i>	508.4	(503.6, 513.2)	523.7	(518.8, 528.6)	526.7	(522.0, 534.4)	535.4	(530.6, 540.1)	507.7	(503.1, 512.2)
<i>White</i>	160.3	(157.9, 162.6)	163.6	(161.2, 166.0)	179.8	(177.2, 182.4)	183.2	(180.6, 185.8)	185.2	(182.6, 187.8)
<i>All</i>	350.0	(348.1, 351.9)	366.0	(364.1, 367.9)	379.8	(377.8, 381.8)	391.2	(389.2, 393.2)	381.0	(379.0, 383.0)

¹Rate per 100,000 population

²95 percent confidence interval

Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health STD Branch

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Table 5.12

Gonorrhea Rates by Ethnicity and Region, 2005-2009										
	2005		2006		2007		2008		2009	
	Rate ¹	95% C.I. ²								
Imperial										
<i>Af. Ame.</i>	78.6	(16.2, 229.7)	0.0	-	89.3	(24.4, 228.9)	102.3	(21.1, 299.1)	40.1	(4.8, 144.8)
<i>Hispanic</i>	43.0	(30.1, 59.5)	31.9	(20.5, 47.6)	37.3	(26.3, 51.5)	27.6	(16.5, 43.7)	13.4	(7.5, 22.0)
<i>White</i>	21.4	(5.8, 54.9)	0.0	-	19.3	(5.3, 49.3)	22.5	(4.6, 66.1)	4.5	(0.1, 24.8)
<i>All</i>	39.3	(30.3, 50.2)	25.5	(18.5, 34.3)	35.7	(26.3, 47.3)	32.1	(23.2, 43.2)	15.4	(10.2, 22.3)
San Diego										
<i>Af. Ame.</i>	576.2	(511.8, 640.8)	596.6	(526.2, 666.8)	521.1	(458.9, 583.2)	470.1	(816.8, 854.8)	40.1	(329.8, 429.1)
<i>Hispanic</i>	93.9	(83.1, 104.8)	107.3	(95.3, 119.6)	89.8	(79.2, 100.1)	78.8	(85.5, 90.6)	13.4	(54.6, 70.1)
<i>White</i>	54.0	(48.1, 59.8)	48.9	(42.8, 54.7)	40.7	(35.7, 45.6)	32.9	(62.4, 66.5)	4.5	(31.8, 40.7)
<i>All</i>	86.2	(82.9, 89.5)	89.9	(86.6, 93.2)	75.7	(72.6, 78.8)	63.9	(61.1, 66.7)	57.8	(55.2, 60.4)
California										
<i>Af. Ame.</i>	578.1	(566.2, 590.2)	600.5	(588.2, 612.9)	558.5	(546.6, 570.4)	486.3	(475.3, 497.4)	443.6	(433.2, 454.0)
<i>Hispanic</i>	83.3	(81.3, 85.2)	79.1	(77.3, 80.9)	69.7	(68.0, 71.4)	51.2	(49.8, 52.7)	46.4	(45.1, 47.7)
<i>White</i>	54.2	(52.9, 55.6)	51.0	(49.6, 52.3)	47.6	(46.2, 48.9)	37.5	(36.3, 38.7)	36.9	(35.7, 38.1)
<i>All</i>	92.4	(91.4, 93.4)	90.7	(89.7, 91.7)	82.8	(81.9, 83.7)	66.7	(65.9, 67.5)	62.0	(61.2, 62.8)

¹Rate per 100,000 population

²95 percent confidence interval

Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health STD Branch

Healthy People 2010 Objective 25-2: 19 new cases per 100,000 population

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Table 5.13

Primary and Secondary Syphilis Rates by Ethnicity and Region, 2005-2009															
	2005			2006			2007			2008			2009		
	Cases	Rate ¹	95% C.I. ²	Cases	Rate ¹	95% C.I. ²	Cases	Rate ¹	95% C.I. ²	Cases	Rate ¹	95% C.I. ²	Cases	Rate ¹	95% C.I. ²
Imperial															
<i>Hispanic</i>	1	0.8	(0.0, 4.5)	1	0.8	(0.0, 4.5)	2	1.5	(0.1, 20.1)	5	3.6	(1.2, 8.4)	6	4.2	(1.5, 9.1)
<i>Af. Ame.</i>	0	0.0	-	0	0.0	-	1	16.6	(0.4, 92.5)	1	16.2	-	0	0.0	-
<i>White</i>	0	0.0	-	1	3.6	(0.1, 20.1)	0	0.0	-	1	3.6	-	0	0.0	-
<i>All</i>	1	0.6	(0.0, 3.3)	2	1.2	(0.1, 4.3)	3	1.7	(0.4, 5.0)	7	3.9	(1.6, 8.0)	6	3.3	(1.2, 7.2)
San Diego															
<i>Hispanic</i>	55	6.5	(4.9, 8.5)	66	7.6	(5.9, 9.7)	89	10.0	(8.0, 12.3)	83	9.2		85	9.2	(7.3, 11.4)
<i>Af. Ame.</i>	19	12.8	(7.7, 20.0)	17	11.7	(6.8, 18.7)	32	22.4	(13.3, 35.4)	49	34.8	(25.7, 46.0)	27	19.4	(10.3, 33.2)
<i>White</i>	109	6.6	(5.4, 7.8)	140	8.4	(7.0, 9.8)	210	12.5	(10.8, 14.2)	182	10.8	(9.2, 12.4)	135	8.0	(6.7, 9.3)
<i>All</i>	192	6.3	(5.4, 7.2)	239	7.8	(6.8, 8.8)	354	11.4	(10.2, 12.6)	347	10.9	(9.8, 12.0)	261	8.1	(7.1, 9.1)
California															
<i>Hispanic</i>	474	3.7	(3.4, 4.0)	553	4.2	(3.8, 4.6)	694	5.1	(4.7, 5.5)	705	5.1	(4.7, 5.5)	687	4.8	(4.4, 5.2)
<i>Af. Ame.</i>	199	8.8	(7.6, 10.0)	278	12.3	(10.9, 13.7)	292	12.9	(11.4, 14.4)	339	14.9	(13.3, 16.5)	267	11.7	(10.3, 13.1)
<i>White</i>	807	4.9	(4.6, 5.2)	865	5.3	(5.0, 5.6)	934	5.7	(5.3, 6.1)	938	5.7	(5.3, 6.1)	863	5.3	(4.9, 5.7)
<i>All</i>	1,608	4.4	(4.2, 4.6)	1,847	5.0	(4.8, 5.2)	2,069	5.5	(5.3, 5.7)	2,187	5.7	(5.7, 5.9)	2,015	5.2	(5.0, 5.4)

¹Rate per 100,000 population

²95 percent confidence interval

Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health STD Branch
Healthy People 2010 Objective 25-3: 0.2 cases per 100,000

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Table 5.14

Congenital Syphilis Rates, by Ethnicity and Region, 2005-2009																				
	2005				2006				2007				2008				2009			
	#	Births	Rate ¹	95% C.I. ²	#	Births	Rate ¹	95% C.I. ²	#	Births	Rate ¹	95% C.I. ²	#	Births	Rate ¹	95% C.I. ²	#	Births	Rate ¹	95% C.I. ²
Imperial																				
<i>Hispanic</i>	2	2,741	73.0	(8.8, 263.7)	1	2,826	35.4	(0.9, 197.2)	2	2,803	71.4	(8.6, 257.9)	1	2,888	34.6	(0.9, 192.8)	2	2,843	70.3	(1.8, 391.7)
<i>Af. Ame.</i>	0	28	0.0	-	0	20	0.0	-	0	25	0.0	-	0	27	0.0	-	0	19	0.0	-
<i>White</i>	0	234	0.0	-	0	232	0.0	-	0	252	0.0	-	0	242	0.0	-	0	212	0.0	-
<i>All</i>	2	3,058	65.4	(7.9, 236.2)	1	3,127	32.0	(0.8, 178.3)	2	3,148	63.5	(7.7, 229.4)	1	3,221	31.0	(0.8, 172.7)	2	3,145	63.6	(7.7, 229.7)
San Diego																				
<i>Hispanic</i>	5	20,300	24.6	(8.0, 57.4)	10	20,532	48.7	(23.4, 89.6)	9	21,444	42.0	(19.2, 79.7)	10	20,891	47.9	(23.0, 88.1)	9	19,669	45.8	(20.9, 86.9)
<i>Af. Ame.</i>	0	2,123	0.0	-	0	2,183	0.0	-	0	1,986	0.0	-	1	2,017	49.6	(1.3, 276.4)	0	1,943	0.0	-
<i>White</i>	1	15,282	6.5	(0.2, 36.2)	1	15,328	6.5	(0.2, 36.2)	1	14,903	6.7	(0.2, 37.3)	1	14,453	6.9	(0.2, 38.4)	0	14,295	0.0	-
<i>All</i>	7	45,897	15.3	(6.2, 31.5)	12	46,876	25.6	(13.2, 44.7)	11	47,545	23.1	(13.2, 44.7)	13	46,742	27.8	(14.8, 47.5)	9	44,960	20.0	(9.1, 38.0)
California																				
<i>Hispanic</i>	40	282,823	14.1	(10.1, 19.2)	53	293,276	18.1	(13.6, 23.7)	50	296,917	16.8	(12.5, 22.1)	40	287,323	13.9	(9.9, 18.9)	30	269,953	11.1	(7.5, 15.8)
<i>Af. Ame.</i>	13	28,756	45.2	(24.1, 77.3)	8	30,016	26.7	(11.5, 52.6)	14	29,479	47.5	(26.0, 79.7)	10	29,428	34.0	(16.3, 62.5)	7	28,611	24.5	(9.9, 50.5)
<i>White</i>	9	156,128	5.8	(2.7, 11.0)	4	154,480	2.6	(0.7, 6.7)	9	151,238	6.0	(2.7, 11.4)	14	146,641	9.5	(5.2, 15.9)	13	141,523	9.2	(4.9, 15.7)
<i>All</i>	71	548,700	12.9	(10.1, 16.3)	69	562,157	12.3	(9.6, 15.6)	84	566,137	14.8	(11.8, 18.3)	69	551,567	12.5	(9.7, 15.8)	54	526,774	10.3	(7.7, 13.4)

¹Rate per 100,000 population

²95 percent confidence interval

Note: A substantial proportion of case-based surveillance data are missing data on race/ethnicity, and this proportion varies between diseases, counties and across years. Therefore, in order to allow for meaningful comparisons of the rates, for rate calculations we have weighted race/ethnic specific case count numerators in accordance with the proportion of cases missing race/ethnicity data in each disease/county/year strata combined with the distribution of the cases in each corresponding strata that do have race/ethnicity data available.

Source: California Department of Public Health STD Branch
Healthy People 2010 Objective 25-3: 0.2 cases per 100,000

Appendix F – Additional Tables

Chapter 6: Mental Health

Table 6.1

Percent of Adults who likely had Psychological Distress During the Past Year		
	%	95% C.I. ^a
Imperial		
<i>Hispanic</i>	9.7	(4.1, 15.4)
<i>White</i>	9.8	(1.4, 18.1)
<i>All</i>	9.8	(5.2, 14.4)
San Diego		
<i>Hispanic</i>	7.1	(3.5, 10.7)
<i>White</i>	4.4	(3.4, 5.3)
<i>All</i>	5.3	(4.1, 6.5)
California		
<i>Hispanic</i>	7.4	(6.2, 8.6)
<i>White</i>	5.6	(5.1, 6.2)
<i>All</i>	6.5	(5.9, 7.1)

^a 95% confidence interval
 Source: 2009 California Health Interview Survey, Askchis:
<http://www.chis.ucla.edu>

Table 6.2

Adults Who Sought Help for a Self-Reported Illness-Needed Help but did not Receive Treatment		
	%	95% C.I. ^a
Imperial		
<i>Hispanic</i>	40.8	(21.3,60.3)
<i>White</i>	50.1	(19, 81.2)
<i>All</i>	41.8	(29.4, 54.3)
San Diego		
<i>Hispanic</i>	47.2	(29.5, 64.9)
<i>White</i>	27.1	(20.1, 34.1)
<i>All</i>	34.2	(26.8, 41.7)
California		
<i>Hispanic</i>	54	(47.1, 60.9)
<i>White</i>	37.2	(33.6, 40.7)
<i>All</i>	44.5	(41.2, 47.8)

^a 95% confidence interval
 Source: 2009 California Health Interview Survey, Askchis:
<http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 6: Mental Health

Table 6.3

Percent of Adults who likely had Psychological distress during the Past Month		
	%	95% C.I. ^a
Imperial		
<i>Hispanic</i>	5.6	(0.7, 10.6)
<i>White</i>	7.1	(0.0, 15.1)
<i>All</i>	5.7	(1.7, 9.7)
San Diego		
<i>Hispanic</i>	4.3	(0.8, 7.7)
<i>White</i>	1.4	(0.9, 2.0)
<i>All</i>	2.2	(1.3, 3.2)
California		
<i>Hispanic</i>	3.9	(2.9, 4.9)
<i>White</i>	2.1	(1.8, 2.3)
<i>All</i>	3.0	(2.5, 3.4)

^a 95% confidence interval
 Source: 2009 California Health Interview Survey, Askchis:
<http://www.chis.ucla.edu>

Table 6.4

Teens that Received Psychological/Emotional Counseling in the Past Year, 2009		
	%	95% C.I. ^a
Imperial		
<i>Hispanic</i>	~	~
<i>White</i>	~	~
<i>All</i>	~	~
San Diego		
<i>Hispanic</i>	9.2	(1.8, 16.7)
<i>White</i>	11.6	(6.3, 16.8)
<i>All</i>	10.5	(6.8, 14.2)
California		
<i>Hispanic</i>	7.3	(5.2, 9.4)
<i>White</i>	11.8	(9.5, 14.1)
<i>All</i>	9.5	(8.0, 11.0)

^a 95% confidence interval
 ~ Insufficient data to calculate an accurate percentage
 Source: 2009 California Health Interview Survey, Askchis:
<http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 6: Mental Health

Table 6.5

Percent of Adults that Needed Help for an Emotional-Mental Health and/or Alcohol-Drug Issue Compared to Those that Received Help for an Emotional-Mental Health and/or Alcohol-Drug Issue in the Past Year, 2009								
	Total Sample	Needed help			Received help			Difference
		#	%	95% C.I. ^a	#	%	95% C.I. ^a	%
Imperial								
<i>Hispanic</i>	98,000	9000	9.2	(5.3,13.2)	7,000	6.8	(3.8,9.8)	2.4
<i>White</i>	19000	3000	13.6	(4.7,22.5)	2,000	9.2	(1.9,16.5)	4.4
<i>All</i>	125000	12000	9.6	(6.2,13.1)	9000	7.1	(4.5,9.8)	2.5
San Diego								
<i>Hispanic</i>	587000	91000	15.5	(10.6,20.4)	70,000	11.9	(7.4,16.4)	3.6
<i>White</i>	1288000	205000	16	(13.2,18.7)	189,000	14.6	(12.0,17.3)	1.4
<i>All</i>	2263000	341000	15.1	(12.9,17.2)	305000	13.5	(11.3, 15.7)	1.6
California								
<i>Hispanic</i>	8918000	1199000	13.4	(11.7,15.2)	799000	9.0	(7.5,10.4)	4.4
<i>White</i>	12733000	2040000	16	(15.0, 17.1)	1,700,000	13.3	(12.4,14.3)	2.7
<i>All</i>	27423000	3914000	14.3	(13.4,15.1)	3,001,000	10.9	(10.2,11.7)	3.4

^a 95% confidence intervalSource: 2009 California Health Interview Survey, Askchis:
<http://www.chis.ucla.edu>

Appendix F – Additional Tables

Chapter 6: Mental Health

Table 6.6

Suicide Rate* Among 15-24 Year Olds (2001-2008)																
Population	2001		2002		2003		2004		2005		2006		2007		2008	
	#	Rate ^a	#	Rate												
Imperial																
<i>Hispanic</i>	0	0.0	1	5.2	0	0.0	0	0.0	2	8.5	2	8.1	0	0.0	0	0.0
<i>White</i>	0	0.0	0	0.0	0	0.0	1	30.1	1	27.6	0	0.0	0	0.0	1	25.0
<i>All</i>	0	0.0	1	4.1	0	0.0	1	3.7	4	13.7	2	6.5	0	0.0	0	0.0
San Diego																
<i>Hispanic</i>	2	1.2	8	4.6	11	6.0	6	3.1	6	4.2	11	7.5	8	5.4	9	5.9
<i>White</i>	23	11.7	24	12.5	22	11.4	22	11.5	13	6.3	22	10.5	22	10.2	15	6.8
<i>All</i>	32	7.2	35	7.7	40	8.5	34	7.1	25	5.8	41	9.3	37	8.3	29	6.4
California																
<i>Hispanic</i>	104	5.0	89	4.1	119	5.4	146	6.4	131	6.1	135	6.0	114	4.8	117	4.8
<i>White</i>	186	10.4	174	9.7	185	10.1	199	10.7	179	8.8	188	9.1	163	7.8	187	8.9
<i>All</i>	348	7.0	322	6.4	380	7.4	423	8.0	367	6.9	407	7.4	370	6.6	383	6.6

*Vital statistic Death Rates are per 100,000 population

Source: California Department of Public Health, Death Statistical Data State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, July 2008
 HP 2010 Goal: 18-1, Reduce the Suicide Rate to a target of 5.0 Suicides per 100,000 Population

Appendix F – Additional Tables

Chapter 6: Mental Health

Table 6.7

Suicide Rates by Age, Ethnicity, and Region, 2008																														
Population	15-24 years						25-44 years						45-64 Years						65+ Years						All Ages					
	Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total		Male		Female		Total	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Imperial																														
<i>Hispanic</i>	0	0.0	0	0.0	0	0	2	9.0	0	0.0	2	5.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	2.8	0	0.0	0	1.5
<i>White</i>	1	45.7	0	0.0	1	25	0	0.0	0	0.0	0	0.0	2	45.0	1	26.5	3	36.5	1	38.0	0	0.0	1	17.5	4	26.5	1	7.7	1	17.8
<i>All</i>	1	5.8	0	0.0	0	0	2	6.7	0	0.0	2	3.9	2	9.7	1	5.1	3	7.5	1	11.8	0	0.0	1	5.4	6	6.3	1	1.2	0	3.9
San Diego																														
<i>Hispanic</i>	8	10.3	1	1.4	9	5.9	17	11.2	5	3.6	22	7.6	8	11.4	5	6.4	13	8.8	1	5.3	1	3.6	2	4.3	34	7.5	12	2.7	9	5.1
<i>White</i>	13	10.6	2	2.0	15	6.8	57	27.0	25	12.1	82	19.6	105	39.1	27	10.5	132	25.1	44	30.4	9	7.3	53	21.7	218	25.7	64	7.7	15	16.7
<i>All</i>	24	9.8	5	2.4	29	6.4	86	19.1	34	7.9	120	13.7	119	29.9	34	8.4	153	19.1	44	9.7	12	6.2	56	16.5	273	17.3	86	5.5	29	11.4
California																														
<i>Hispanic</i>	100	7.9	17	1.4	117	4.8	213	9.4	40	2.0	253	5.9	106	9.0	29	2.4	135	5.7	36	11.5	5	1.2	41	5.6	458	6.5	94	1.4	117	4.0
<i>White</i>	149	13.7	38	3.8	187	8.9	508	24.3	170	8.5	678	16.5	911	35.7	301	11.8	1212	23.7	457	39.6	115	7.7	572	21.7	2030	24.9	627	7.6	187	16.2
<i>All</i>	300	10.1	83	3.0	383	6.6	861	15.7	263	5.1	1124	10.5	1141	5.2	373	7.8	1514	5.7	550	30.2	138	5.8	688	16.4	2864	15.0	865	4.5	383	9.7

*Vital statistic Death Rates are per 100,000 population

Source: California Department of Public Health, Death Statistical Data State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2000-2050, July 2008

HP 2010 Goal: 18-1, Reduce the Suicide Rate to a target of 5.0 Suicides per 100,000 Population

Appendix F – Additional Tables

Chapter 6: Mental Health

Table 6.8

Attempted Suicide One or More Times (during the 12 months before the survey), San Diego, 2009						
	Male		Female		All	
	%	95% C.I.^a	%	95% C.I.^a	%	95% C.I.^a
San Diego						
<i>Hispanic</i>	5.7	(3.5, 9.1)	10.4	(6.8, 15.6)	8.0	(6.0, 10.6)
<i>White</i>	1.2	(0.3, 5.1)	2.5	(0.9, 6.6)	1.9	(0.8, 4.2)
<i>All</i>	4.1	(2.8, 5.9)	7.9	(5.8, 10.7)	6.0	(4.8, 7.5)

^a95 percent Confidence interval

Source: Centers for Disease Control and Prevention, Youth Behavior Surveillance System (YRBSS) 2009

Appendix F – Additional Tables

Chapter 7: Diabetes and Risk Factors

Table 7.1

Percent of Adults (Age 18+) Who Have Been Diagnosed with Diabetes by Ethnicity and Region, 2005-2009						
Population	2005		2007		2009	
	%	95% C.I.^a	%	95% C.I.^a	%	95% C.I.^a
Imperial						
<i>Hispanic</i>	10.4	(6.5, 14.2)	10.4	(7.2, 13.7)	9.1	(5.7, 12.4)
<i>White</i>	12.6	(6.1, 19.1)	12.8	(7.0, 18.5)	7.1	(2.8, 11.5)
<i>All</i>	10.9	(7.7, 14.2)	11.0	(8.2, 13.7)	9.6	(6.7, 12.5)
San Diego						
<i>Hispanic</i>	6.5	(4.4, 8.6)	7.5	(5.4, 9.5)	10.5	(6.3, 14.8)
<i>White</i>	5.1	(4.1, 6.1)	5.2	(4.2, 6.2)	4.9	(4.2, 5.7)
<i>All</i>	5.8	(4.8, 6.7)	6.3	(5.2, 7.3)	7.8	(6.0, 9.7)
California						
<i>Hispanic</i>	8.2	(7.4, 9.0)	9.2	(8.2, 10.2)	10.7	(9.1, 12.3)
<i>White</i>	5.8	(5.5, 6.2)	6.7	(6.3, 7.1)	6.3	(5.8, 6.7)
<i>All</i>	7.0	(6.6, 7.3)	7.8	(7.4, 8.2)	8.5	(7.8, 9.1)

^a 95 percent Confidence Interval

Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objectives:

5-2: Prevent Diabetes, Target: 2.5 new cases per 1,000 population

5-3: Reduce the overall rate of diabetes that is clinically diagnosed, Target: 25 overall cases per 1,000 population

5-4: Increase the proportion of adults with diabetes whose condition has been diagnosed, Target: 80 percent

Appendix F – Additional Tables

Chapter 7: Diabetes and Risk Factors

Table 7.2

Diabetes Age-Adjusted ^a Death Rates ^b Region, 2002-2008														
Population	2002		2003		2004		2005		2006		2007		2008	
	#	Rate												
Imperial														
<i>Hispanic</i>	27	44.1	31	47.6	22	32.0	32	40.6	30	36.7	41	47.5	32	35.0
<i>White</i>	4	10.6	11	27.8	10	22.2	11	26.9	6	13.7	8	18.6	16	36.5
<i>All</i>	31	26.7	44	36.5	38	30.8	48	34.9	37	26.5	51	34.7	49	31.7
San Diego														
<i>Hispanic</i>	84	28.1	97	28.7	126	36.8	126	34.3	121	32.8	110	28.2	129	31.8
<i>White</i>	316	15.9	299	15.0	312	15.9	349	16.9	376	18.1	306	14.7	333	15.5
<i>All</i>	475	18.1	499	18.7	531	19.6	604	21.8	612	21.9	520	18.1	571	19.2
California														
<i>Hispanic</i>	1,634	34.8	1,755	34.6	1,817	34.3	2,025	35.4	1,926	32.3	1,946	31.3	1,974	30.1
<i>White</i>	3,689	17.3	3,778	17.4	3,770	17.5	3,969	18.6	3,811	17.7	3,726	17.1	3,673	16.7
<i>All</i>	6,783	21.4	7,088	21.5	7,119	21.3	7,679	23.0	7,367	21.6	7,395	21.2	7,349	20.6

^a Age-adjusted to 2000 population

^b Rate per 100,000 population

Source: California Department of Public Health Vital Statistic Query System

Healthy People 2010 Objective 5-5: Reduce the diabetes death rate to 45 per 100,000 population

Appendix F – Additional Tables

Chapter 7: Diabetes and Risk Factors

Table 7.3

Percent of Adults (Age 18+) Who Are Obese (BMI ^a ≥30) by Ethnicity and Region, 2005-2009						
Population	2005		2007		2009	
	%	95% C.I. ^b	%	95% C.I. ^b	%	95% C.I. ^b
Imperial						
<i>Hispanic</i>	28.3	(21.9, 34.7)	41.4	(35.1, 47.7)	37.5	(28.5, 46.4)
<i>White</i>	36.7	(26.3, 47.2)	33.0	(23.7, 42.2)	32.9	(21.3, 44.5)
<i>All</i>	30.7	(25.3, 36.1)	39.6	(34.4, 44.9)	35.9	(28.6, 43.3)
San Diego						
<i>Hispanic</i>	26.9	(22.5, 31.4)	30.2	(24.6, 35.8)	30.3	(25.4, 35.2)
<i>White</i>	16.1	(14.3, 18.0)	19.3	(16.9, 21.7)	21.9	(18.9, 24.8)
<i>All</i>	18.4	(16.7, 20.1)	21.7	(19.5, 23.9)	23.6	(21.2, 26.1)
California						
<i>Hispanic</i>	27.4	(26.1, 28.8)	30.1	(28.5, 31.6)	32.1	(29.9, 34.3)
<i>White</i>	19.2	(18.5, 19.9)	20.4	(19.6, 21.1)	22.8	(21.8, 23.9)
<i>All</i>	21.2	(20.6, 21.8)	22.7	(22.0, 23.3)	24.4	(23.5, 25.4)

^a Body Mass Index (BMI) is calculated by dividing WEIGHT (in kilograms) by HEIGHT SQUARED (in meters).

^b 95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective 19-2: Reduce the proportion of adults who are obese to 15 percent

Appendix F – Additional Tables

Chapter 7: Diabetes and Risk Factors

Table 7.4

Percent of Adults (Age 18+) Who Are Overweight (BMI ^a 25.0-29.99) by Ethnicity and Region, 2005-2009						
Population	2005		2007		2009	
	%	95% C.I. ^b	%	95% C.I. ^b	%	95% C.I. ^b
Imperial						
<i>Hispanic</i>	34.2	(26.0, 42.3)	33.3	(27.2, 39.4)	34.2	(26.0, 42.3)
<i>White</i>	32.3	(21.4, 43.2)	36.6	(27.5, 45.7)	32.3	(21.4, 43.2)
<i>All</i>	33.9	(27.2, 40.6)	34.6	(29.4, 39.7)	33.9	(27.2, 40.6)
San Diego						
<i>Hispanic</i>	35.3	(30.6, 39.9)	34.3	(28.9, 39.6)	37.9	(31.9, 44.0)
<i>White</i>	37.5	(34.9, 40.1)	32.9	(30.3, 35.6)	32.4	(29.2, 35.5)
<i>All</i>	36.3	(34.1, 38.4)	33.0	(30.7, 35.2)	34.1	(31.3, 36.9)
California						
<i>Hispanic</i>	38.6	(37.1, 40.1)	37.3	(35.6, 39.0)	37.7	(35.4, 40.0)
<i>White</i>	35.1	(34.3, 35.9)	35.0	(34.1, 35.9)	34.9	(33.6, 36.2)
<i>All</i>	34.9	(34.2, 35.6)	34.4	(33.7, 35.2)	35.0	(33.9, 36.1)

^a Body Mass Index (BMI) is calculated by dividing WEIGHT (in kilograms) by HEIGHT SQUARED (in meters).

^b 95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Appendix F – Additional Tables

Chapter 7: Diabetes and Risk Factors

Table 7.5

Percent of Adults (Age 18+) Who Are Obese (BMI ^a ≥ 30) by Sex, Ethnicity and Region, 2009						
Population	Males		Females		Total	
	%	95% C.I. ^b	%	95% C.I. ^b	%	95% C.I. ^b
Imperial						
<i>Hispanic</i>	48.8	(34.4, 63.1)	25.7	(19.6, 31.8)	37.5	(28.5, 46.4)
<i>White</i>	41.8	(23.3, 60.4)	23.3	(9.5, 37.0)	32.9	(21.3, 44.5)
<i>All</i>	45.3	(33.4, 57.1)	26.0	(20.4, 31.6)	35.9	(28.6, 43.3)
San Diego						
<i>Hispanic</i>	29.0	(21.6, 36.5)	31.5	(25.4, 37.7)	30.3	(25.4, 35.2)
<i>White</i>	23.2	(18.6, 27.8)	20.7	(16.9, 24.5)	21.9	(18.9, 24.8)
<i>All</i>	25.1	(21.1, 29.1)	22.2	(19.3, 25.1)	23.6	(21.2, 26.1)
California						
<i>Hispanic</i>	33.3	(30.0, 36.6)	30.9	(28.0, 33.8)	32.1	(29.9, 34.3)
<i>White</i>	25.3	(23.6, 27.1)	20.5	(19.3, 21.7)	22.8	(21.8, 23.9)
<i>All</i>	26.1	(24.6, 27.6)	22.8	(21.6, 24.0)	24.4	(23.5, 25.4)

^a Body Mass Index (BMI) is calculated by dividing WEIGHT (in kilograms) by HEIGHT SQUARED (in meters).

^b 95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective 19-2: Reduce the proportion of adults who are obese to 15 percent

Appendix F – Additional Tables

Chapter 7: Diabetes and Risk Factors

Table 7.6

Percent of Teens (Ages 12-17) Who Are Obese or Overweight ^a by Ethnicity and Region, 2005-2009						
Population	2005		2007		2009	
	%	95% C.I. ^b	%	95% C.I. ^b	%	95% C.I. ^b
Imperial						
<i>Hispanic</i>	38.0	(18.4, 57.7)	8.4	(10.8, 23.5)	17.2	(10.8, 23.5)
<i>White</i>	~	~	44.9	(1, 100)	~	~
<i>All</i>	34.3	(16.6, 52.0)	11.5	(2.6, 20.3)	15.4	(10.1, 20.6)
San Diego						
<i>Hispanic</i>	20.6	(10.5, 30.6)	12.5	(5.5, 19.6)	20.6	(11.2, 30.1)
<i>White</i>	6.7	(2.2, 11.2)	11.4	(5.0, 17.7)	6.6	(2.1, 11.1)
<i>All</i>	11.2	(6.8, 15.6)	12.1	(7.6, 16.7)	11.7	(7.2, 16.3)
California						
<i>Hispanic</i>	19.8	(16.7, 23.0)	17.4	(14.4, 20.3)	16.4	(12.9, 19.8)
<i>White</i>	9.1	(7.2, 11.0)	8.5	(6.7, 10.3)	7.7	(6.0, 9.5)
<i>All</i>	14.2	(12.5, 15.9)	13.3	(11.6, 14.9)	12.0	(10.1, 13.9)

^a Obese or overweight is defined as at or above the gender- and age-specific 95th percentile of Body Mass Index (BMI)

^b 95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective 19-3: Reduce the proportion adolescents who are overweight or obese to 5%

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Table 7.7

Percent of People Who Eat Five or More Servings of Fruits & Vegetables per Day, 2009				
Population	Children (2-11)		Teens (12-17)	
	%	95% C.I.^a	%	95% C.I.^a
Imperial				
<i>Hispanic</i>	48.8	(25.9, 71.8)	13.7	(5.3, 22.1)
<i>White</i>	53.2	(17.9, 88.5)	~	~
<i>All</i>	48.7	(28.8, 68.6)	11.7	(4.7, 18.8)
San Diego				
<i>Hispanic</i>	46.5	(38.6, 54.5)	18.3	(9.8, 26.8)
<i>White</i>	50.3	(42.6, 58.1)	26.9	(19.0, 34.7)
<i>All</i>	47.1	(41.9, 52.3)	22.4	(17.0, 27.9)
California				
<i>Hispanic</i>	51.6	(48.0, 55.2)	17.2	(13.7, 20.6)
<i>White</i>	46.6	(43.8, 49.4)	23.2	(20.2, 26.2)
<i>All</i>	48.4	(46.2, 50.6)	19.9	(17.8, 22.1)

^a95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

Healthy People 2010 Objective:

19-5: Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.

19-6: Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.

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Table 7.8

Percent of People Who Eat Fast Food per Week, by Ethnicity and Region, All Ages, 2009						
Population	No Times		1 or 2 Times		3 or more Times	
	%	95% C.I. ^a	%	95% C.I. ^a	%	95% C.I. ^a
Imperial						
<i>Hispanic</i>	30.9	(24.7, 37.0)	51.7	(44.2, 59.3)	17.4	(12.1, 22.7)
<i>White</i>	32.6	(21.6, 43.5)	50.5	(38.8, 62.2)	16.9	(8.5, 25.3)
<i>All</i>	31.3	(26.0, 36.6)	52.0	(45.6, 58.4)	16.7	(12.3, 21.1)
San Diego						
<i>Hispanic</i>	27.5	(23.8, 31.2)	50.0	(45.5, 54.5)	22.5	(18.5, 26.4)
<i>White</i>	36.4	(33.6, 39.1)	47.4	(44.3, 50.6)	16.2	(13.5, 18.9)
<i>All</i>	32.7	(30.7, 34.8)	48.0	(45.5, 50.4)	19.3	(17.1, 21.5)
California						
<i>Hispanic</i>	28.6	(27.0, 30.3)	49.7	(47.8, 51.5)	21.7	(20.1, 23.2)
<i>White</i>	40.7	(39.6, 41.8)	41.6	(40.5, 42.7)	17.7	(16.7, 18.8)
<i>All</i>	35.3	(34.4, 36.2)	45.1	(44.1, 46.0)	19.6	(18.8, 20.5)

^a95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

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Table 7.9

Consumed two or more Glasses of Sugary Drink During the Previous Day, Children and Teen, by Country of Birth, 2009						
Population	US		Mexico		Either	
	%	95% C.I. ^a	%	95% C.I. ^a	%	95% C.I. ^a
Imperial						
<i>Hispanic</i>	26.9	(7.1, 46.7)	31.1	(4.7, 57.5)	27.2	(8.7, 45.7)
<i>White</i>	12.5	(11.1, 13.8)	~	~	12.5	(4.4, 13.8)
<i>All</i>	24.4	(7.1, 41.6)	31.1	(4.7, 57.5)	24.5	(8.4, 40.5)
San Diego						
<i>Hispanic</i>	15.3	(9.9, 20.8)	22.0	(6.9, 37.0)	16.1	(11.1, 21.1)
<i>White</i>	8.4	(5.3, 11.6)	~	~	8.2	(5.2, 11.3)
<i>All</i>	11.3	(8.5, 14.1)	21.6	(6.9, 36.3)	11.6	(8.9, 14.3)
California						
<i>Hispanic</i>	17.8	(15.3, 20.3)	22.1	(16.0, 28.2)	18.5	(16.2, 20.9)
<i>White</i>	10.4	(8.9, 12.0)	30.8	(0.0, 81.3)	10.3	(8.8, 11.9)
<i>All</i>	14.3	(12.9, 15.7)	22.0	(15.9, 28.0)	14.7	(13.3, 16.1)

^a 95% Confidence IntervalSource: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

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Table 7.10

Percent of Children (Ages 5-11) Who Were Physically Active for at Least 1 Hour on at Least 5 Days in the Previous Week, by Ethnicity and Region, 2009		
Population	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	70.7	(62.9, 78.5)
<i>White</i>	42.8	(3.8, 81.7)
<i>All</i>	63.5	(53.5, 73.5)
San Diego		
<i>Hispanic</i>	30.3	(21.4, 39.3)
<i>White</i>	45.2	(37.3, 53.0)
<i>All</i>	38.3	(32.6, 44.1)
California		
<i>Hispanic</i>	34.1	(29.7, 38.5)
<i>White</i>	51.4	(48.1, 54.7)
<i>All</i>	40.8	(38.1, 43.5)

^a95% Confidence Interval

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

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Table 7.11

Percent of Teens (Ages 12-17) Who Are Physically Active for at Least 1 Hour on at Least 3 Days in a Typical Week, by Ethnicity and Region, 2009		
Population	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	75.7	(65.7, 85.8)
<i>White</i>	65.7	(56.8, 74.6)
<i>All</i>	69.2	(60.2, 78.2)
San Diego		
<i>Hispanic</i>	75.7	(67.4, 83.9)
<i>White</i>	72.6	(64.6, 80.6)
<i>All</i>	71.4	(65.9, 77.0)
California		
<i>Hispanic</i>	61.6	(57.4, 65.9)
<i>White</i>	67.8	(64.4, 71.3)
<i>All</i>	63.2	(60.6, 65.9)

^a 95% Confidence Interval

Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

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Table 7.12

Percent of Teens (Ages 12-17) Who Visited a Park, Playground or Open Space in the Past Month, 2009		
Population	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	87.5	(80.9, 94.1)
<i>White</i>	~	~
<i>All</i>	81.6	(75.6, 87.5)
San Diego		
<i>Hispanic</i>	84.4	(76.4, 92.4)
<i>White</i>	86.2	(80.3, 92.2)
<i>All</i>	84.2	(79.8, 88.6)
California		
<i>Hispanic</i>	72.9	(69.0, 76.8)
<i>White</i>	78.9	(76.0, 81.9)
<i>All</i>	75.2	(72.9, 77.6)

^a 95% Confidence Interval

~ Data insufficient to report percentages

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

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Table 7.13

Percent of Teens (Ages 12-17) who Walked/Biked/Skated from School in Past Week, by Ethnicity and Region, 2009

Population	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	58.8	(45.2, 72.4)
<i>White</i>	~	~
<i>All</i>	51.9	(39.3, 64.4)
San Diego		
<i>Hispanic</i>	50.9	(40.0, 61.9)
<i>White</i>	40.4	(31.6, 49.3)
<i>All</i>	44.0	(37.3, 50.7)
California		
<i>Hispanic</i>	56.6	(52.2, 60.9)
<i>White</i>	39.1	(35.5, 42.8)
<i>All</i>	48.5	(45.7, 51.3)

^a 95% Confidence Interval

~ Data insufficient to report percentages

Source: 2009, California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>

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Table 7.14

Percent of Teens (Ages 12-17) Who Did Not Walk or Bike to School that Could Have in 30 Minutes or Less, by Ethnicity and Region, 2009		
Population	%	95% C.I.^a
Imperial		
<i>Hispanic</i>	62.1	(59.5, 64.7)
<i>White</i>	~	~
<i>All</i>	51.3	(48.9, 53.8)
San Diego		
<i>Hispanic</i>	51.6	(36.6, 66.7)
<i>White</i>	32.8	(21.7, 44.0)
<i>All</i>	40.3	(32.0, 48.7)
California		
<i>Hispanic</i>	54.9	(48.7, 61.1)
<i>White</i>	40.5	(35.6, 45.4)
<i>All</i>	48.4	(44.7, 52.2)

^a 95% Confidence Interval

~ Data insufficient to report percentages

Source: California Health Interview Survey (CHIS): <http://www.chis.ucla.edu/>