CALIFORNIA DEPARTMENT OF PUBLIC HEALTH

OFFICE OF BINATIONAL BORDER HEALTH

BORDER HEALTH STATUS

REPORT TO THE LEGISLATURE

2012-2014

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Table of Contents

Authors	**iii**
Acknowledgements	**iv**
Table of Contents	**vi**
Index of Figures and Tables	**vii**
Executive Summary	**x**
Introduction	**1**
Demographics	**2**
Access to Healthcare	**4**
Obesity	**6**
Diabetes	**10**
Mental Health	**12**
Tuberculosis	**15**
Sexually Transmitted Infections	**19**
HIV/AIDS	**23**
Immunization and Vaccine Preventable Diseases	**26**
Conclusion	**29**
References	**30**
Appendices	**33**

Index of Figures

Number		Page
1.1	Race/Ethnicity Distribution by Region, 2014	2
1.2	Population Who Graduated College by Ethnicity and Region, 2011-2012	2
1.3	Percent Who Live Below 200% of the Federal Poverty Level by Race/Ethnicity and Region, 2011-2012	3
2.1	Percent of Population Insured by Ethnicity and Region, 2012	4
2.2	Proportion of Insured Under Employer-based Plans by Region and Ethnicity, 2011- 2012	5
3.1	Fig. 3.1 Percentage Who are Obese by Region, 2005-2013	6
3.2	Trends in the Percentage Who are Obese by Race/Ethnicity and Region, 2005-2013	7
3.3	Age Distribution of Obese Adults by Region , 2012	7
4.1	Diabetes Mortality Rates by Region and Race Ethnicity,	10
4.2	Age Distribution of Diabetics by Region, 2011-2012	11
4.3	Proportion of Diabetics by Region and Age, 2011- 2012	11
5.1	Percentage of Severe Social Life Impairment by Ethnicity/Race and Region, 2011-2012	12
5.2	Percentage of Severe Family Life Impairment by Ethnicity/Race and Region, 2011-2012	13
5.3	Suicide Mortality Rate by region, 2013	13
5.4	Suicide Mortality Rates by Ethnicity, 2013	14
5.5	Suicide Mortality Rate by Gender, 2013	14
6.1	TB Case Rate in California and Border Counties 2005-2014	15
6.2	TB Rates in California and Border Counties by Ethnicity 2014	16
6.3	TB Cases with HIV* in California and Border Counties 2011-2014	17
7.1	Incidence Rate of Chlamydia, 2013	19
7.2	Incidence Rate of Gonorrhea, 2013	20
7.3	Incidence Rate of Syphilis: Primary and Secondary, 2013	21
8.1	Diagnosed Persons Living with HIV/AIDS by Current HIV Status in CA Border Counties, 2011- 2013	24
8.2	Rates of Diagnosed Persons Living with HIV/AIDS by Race/Ethnicity, in California and California Border Counties, 2013	24
8.3	Percentage of New HIV/AIDS Cases by Transmission Type for Males and Females in California Border Counties, 2013	25
9.1	Percentage of Fully Immunized Kindergarteners by Region (2010-2014)	26
9.2	Trends in Pertussis Incidence Rate from 2009-2014 by Region	27

Index of Tables

Number		Page
1.1	Percent Change in California and Border Counties by Race/Ethnicity (2004-2014)	34
1.2	Education Level Completed by Ethnicity and Region (2011-2012)	35
2.1	Health Insurance Coverage for All Ages by Ethnicity and Region (2001-2012)	36
2.2	Percent of the Populations with Employer Health Benefits by Ethnicity and Region (2011-2012)	37
2.3	Percent of the Populations Who Are Insured by Ethnicity and Region (2011-2012)	38
2.4	Percent of the Populations Who Are Insured with HMO[a] by Ethnicity and Region (2009-2012)	39
2.5	Percent of the Population's Insurance Status for the Past Year by Ethnicity and Region (2011-2012)	40
3.1	Percent of Adults (Age 18+) Who Are Obese (BMI[a] ≥30) by Race/Ethnicity and Region (2005-2012)	41
3.2	Percent of Adults (Age 18+) Who Are Overweight (BMI[a] 25.0-29.99) by Race/Ethnicity and Region (2005-2012)	42
3.3	Age Distribution of Obese (BMI[a] ≥30) Adults (Age 18+) by Region (2005-2012)	43
3.4	Age Distribution of Overweight (BMI[a] 25.0-29.99) Adults (Age 18+) by Region (2005-2012)	44
3.5	Risk Ratio for Obesity (BMI[a] ≥30) by Age Group (2012)	45
3.6	Distribution of Adolescents Who Are Overweight (BMI[a] 25.0, 29.99) or Obese (BMI[a] ≥30) by Number of Fruits or Vegetables Eaten Daily (2005-2012)	46
3.7	Distribution of Adolescents Who Are Overweight (BMI[a] 25.0, 29.99) or Obese (BMI[a] ≥30) by Number of Days a Week They Were Physically Active for an Hour (2005-2012)	47
4.1	Percent of Adults (Age 18+) Who Have Been Diagnosed with Diabetes by Ethnicity and Region (2005-2013)	48
4.2	Diabetes Mellitus Mortality Rates by Race/Ethnicity and Region (2012-2013)	49
4.3	Age Distribution of Adults (Age 18+) Who Have Been Diagnosed with Diabetes by Region (2005-2012)	50
5.1	Family Life Impairment in the past 12 months (2011-2012)	51
5.2	Social Life Impairment in the past 12 months (2011-2012)	52
5.3	Ever seriously thought about committing suicide in the past 12 months (2011-2012)	53
5.4	Suicide Mortality Cases By Age Group 2013	54
5.5	Suicide Mortality Cases by Gender 2013	55
6.1	Tuberculosis Case Rates per 100,000 Population in California and Border Counties (2005-2014)	56
7.1	Cases and Rates of Chlamydia and Gonorrhea by region and Race/Ethnicity (2012-2013)	57
7.2	Cases and Rates of Syphilis by region and Race/Ethnicity, 2012- 2013	58
8.1	Total Number of Individuals Living with HIV, AIDS, or HIV and AIDS in California Border Counties, by Gender and Race/Ethnicity (2011-2013)	59
8.2	Total Number of Individuals Living with HIV, AIDS, and HIV or AIDS in California, by Gender and Race/Ethnicity (2011-2013)	60
8.3	Total Number of Individuals with New HIV, AIDS, or HIV and AIDS diagnoses in California Border Counties, by Gender and Risk Exposure Group (2011-2013)	61
8.4	Total Number of Individuals with New HIV/AIDS diagnoses in California Border Counties, by Gender and Race/Ethnicity (2011-2013)	62

Index of Tables (Continued)

Number		Page
8.5	Total Number of Individuals with New HIV/AIDS diagnoses in California Border Counties, by Gender, Race, Age, and Risk Exposure Group (2011-2013)	63
8.6	Total Number of Individuals with New HIV/AIDS Diagnoses in California Border Counties, 2011-2013	64
9.1	Immunization Levels for Kindergarteners by region (2012-2014)	65
9.2	Kindergarten Students Vaccine and Exemption Rates by Region (2010-2014)	66
9.3	Child Care Facilities Vaccine and Exemption Rates by Region (2010-2014)	67
9.4	7th Grade Students Vaccine and Exemption Rates by region (2012-2014)	68
9.5	Cases and Rates of Vaccine-preventable-Disease and by Region (2009-2014)	69
9.6	The number of cases of Vaccine-Preventable-Disease and by region, 2009-2013	70

Executive Summary

Highlights of the Border Health Status: Report to the Legislature 2012-2014

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 as it relates to disease prevention, surveillance, and control. This report uses the most recent available data and covers the following indicators: demographics, access to healthcare, obesity, diabetes, mental health, tuberculosis, STIs, HIV/AIDS, immunizations and vaccine preventable diseases.

Demographics

- In 2014, there were 3,384,909 individuals living in the California Border Region, the majority of which were living in San Diego County (n=3,198,165) and a smaller proportion in Imperial County (n=186,744) (DOF, 2014).
- In the State of California in 2014, Whites and Hispanics/Latinos each make up the same proportion at 39% of the total population. In Imperial County, however, Hispanics/Latinos made up the majority (81%) of the population, while Whites made up 14%. In San Diego County, the majority of the population was White (47%), but Hispanics/Latinos constituted the largest minority group at 34%.
- The percent of Hispanics/Latinos in California who had less than a high school education (32%) was close to seven times greater than that of the White population (4.8%). In San Diego County, the percentage of Hispanics/Latinos who had less than a high school education (28%) was more than nine times greater than that of Whites (3.2%). In Imperial County, the percentage of Whites who had less than a high school degree was 15.8%; among Hispanics/Latinos the percentage was almost three times greater (42.7%).
- In 2012 more than half (67.8%) of Imperial County residents were living below 200% of the Federal Poverty Level (FPL), compared to 60.5% in San Diego County and 61.3% in California statewide.
- In both border counties and California statewide, the percentage of Whites living at or above 300% of the FPL was at least twice as high as that of Hispanics/Latinos.
- In December 2014, California reported that 10.5% of the population was unemployed; in San Diego County the unemployment rate was 8.9%, while Imperial County reported an unemployment rate of 28.3%, the highest among all counties in California.

Access to Care

- In 2012 in the State of California, 90.6% of Whites were insured, compared to 78.2% of Hispanics/Latinos. Similarly, 90.2% and 95.6% (though this percentage was statistically unstable) of Whites in San Diego County and Imperial County respectively had health insurance, compared to just 73.8% of Hispanics/Latinos in San Diego County and 79.4% in Imperial County.
- In California, 46.2% of those with insurance were covered under employer-based plans, compared to 51.0% and 36.4% in San Diego County and Imperial County respectively.
- In the State of California, 29.2% of Hispanics/Latinos reported that their employer did not offer health benefits, compared to just 13.3% of Whites and 19.3% of all ethnicities combined. In San Diego County, 26.7% of Hispanics/Latinos were not offered health benefits by their employer, compared to only 11.6% of Whites and 16.7% of all ethnicities combined. Similarly, in Imperial County, 35.8% of Hispanics/Latinos were not offered benefits at work compared to just 12.5% of Whites, though data for Whites was statistically unstable.
- In the State of California, 28.2% of Hispanics/Latinos were covered under MediCal only, compared to just 6% of Whites and 16.7% of all ethnicities combined. Similarly, 22.5% of Hispanics/Latinos in San Diego County and 31.9% in Imperial County were covered solely under MediCal, compared to 4% and 13.3% of Whites in San Diego County and Imperial County respectively, though the percentage for Whites in Imperial County was statistically unstable.
- Between October 1, 2013 and March 31, 2014, 1,395,929 were enrolled into a healthcare plan in the State of California. In Imperial County during the same time period, 4,401 were enrolled; 4,283 were subsidy eligible and 118 were unsubsidized. In San Diego County, 121,900 were enrolled; 105,870 of whom were subsidy-eligible and 16,030 were unsubsidized.

Obesity

- In 2013, 23.7% of adults in San Diego County and 45.1% of adults in Imperial County, the highest proportion of all California counties, were obese.
- The Hispanics/Latino population has had a consistently higher percentage of obesity when compared with the White population and all other populations combined. In 2013 in Imperial County 48.1% of Hispanics/Latinos were obese, more than double the percentage of Whites (19.9%) in San Diego County (CHIS, 2015). This trend was similar in adults in the whole State of California.
- In Imperial County, 61.2% of people with obesity lived below 200% of the FPL, compared to 37.6% in San Diego County.
- In Imperial County, San Diego County and the entire State of California, obese adults were four, five and six-and-a-half times more likely, respectively, to belong to the 40-to-64-year-old age group than to the 18-to-24-year-old age group.
- In 2012 Imperial County reported that 87.1% of women had ever breastfed, and 25.6% had exclusively breastfed. Imperial County ranked 49th among all California Counties for exclusive breastfeeding. During the same period of time, in San Diego County, 95.1% of women reported any breastfeeding, while 73.7% reported exclusive breastfeeding. In comparison, in 2012 the whole State of California reported that 92% of women reported any breastfeeding and 62.4% reported exclusive breastfeeding.
- In Imperial County, 63.9% of the population reported consuming soda at least once a week; Hispanics/Latinos had a slightly higher proportion of soda consumption (66.6%). In San Diego County, 40.1% of the population reported consuming soda at least once a week, and 51.3% of Hispanics/Latinos specifically reported drinking soda at least once a week.
- In Imperial County 88.4% of teens reported eating fast food at least once in the past week compared to 73.7% and 77.2% of teens in San Diego and the whole State of California respectively.

Diabetes

- In 2013, 8.7% of adult respondents in California had been diagnosed with diabetes, compared to 8.5% and 20.6% of adults in San Diego County and Imperial County respectively.
- In 2013 in Imperial County, 24.2% of Hispanics/Latinos reported being diabetic compared to just 6.2% of Whites, though the percentage for Whites is statistically unstable. Similarly in San Diego County, 10.5% of Hispanics/Latinos were diabetic in 2013, compared to 7.1% of Whites and 8.5% of all ethnicities combined.
- Hispanics/Latinos along the border region and the State of California overall also have higher diabetes-related mortality rates than Whites and all ethnicities combined, even after adjusting for age. In San Diego County, the diabetes-related mortality rate in 2013 was 24.1 per 100,000 for Hispanic/Latinos, compared to 16.5 for Whites. In Imperial County the rates were 27.6 for Hispanics/Latinos and 20.2 for Whites.
- Between 2011 and 2012, diabetics in the 40-64 age group represented the highest proportion of diabetics, followed by diabetics in the 65-79 age group. In San Diego County, 53.3% of diabetics were between 40 and 64 years of age. In comparison, 24.3% of diabetics were between 65 and 79 years of age, and just 10.5% of diabetics were 25-39 years of age.

Mental Health

- Fewer Hispanics/Latinos in both border counties reported no social life and family life impairment than their White counterparts. Among those who did report social life impairment, 7.3% of Hispanics/Latinos in San Diego County reported “severe” social life impairment in the past year compared to 5.8% of Whites. Similarly, 6.2% of Hispanics/Latinos in San Diego County reported “severe” family life impairment in the past 12 months due to emotions compared to 4.9% of Whites.
- During 2011 and 2012, 8.8% of respondents in California reported having seriously considered committing suicide in the previous 12 months, compared to 7.4% and 6.3% of respondents in San Diego County and Imperial County respectively, though Imperial County data was statistically unstable.
- In California and the border counties, more Whites reported seriously considering suicide compared to Hispanics/Latinos and all ethnicities combined.
- The all-ethnicity suicide mortality rate in California in 2013, which is the most recent data available, was 10.2 per 100,000. In San Diego County the suicide mortality rate was 13.0 in 2013, which represents an increase from 11.9 per 100,000, in 2011. Conversely, the suicide rate in Imperial County decreased from 10.0 in 2011 to 6.6 per 100,000, in 2013.
- In the State of California in 2013, the suicide rate was 15.9 for Whites, compared to just 4.7 for Hispanics/Latinos. Similarly in San Diego County, the suicide mortality rate for Whites was 17.8, compared to 5.1 for Hispanics/Latinos. In Imperial County, the mortality rate for Whites declined from 26.4 in 2011 to 16.6 per 100,000, in 2013. Still, this rate is notably higher than the rate of 5.1 per 100,000, for Hispanics/Latinos, which also decreased from 6.8 per 100,000, in 2011.
- White males had the highest suicide rates overall (24.3 in California; 26.6 and 19.3 in San Diego and Imperial Counties respectively), while Hispanic/Latino women had the lowest suicide rates overall (1.5 in California; 2.4 and 1.1 per 100,000, in San Diego and Imperial Counties respectively).

Tuberculosis

- California's case rate remains consistently higher than the national case rate, with California reporting the most TB cases in the United States; California reported 2,145 incident TB cases in 2014, a one percent decline from 2,166 cases in 2013.
- California border counties are major contributors to the state's TB burden. In 2014, Imperial County reported a case rate of 19.9 per 100,000 (n=36), the highest rate among all California counties. For the same year, San Diego County reported a case rate of 6.8 per 100,000 (n=220).
- Between 2010 and 2014, 37% of TB cases in California were of Hispanic/Latino ethnicity. During the same time period, Imperial and San Diego counties reported that 92% and 53% of TB cases were Hispanic/Latino respectively.
- Between 2010 and 2014, 78% of TB cases in California were foreign-born, 22% of which were from Mexico. Similarly, 59% of all Imperial County TB cases and 30% of all San Diego County TB cases were born in Mexico.
- California reported 12% of TB cases as having a history of substance abuse, while 25% of TB cases in Imperial County and 19% in San Diego County had a history of substance abuse. Substance abuse was more common among Mexican-born TB cases in California (18%) compared to non-Mexican born cases (10%).
- Approximately 23% of all TB cases in California and in Imperial County and 21% in San Diego County reported co-morbid diabetes during 2010-2014. In all three regions, Mexican-born TB cases were more likely than other TB cases to report diabetes co-morbidity (30% in California, 26% in Imperial, and 24% in San Diego).
- In Imperial County, about 7% of TB cases were co-infected with TB and HIV, and in San Diego County about 8% were co-infected. Mexican-born TB cases in California and in San Diego County were more likely to be co-infected when compared to non-Mexican-born TB cases, but the same was not true in Imperial County
- During 2010-2014, initial resistance to isoniazid (INH), a key first-line anti-TB drug, occurred in about 8% of California and San Diego TB cases. Resistance to INH occurred in about 3% of Imperial TB cases.
- In California, 1.4% of TB cases were determined to be Multidrug-resistant (MDR) TB from 2010-2014. San Diego had a slightly lower proportion of MDR TB cases with 1.2%. Imperial County only reported one case of MDR TB during this time period.
- San Diego County reported higher completion rates than the state with 88% of all TB cases completing treatment, while 84% of Mexican-born TB cases completed treatment. In Imperial County only 60% of all TB cases reported treatment completion.

Sexually Transmitted Infections

- In 2013, chlamydia rates were higher in San Diego (507.2 per 100,000) than in Imperial County (332.1 per 100,000). In the border region and California, Hispanics/Latinos and African Americans/Blacks had higher rates when compared to Whites.
- In 2013, California received a total of 38,365 reports of gonorrhea cases, which constitutes a rate of 100.4 per 100,000. During the same time, Imperial County had a rate of 24.0 per 100,000, and San Diego had a rate of 90.4 cases per 100,000.
- In 2013, the primary and secondary syphilis rate in San Diego County was 11.0 per 100,000, compared to just 2.2 in Imperial County and 9.3 in the whole State of California.
- In San Diego County 97% of primary and secondary syphilis cases were among males and nearly half were among African Americans/Blacks. In Imperial County, on the other hand, all cases were Hispanic/Latino males.
- The rates for congenital syphilis in California decreased in 2011 and 2012 and then increased nearly twofold in 2013. In 2013, the statewide rate (11.1 per 100,000) increased to almost double that of San Diego (4.6). Imperial County did not have any cases of congenital syphilis between 2011 and 2013.

Immunization and Vaccine Preventable Diseases

- Over a ten year period (2004-2014), the proportion of vaccination coverage with all required immunizations among children four to six years of age in California and its border counties have remained close to or above 90%.
- In 2014, California reported that 90.40% of all school-age children entering kindergarten had all required immunizations, compared to Imperial County (93.41%) and San Diego County (92.34%).
- In 2013, according to the most recent data available, the CDPH-Immunization Branch reported for Imperial County no cases for hepatitis A, three cases of pertussis (1.63 per 100,000), and no varicella deaths or hospitalizations. For San Diego County, 40 cases for hepatitis A were reported (1.26 per 100,000), nine cases of hepatitis B acute (0.28 per 100,000), 15 cases of meningococcal disease (0.47 per 100,000), 408 pertussis cases (12.82 per 100,000), and two varicella hospitalizations. There were no measles cases reported for Imperial County in 2013, and only two cases were reported for San Diego County.
- In 2014, there were 29.2 cases of pertussis per 100,000 in California, which represents an increased rate since the 2010 outbreak. In 2014, there were 63.4 cases of pertussis in San Diego County and 5.6 cases per 100,000 in Imperial County.
- In 2014, California had 97.76% of students with Tdap vaccination upon entry to seventh grade. Similarly, San Diego had 97.29% students with Tdap vaccination and Imperial County had 99.39%.
- In 2014, there were a total of 75 measles cases with onset in the State of California. Of the 75 cases, six measles cases were reported in San Diego County.

INTRODUCTION

The 2012-2014 Border Health Status Report provides a snapshot of the health situation in the California Border region. The southern border of California is composed of two counties: San Diego County and Imperial County. Despite their geographical proximity, there are significant differences between the two counties in terms of socioeconomic status, poverty level, unemployment, and racial/ethnic composition. While in San Diego, Hispanics/Latinos comprised the largest minority, in Imperial County Hispanics/Latinos constitute the majority of the population at 81%. These differences continue to have an impact on the health status of the border population and give rise to different public health challenges. Imperial County has the highest rate of obesity and tuberculosis in the whole State of California. Meanwhile, the numbers and rates for STIs and HIV/AIDS are higher in San Diego County, compared to Imperial County.

The California-Baja California border is a very dynamic border, with more crossings in both directions than at any other border in the world; this situation creates even more complexity for working at the public health level. The Office of Binational Border Health (OBBH) is charged with maintaining excellent communication and collaboration with our counterpart state from Mexico, Baja California. Knowing in advance if there is an increase in cases, outbreaks or epidemics across the border helps us to prepare ourselves, and if possible, provide assistance to Baja California.

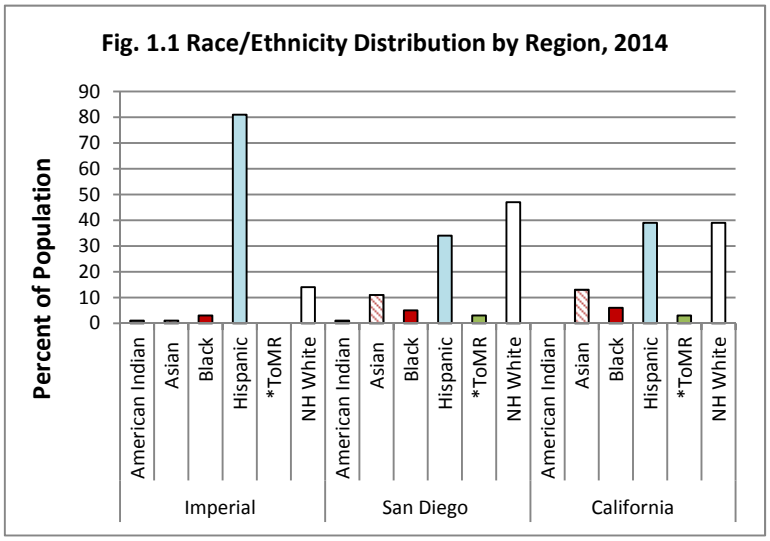
The OBBH was created to help identify challenges and promote health successes that are specific to the border region and its unique population. OBBH works in partnership with state and local agencies to develop the Annual Border Health Status Report, which provides evidence-based information on the needs of the border community. This report summarizes, synthesizes, and analyzes data from a variety of relevant sources to provide an accurate and updated report.

This “Report to the Legislature: Annual Border Health Status Report 2012-2014” provides a summary of the current health status of the border region. The report was prepared by the California Department of Public Health, in compliance with the requirement set forth in Assembly Bill 63 (Ducheny), Chapter 765, Statues of 1999 (Section 475 of the Health and Safety Code). This report presents important health indicators for border communities in California but does not intend to be a fully comprehensive report of all health issues of the border; it aims to provide a general overview of the health status of the population living in this border region. The 2012-2014 report covers demographics, access to healthcare, obesity, diabetes, mental health, tuberculosis, STIs, HIV/AIDS, immunizations, and vaccine-preventable-diseases.

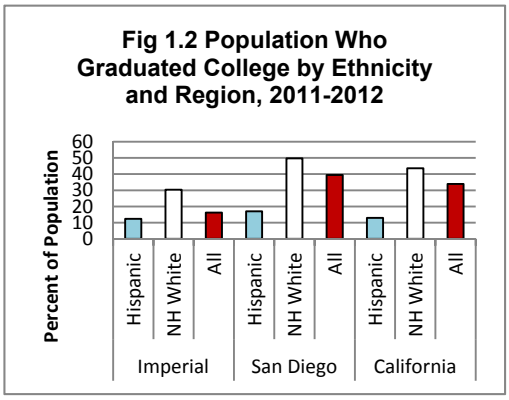
DEMOGRAPHICS

Over the last decade, 2004-2014, the population of the southern border region of California, composed of San Diego and Imperial Counties, experienced steady growth. During this period, Imperial County's population increased by 16.8%, which is almost three times the rate of increase in San Diego County (5.5%) and in California overall (5.5%) for the same time period. In 2014, the California Department of Finance (DOF) reported that there were 3,384,909 individuals living in the California border region; the majority of whom were living in San Diego County (n=3,198,165) and a smaller proportion in Imperial County (n=186,744) (DOF, 2014).

The population in California and along its southernmost border region is racially and ethnically diverse. In 2014, Hispanics/Latinos made up the majority (81%) of the population in Imperial County, while Whites made up 14% (DOF, 2014). In San Diego County, the majority of the population was White (47%), while Hispanics/Latinos constituted the largest minority group at 34% (DOF, 2014). In the State of California, Whites and Hispanics/Latinos make up the same proportion at 39% of the total population (DOF, 2014). From 2004 to 2014 in California, the Hispanic/Latino population increased by 19.4%, and the White population decreased by 9.1% (Table. 1.1) (DOF, 2014).



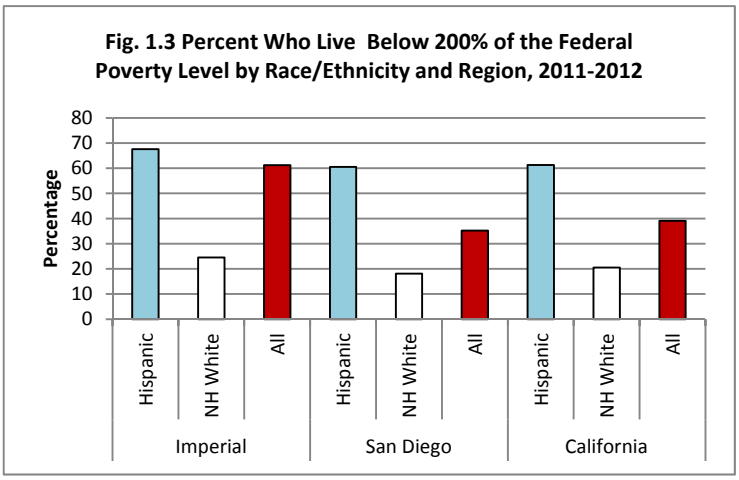
Source: California Department of Finance, State and County Population Projections by *Race/Ethnicity Detailed Age and Gender, 2010-2060.* Sacramento, CA
*Two or More Races (Not Hispanic or Latino)



Source: California Health Interview Survey (CHIS)

The proportion of the California population that reported being able to speak English 'well' or 'very well' was 64.8% (CHIS, 2015). In each border county, a higher proportion of Whites were able to speak English "well" or "very well" compared to the Hispanics/Latinos. In San Diego County, Imperial County, and California as a whole, Hispanics/Latinos were less likely to have received a college level education or higher when compared to Whites and all ethnicities combined. The percent of Hispanics/Latinos in California who had less than a high school education (32%) was close to seven times greater than that of Whites (4.8%) (CHIS, 2015). In San Diego County, the disparity was greater; the percentage of Hispanics/Latinos who had less than a high school education (28%) was more

than nine times greater than that of Whites (3.2%) (Table 1.2) (CHIS, 2015). In Imperial County, the percentage of Whites who had less than a high school degree was 15.8%; among Hispanics/Latinos the percentage was almost three times greater (42.69%) (CHIS, 2015).



Source: California Health Interview Survey (CHIS)

According to the most recent data available, in 2012 more than half (67.8%) of Imperial County residents were living below 200% of the Federal Poverty Level (FPL), compared to 60.5% in San Diego County and 61.3% in California statewide (Fig. 1.3). In San Diego, a higher percentage of the Hispanic/Latino population was living below 200% of the FPL compared with the total county population. Across all ethnicities, there was a considerably higher percentage of the population living at or above 300% of the FPL in San Diego County (52%) and California (46.9%) than in Imperial County (22.9%) (CHIS, 2014). In 2012, Imperial County and the State of California yielded similar proportions. Additionally, in both border counties and California statewide, the percentage of Whites living at or above 300% of the FPL was at least twice as high as that of Hispanics/Latinos (CHIS, 2014).

By December 2014, California reported that 10.5% of the population was unemployed, while San Diego County reported an 8.9% unemployment rate. For the same year, the unemployment rate in Imperial County was 28.3%, the highest among all counties in California (BLS, 2015).

ACCESS TO CARE

BACKGROUND

According to the Healthy People 2020 initiative, having access to health care services is defined as the ability to use personal health services in a timely manner, such that the best possible health outcomes can be achieved. Having access to health care requires three key steps: gaining entry into the health care system, accessing a health care organization where services are provided, and finding a health care provider with whom the patient feels comfortable (HHSA, 2015).

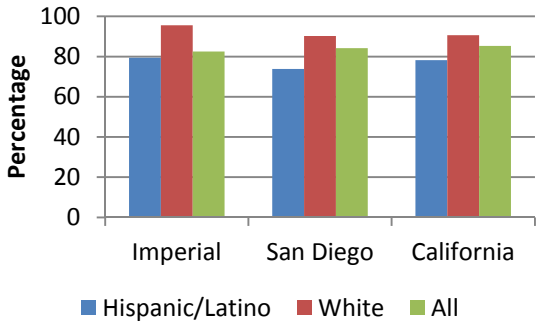
In 2010, an estimated 48.2 million Americans did not have health insurance. The Patient Protection and Affordable Care Act (ACA), which was passed in 2010 and went into effect in California and the rest of the United States, on January 1, 2014, was created to mitigate these problems by expanding access to health insurance.

ACCESS TO CARE IN THE BORDER REGION

Health Insurance Coverage

In 2012, the most recent data available, 85.3% of the California State population was insured, compared to 82.5% and 84.2% of inhabitants of Imperial County and San Diego County respectively. Ethnic breakdown of the proportion insured, however, showed that across all geographic regions in question, Hispanics/Latinos had the lowest rates of coverage compared to Whites and all ethnicities combined. In the State of California, 90.6% of Whites were insured, compared to 78.2% of Hispanics/Latinos. Similarly, 90.2% and 95.6% (though this percentage was statistically unstable) of Whites in San Diego County and Imperial County, respectively, had health insurance, compared to 73.8% of Hispanics/Latinos in San Diego County and 79.4% in Imperial County (CHIS, 2012) (Fig. 2.1).

Fig. 2.1 Percent of Population Insured by Ethnicity and Region, 2012

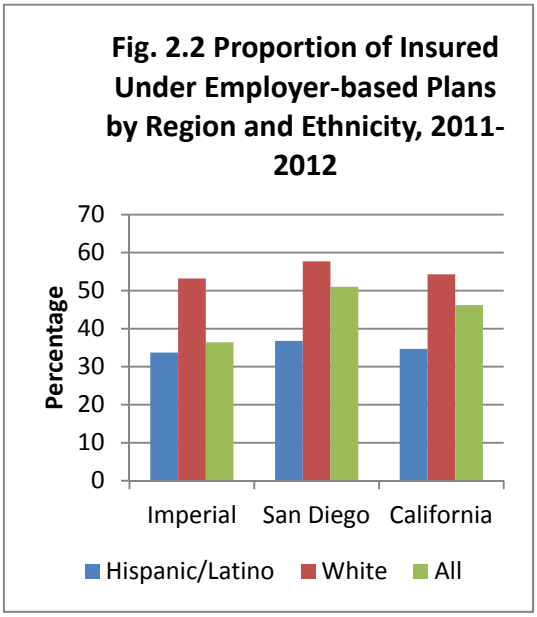


Source: California Health Interview Survey, 2012

One factor contributing to lower insurance coverage among Hispanics/Latinos could be lower proportions of employer-based benefits among this population. In California and the border counties between 2011 and 2012, the most current data available, a higher proportion of Hispanics/Latinos reported working for employers who did not offer health benefits compared to Whites and all ethnicities combined. In the State of California, 29.2% of Hispanics/Latinos reported that their employer did not offer health benefits, compared to just 13.3% of Whites and 19.3 of all ethnicities combined. In San Diego County, 26.7% of Hispanics/Latinos were not offered health benefits by their employer, compared to only 11.6% of Whites and 16.7% of all ethnicities combined. Similarly, in Imperial County, 35.8% of Hispanics/Latinos were not offered benefits at work compared to just 12.5% of Whites, though data for Whites were statistically unstable (CHIS, 2012).

Type of Coverage

Among those who were insured between 2011 and 2012, which are the most recent data available, employer-based insurance was the most common form of insurance in the border counties and the State of California overall, followed by coverage under Medi-Cal only. In California, 46.2% of those with insurance were covered under employer-based plans, compared to 51.0% and 36.4% in San Diego County and Imperial County respectively. Whites (54.3% in California, and 57.7% and 53.2% in San Diego County and Imperial County respectively) were covered under employer-based plans at higher proportions when compared to their Hispanic/Latino counterparts (34.7% in California and 36.8% and 33.7% in San Diego and Imperial Counties respectively) and all ethnicities combined (46.2% in California and 51.0% and 36.4% in San Diego and Imperial Counties respectively) (Fig. 2.2). In contrast, more Hispanics/Latinos in California overall and the border region were covered under Medi-Cal only, compared to Whites and all ethnicities combined. In the State of California, 28.2% of Hispanics/Latinos were covered under Medi-Cal only, compared to just 6% of Whites and 16.7% of all ethnicities combined. Similarly, 22.5% of Hispanics/Latinos in San Diego County and 31.9% in Imperial County were covered solely under Medi-Cal, compared to 4% and 13.3% of Whites in San Diego County and Imperial County respectively, though the percentage for Whites in Imperial County was statistically unstable (CHIS, 2012).



Source: California Health Interview Survey, 2012

Effect of the ACA in California and the Border Region

Between October 1, 2013 and March 31, 2014, the most recent data available, 1,395,929 were enrolled into a healthcare plan in the State of California, through Covered California, the state health insurance exchange. Of those, 1,222,320 were subsidy-eligible and 173,609 were unsubsidized. In Imperial County during the same time period, 4,401 were enrolled; 4,283 were subsidy-eligible and 118 were unsubsidized. In San Diego County, 121,900 were enrolled; 105,870 of whom were subsidy-eligible and 16,030 were unsubsidized (Covered California, 2014).

OBESITY

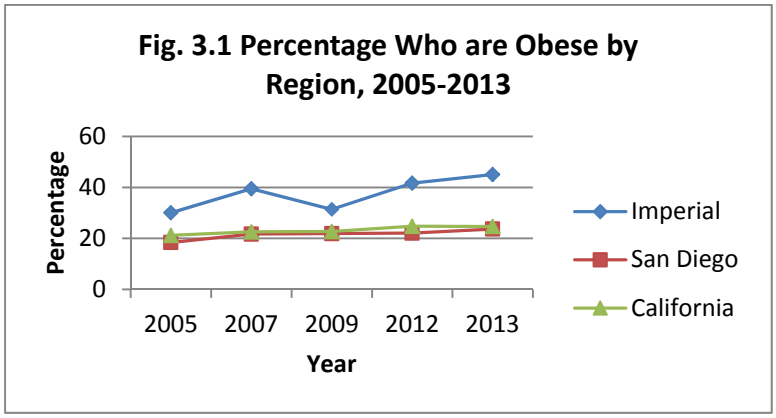
BACKGROUND

Obesity is defined as having an amount of body fat in excess of what is considered to be healthy. The most common estimator of body fat is the Body Mass Index (BMI) measure, which is a number calculated using a person's weight and height. For adults, a BMI between 25.0-29.9 or 30.0-39.9 is categorized as overweight or obese, respectively. A BMI of 40.0 or greater is classified as extreme obesity (NIH, 2012). The direct cause of obesity is energy imbalance; this means consuming too many calories while not getting sufficient physical activity to offset this calorie intake. This imbalance, in turn, is mediated by lifestyle, environment, and genetics (CDC, 2012).

Being overweight or obese are associated with increased risk of several serious adverse health outcomes in adults, including, but not limited to, coronary heart disease (CHD), type 2 diabetes, high blood pressure, stroke, diverse types of cancer, and poor reproductive health in women. During 2009-2010, approximately 78 million adults (about one third of the population) in the United States were obese, with a BMI of 30 or greater (CDC, 2013).

OBESITY IN THE CALIFORNIA BORDER REGION

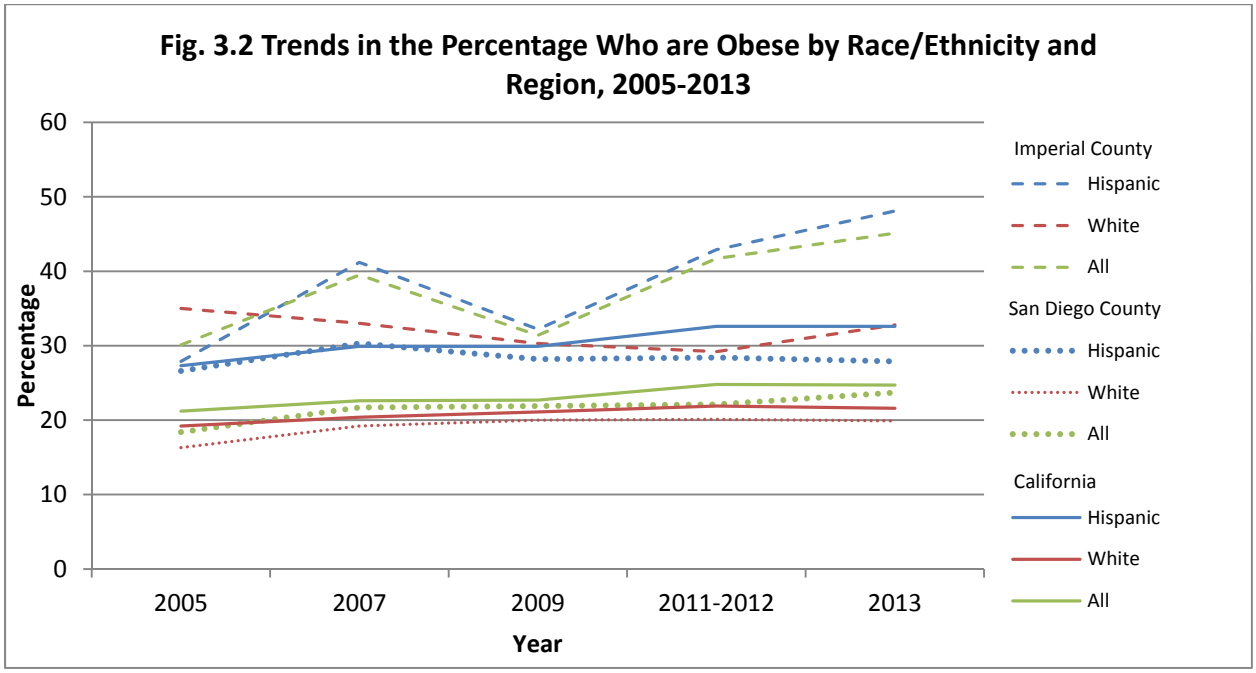
According to the most recent data available, in 2013, 45.1% of adults in Imperial County were obese. In comparison, San Diego County reported a lower percentage of adult obesity with 23.7%. Although San Diego County and the whole State of California (24.7%) met the 2020 Healthy People goal for obesity (less than 30.5%), Imperial County reported almost twice the percentage of San Diego and did not meet the HP 2020 target. Furthermore, Imperial County had the highest obesity rate in the whole State of California. This percent more than doubled when overweight and obesity were combined (Tables 3.1 and 3.2).



Source: California Health Interview Survey (CHIS), 2015

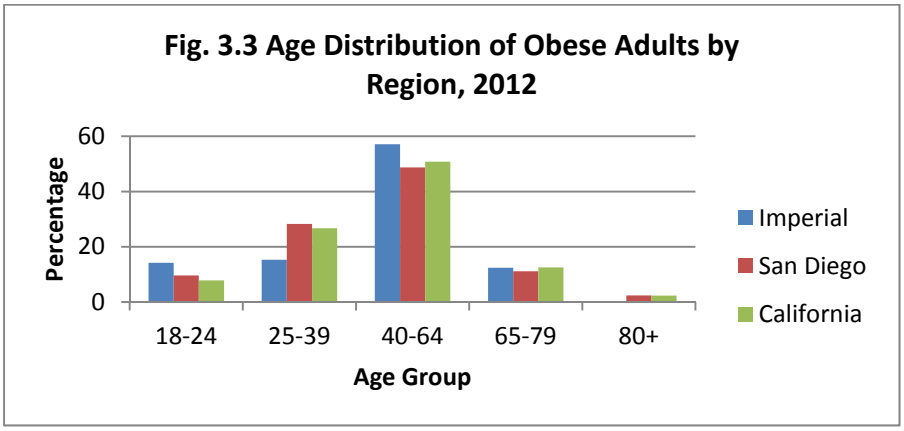
Additionally, differences regarding race/ethnicity, socioeconomic factors and age exist in the California border region. The Hispanic/Latino population has had a consistently higher percentage of obesity when compared with the White population and all other populations combined. In 2013 in Imperial County 48.1% of Hispanics/Latinos were obese, more than

double the percentage of Whites (19.9%) in San Diego County (CHIS, 2013). This trend was similar in adults in the whole State of California (Fig. 3.2).



Source: California Health Interview Survey (CHIS), 2015

In 2012, the most recent data available, Hispanic/Latino teens in San Diego County had a higher percentage of obesity when compared to White teens (18.4% vs. 7.4%, respectively). The overall overweight and obesity prevalence among Hispanic/Latino teens in Imperial County was 37.1%; there are no current data for White teens in Imperial County. Regarding the Federal Poverty Level (FPL), in 2013, socioeconomic disparities between the two border counties were as follows: in Imperial County, 61.2% of people with obesity lived below 200% of the FPL, in comparison with San Diego County, where 37.6% of people with obesity lived below 200% of the FPL. Age makes a difference in the prevalence of obesity in the California border counties, and throughout the State of California. In Imperial County, San Diego County and the entire State of California, obese adults were four, five and six-and-a-half times more likely, respectively, to belong to the 40-to-64-year-old age group than to the 18-to-24-year-old age group (Fig. 3.3).



Source: California Health Interview Survey (CHIS), 2015

State Obesity Indicators and Target Goals for Prevention:

The California State target goals are based on the CDC evidence-based target areas for obesity prevention. These targets include: increased consumption of fruits and vegetables, increased physical activity, increased breastfeeding (initiation, duration, and exclusivity), decreased consumption of high energy dense foods, and decreased television viewing time. This report includes current measures for some target indicators, when available.

Breastfeeding has been shown to have a protective effect against becoming overweight or obese. The American Academy of Pediatrics recommends that babies be breastfed exclusively for about six months and continue to be breastfed for a year or longer with complementary foods (CDPH, 2014). According to the Women, Infant and Children (WIC) Association and the UC Davis Human Lactation Center, in 2012 Imperial County reported that 87.1% of women had ever breastfed, and 25.6% had exclusively breastfed. Imperial County ranked 49th in the state for exclusive breastfeeding. During the same period of time, in San Diego County, 95.1% of women reported any breastfeeding, while 73.7% reported exclusive breastfeeding. San Diego ranked 25th when compared to the rest of the state for exclusive breastfeeding. In comparison, in 2012 the whole State of California reported that 92% of women reported any breastfeeding and 62.4% reported exclusive breastfeeding (WIC, 2013).

Among adolescents who suffer from being overweight or obese in Imperial County, only 12.3% reported eating five or more fruits and vegetables per day, although CHIS reports these data as statistically unstable (CHIS, 2012). Meanwhile in San Diego County, 70.4% of adolescents who are overweight or obese reported eating less than five fruits and vegetables per day.
Sugary-drinks consumption has been linked to obesity increase in the United States. More people are consuming more sugary drinks, and the size for these types of drinks has also been increasing. A regular 20-ounce soda contains 15 to 18 teaspoons of sugar and upward of 240 calories. These calories are considered empty calories with no nutritional value. Furthermore, consuming sugary drinks does not signal satiety, causing people to desire eating more food (Harvard School of Public Health, 2015). The border counties specifically have also been experiencing this increase in sugary drink consumption. In Imperial County, 63.9% of the population reported consuming soda at least once a week; Hispanic/Latinos had a slightly higher proportion of soda consumption (66.6%), this is higher than in San Diego County and California overall. In San Diego County, 40.1% of the population reported consuming soda at least once a week, and 51.3% of Hispanic/Latinos specifically reported drinking soda at least once a week. The trends for all populations in California are similar to that of San Diego County (CHIS, 2012).

Fast food is very popular among children and adolescents. Among children up to 12 years old in Imperial County, 72% reported eating fast food at least once in the past week (although statistically unstable). In San Diego the proportion was slightly less with 63.8%, which was similar to the whole State of California. Teens reported eating more fast food compared to children. In Imperial County 88.4% of teens reported eating fast food at least once in the past week compared to 73.7% and 77.2% of teens in San Diego and the whole State of California respectively (CHIS, 2012).

In 2013, Mexico approved legislation that charges $1 MXN per liter tax (around 0.08 USD) on sodas, as well as a tax of 5% for junk food (Dirección General de Estudios Jurídicos. Gobierno de México, 2013). In the United States, Berkeley has become the first city to pass a law taxing

sugary drinks. In 2014, a 1 cent-an-ounce tax on soft drinks was approved to add to sugary drinks by 75% of the voters.

In the California Border Region, several programs are in place that target obesity prevention and health promotion; different programs exist for San Diego and Imperial Counties. In the city of Chula Vista (County of San Diego), the school district has a comprehensive approach to improve nutrition and physical activities opportunities in schools. This initiative involves leaders, teachers and families. From 2010 to 2012 there was a 3.2% decrease in the overweight or obese range for all students, and a 3.2% gain in normal range. Additionally, there was a decline in the obese range at every grade level, especially at the sixth grade (5.1%) (County of San Diego, 2015). Project Our Choice, Being Healthy (*Nuestra Opcion,Ser Saludables*) in Imperial County, is designed to prevent and control obesity among the young and vulnerable population living in a border, rural community. The Our Choice project aims to modify harmful behaviors, policies, systems and environments to increase the consumption of water, fruits and vegetables, and to promote physical activity and quality of sleep (Ayala, 2015).

DIABETES

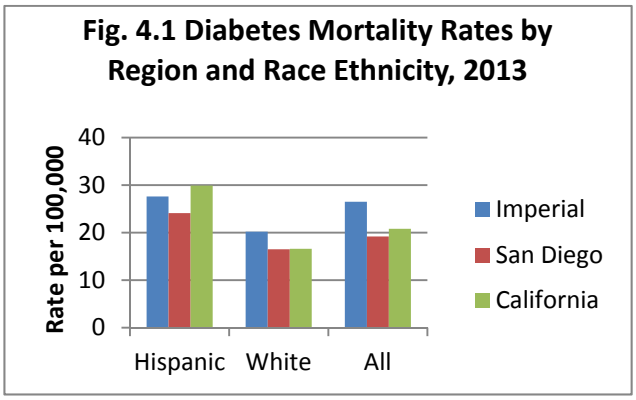
Diabetes is a disease characterized by abnormally high levels of blood glucose as a result of abnormal pancreatic function; usually the pancreas is not producing enough insulin or is not producing any at all. There are two types of diabetes: type 1 and type 2. Type 1 diabetes is an autoimmune disease in which the body does not produce the hormone insulin. Type 2 diabetes is the most common and accounts for 90-95% of all diabetes cases in the United States (CDC, 2015).

Some of the risk factors for type 2 diabetes include physical inactivity, older age, obesity, family history of diabetes, prior history of gestational diabetes (diabetes during pregnancy), and race/ethnicity: African Americans/Blacks, Hispanic/Latino Americans, American Indians and Pacific Islanders are at particularly high risk for type 2 diabetes. Some studies have found that diabetes can be delayed and possibly prevented by losing a small amount of weight (5-7% of the total body weight) through 30 minutes of physical activity 5 days a week and healthier eating. Diabetes can cause serious health complications such as blindness, lower extremity amputations, kidney failure, and heart disease (CDC, 2015).

DIABETES IN THE CALIFORNIA BORDER REGION

In 2013, the most recent data available, 8.7% of adult California respondents reported having ever been diagnosed with diabetes; this proportion is about the same as it was between 2011 and 2012 (8.4%), but represents a slight increase from 7.0% in 2005 (CHIS, 2013). Similarly, in 2013 in San Diego County, 8.5% of adult respondents reported having ever been diagnosed. In Imperial County, however, the prevalence of diagnosed diabetes was 20.6% (CHIS, 2013).

The breakdown of diabetes prevalence by ethnicity revealed a difference in trend between the State of California as a whole and the border region in 2013. In the State of California as a whole, 11.6% of Whites reported having been diagnosed with diabetes, compared to 6.6% of Hispanics/Latinos and 8.7% of all ethnicities combined; this is a recent change in trend however, as between 2011 and 2012 more Hispanics/Latinos (9.9%) actually reported having been diagnosed with diabetes than Whites (7.2%) and all ethnicities combined (8.4%). Along the border region, Hispanics/Latinos reported having been diagnosed with diabetes at higher proportions than their White counterparts and all ethnicities combined. In 2013 in Imperial County, 24.2% of Hispanics/Latinos reported being diabetic compared to just 6.2% of Whites, though the percentage for Whites is statistically unstable. Similarly in San Diego County, 10.5% of Hispanics/Latinos were diabetic in 2013, compared to 7.1% of Whites and 8.5% of all ethnicities combined.

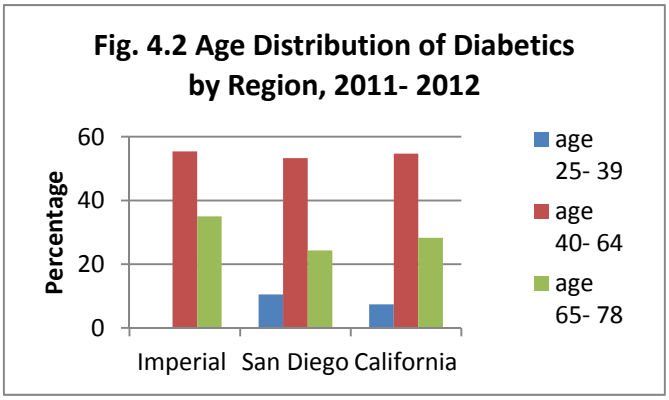


Source: California Health Interview Survey, 2013

Hispanics/Latinos along the border region and the State of California overall also have higher diabetes-related mortality rates than Whites and all ethnicities combined even after adjusting for age. In the State of California in 2013, the most recent data available, the diabetes mortality rate for Hispanics/Latinos was 29.9 per 100,000, compared to 16.6 for Whites and 20.8 for all ethnicities (Fig. 4.1).

In San Diego County during the same year, the mortality rate for Hispanics/Latinos was 24.1, compared to 16.5 for Whites and 19.2 for all ethnicities combined. Similar trends were observed in Imperial County, where the mortality rate for Hispanics/Latinos was 27.6, compared to 20.2 for Whites and 26.5 for all ethnicities combined. This disparity among ethnicities was also true in 2012, though overall rates in San Diego County have decreased and rates in Imperial County have increased; rates in the State of California overall have remained relatively stable (Fig. 4.1).

Data from 2011 and 2012, the most recent available, showed that in the State of California overall and the border counties, diabetics in the 40-64 age group represented the highest proportion of diabetics, followed by diabetics in the 65-79 age group. In California, 54.7% of diabetics were between 40 and 64 years of age. In comparison, 28.3% of diabetics were 65-79 years of age, and just 7.4% of diabetics were between 25 and 39 years of age. Similarly in San Diego County, 53.3% of diabetics were between 40 and 64 years of age. In comparison, 24.3% of diabetics were between 65 and 79 years of age, and just 10.5% of diabetics were 25-39 years of age (Fig. 4.2).



Source: California Health Interview Survey, 2011- 2012

MENTAL HEALTH

BACKGROUND

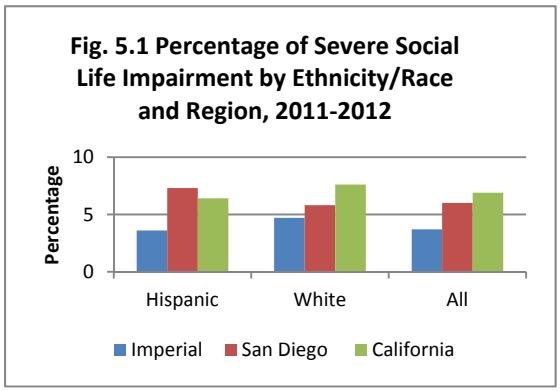
Mental health is defined as the state of emotional, psychological, and social well-being and it is one of the key components of overall health, as defined by the World Health Organization. Mental health is of integral importance at all life-stages as it greatly influences how a person relates and interacts with others, makes decisions, and copes with stress and daily life. In addition, mental health and physical health are closely interrelated; mental illnesses such as depression and anxiety adversely affect a person's ability to engage in health-promoting behaviors. In the United States and Canada, mental health disorders account for 25% of all years of life lost due to disability and premature mortality (HHSA, 2014).

Mental illnesses are not uncommon and can be caused by a variety of different factors including, but not limited to, family history and other biological factors, trauma, and stress. In fact, according to the National Institute of Mental Health (NIMH), 1 in 17 adults have a seriously debilitating mental illness in any given year (Kessler et al., 2005). Certain mental illnesses, such as depression and anxiety, are also impacted by known social determinants of health (WHO, 2014).

MENTAL HEALTH IN THE CALIFORNIA BORDER REGION

Life Impairment Due to Emotions

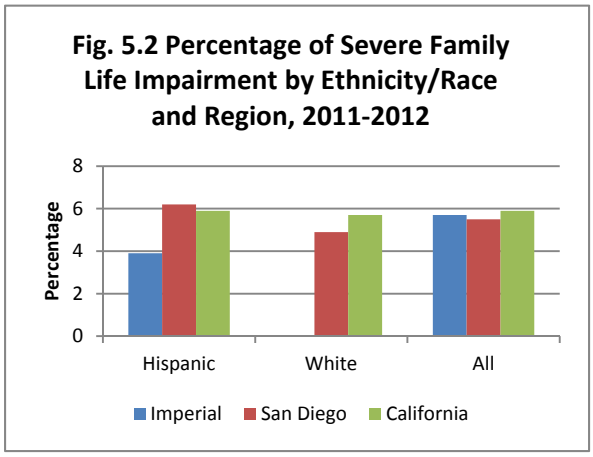
Between 2011 and 2012, the most current data available, the California Health Interview Survey (CHIS) project collected data on perceived social and family life impairment due to emotions in the past 12 months. Respondents were asked if their emotions interfered "a lot, some or not at all" with their social lives and then again with their family lives.



Source: California Health Interview Survey, 2012

During that time period, 86.2% of California respondents reported experiencing no social life impairment in the last 12 months; similarly, 87.4% and 86.7% of respondents reported experiencing no social life impairment in San Diego County and Imperial County respectively (Table 5.2). However, when examining the breakdown by ethnicity, fewer Hispanic/Latinos in both border counties reported no social life impairment than their White counterparts. In Imperial County 92.6% of Whites reported no social life impairment in the past year compared to 87.9% of Hispanic/Latinos, though data for Whites was statistically unstable. Similarly, in San Diego County, 87.8% of White respondents reported no social life impairment in the past year compared to 85.7% of Hispanic/Latinos. Among those who did report social life impairment, 7.3% of Hispanics/Latinos in San Diego County reported "severe" social life impairment in the past 12 months compared to 5.8% of Whites. In the State of California overall, more Whites (7.6%) reported "severe" social life impairment than did Hispanic/Latinos (6.4%).

For the purpose of this study, severe social life impairment was defined as emotions interfering "a lot" with social life (Fig 5.1) (CHIS, 2012).

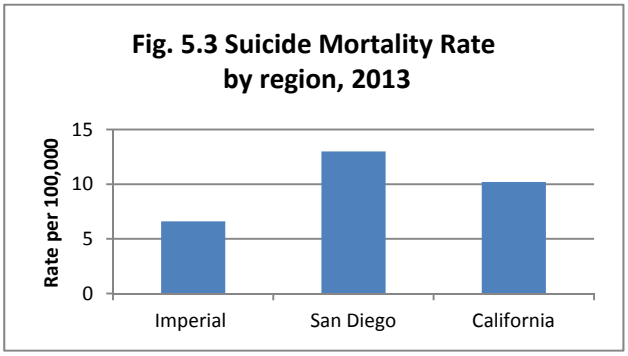


Source: California Health Interview Survey, 2012

The most current CHIS data available measuring family life impairment in the past 12 months (2011-2012) shows similar trends. In California, 86.4% of respondents reported no family life impairment in the past year, similar to 87.7% and 86.6% observed in San Diego County and Imperial County respectively. Again, when examining the breakdown by ethnicity, less Hispanic/Latinos in the border region reported no family life impairment due to emotions. In San Diego County, 88.1% of Whites reported no impairment, compared to 86.4% of Hispanic/Latinos. In Imperial County, 92.9% of White respondents reported no impairment (though this data was statistically unstable), compared to 87.7% of Hispanic/Latinos. In San Diego County, 6.2% of Hispanic/Latinos reported "severe" family life impairment in the past 12 months due to emotions compared to 4.9% of Whites. In California overall, there was no significant difference in reports of severe impairment among Hispanic/Latinos (5.9%), Whites (5.7%), and all ethnicities combined (5.9%). For the purpose of this study, severe family life impairment was defined as emotions interfering "a lot" with relationships with friends and family (Fig. 5.2) (CHIS, 2012).

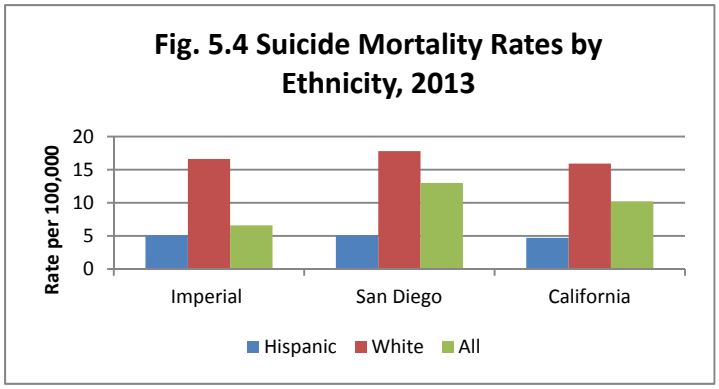
Suicide

During 2011 and 2012, the most current data available, 8.8% of respondents in California reported having seriously considered committing suicide in the previous 12 months, compared to 7.4% and 6.3% of respondents in San Diego County and Imperial County respectively, though Imperial County data was statistically unstable. In California and the border counties, more Whites reported seriously considering suicide compared to Hispanics/Latinos and all ethnicities combined.



Source: California Department of Public Health Center for Health Statistics and Informatics

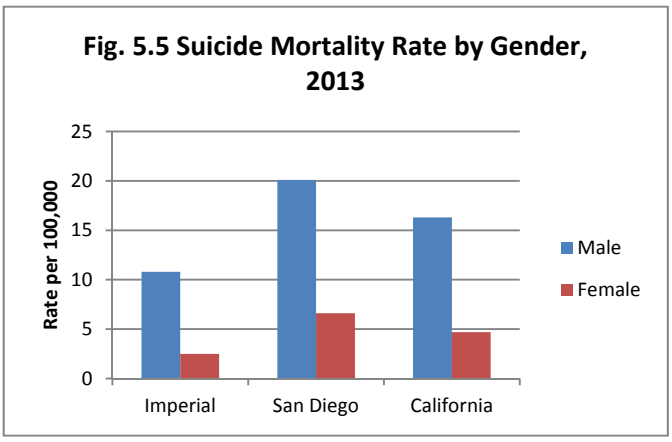
In the State of California, 11.0% of Whites, compared to just 6.5% of Hispanics/Latinos, seriously considered committing suicide. Similarly, in San Diego County, 9.2% of Whites seriously considered suicide compared to 5.3% of Hispanic/Latinos (CHIS, 2012).



Source: California Department of Public Health Center for Health Statistics and Informatics

The all-ethnicity suicide mortality rate in California in 2013, which are the most recent data available, was 10.2 per 100,000. This rate has remained relatively stable since 2011, when it was 10.4 per 100,000. In San Diego County the suicide mortality rate was 13.0 in 2013, which represents an increase from 11.9 in 2011. Conversely, the suicide rate in Imperial County decreased from 10.0 in 2011 to 6.6 per 100,000, in 2013 (Fig. 5.3). The ethnic breakdown of suicide mortality in California and the border counties shows that though suicide rates for Hispanics/Latinos and Whites have remained stable in San Diego County and California overall, rates for Whites are significantly higher than those for Hispanics/Latinos and all ethnicities combined. In the State of California in 2013, the suicide rate was 15.9 for Whites, compared to 4.7 for Hispanics/Latinos. Similarly in San Diego County, the suicide mortality rate for Whites was 17.8, compared to 5.1 for Hispanics/Latinos. In Imperial County, the mortality rate for Whites declined from 26.4 in 2011 to 16.6 in 2013. Still, this rate is notably higher than the rate of 5.1 for Hispanics/Latinos, which also decreased from 6.8 in 2011 (Fig.5.4).

Suicide mortality rate breakdown by gender for 2013, the most current data available, showed that males across all geographic areas of interest had higher rates (16.3 in California, 20.1 and 10.8 in San Diego and Imperial Counties respectively) than females (4.7 in California; 6.6 and 2.5 in San Diego and Imperial Counties respectively). White males had the highest suicide rates overall (24.3 in California; 26.6 and 19.3 in San Diego and Imperial Counties respectively), while Hispanic/Latino women had the lowest suicide rates overall (1.5 in California; 2.4 and 1.1 in San Diego and Imperial Counties respectively) (Fig. 5.5) (CDPH, 2013).



Source: California Department of Public Health Center for Health Statistics and Informatics

Data from the border region shows that Hispanics/Latinos report more family and social life impairment due to emotional stress than their White counterparts. These findings support those of other studies which identify Hispanics/Latinos as a population at high-risk for depression, anxiety, and substance abuse (NAMI, 2006). Despite this, in the border region and the State of California overall, Hispanics/Latinos have had significantly lower rates of suicide than their White counterparts and all ethnicities combined. This discrepancy may be partially explained by the idea of family cohesion as a protective factor for acculturation stress experienced by many immigrant and minority families, though this protective effect has been observed to be diminished among U.S. born and long-term residents compared to recent Hispanic/Latino immigrants (NAMI, 2006; Singh et al., 2011)

TUBERCULOSIS

BACKGROUND

Tuberculosis (TB) is caused by the bacterium *Mycobacterium tuberculosis*, a bacterium that usually attacks the lungs, but can attack other regions of the body such as the lymph nodes, spine, and brain. If not treated properly or early enough, TB can be fatal. TB is spread through the air when a person with active TB coughs, sneezes, or speaks. Often the immune system is able to keep the bacteria from growing, and the only sign of infection is a positive TB skin test or blood test. Persons with (latent) TB infection cannot transmit TB to others. TB infection can progress to TB disease weeks or years after infection. Progression to TB disease is more likely among persons with weakened immune systems, such as those with HIV, end stage renal disease, diabetes or those taking immunosuppressive medications (WHO, 2015).

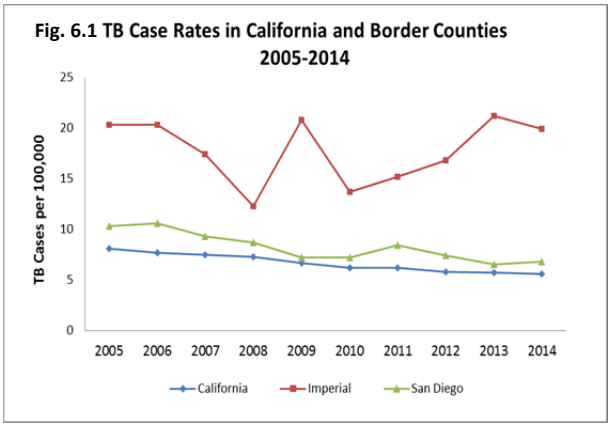
Tuberculosis (TB) is second only to HIV/AIDS as the greatest killer worldwide due to a single infectious agent (WHO, 2015). The California Department of Public Health is committed to preventing, controlling, and eventually eliminating TB in California. This is not possible without strong collaborations with national and international health partners, especially Mexico, to strengthen locating, testing, and treating those at highest risk for TB.

STATUS IN THE BORDER REGION

TB Burden

California reported 2,145 incident TB cases in 2014, a one percent decline from 2,166 cases in 2013. The TB case rate declined from 5.7 cases per 100,000 in 2013 to 5.6 cases per 100,000 in 2014. California's case rate remains consistently higher than the national case rate, with California reporting the most TB cases in the United States. However, in examining a ten year period from 2005 to 2014, California has reported a 26% decrease in TB cases (2,990 to 2,145) and a 31% decrease in TB case rate (8.1 per 100,000 to 5.6 per 100,000) (Fig. 6.1).

California border counties are major contributors to the state's TB burden. In 2014, Imperial County reported a case rate of 19.9 per 100,000 (n=36), the highest rate among all California counties. However, this was a slight decrease from a case rate of 21.2 per 100,000 (n=38) in 2013. San Diego County reported a case rate of 6.8 per 100,000 (n=220) in 2014. This was a slight increase from 6.5 per 100,000 (n=206) in 2013. Both counties report a higher rate than the state average.



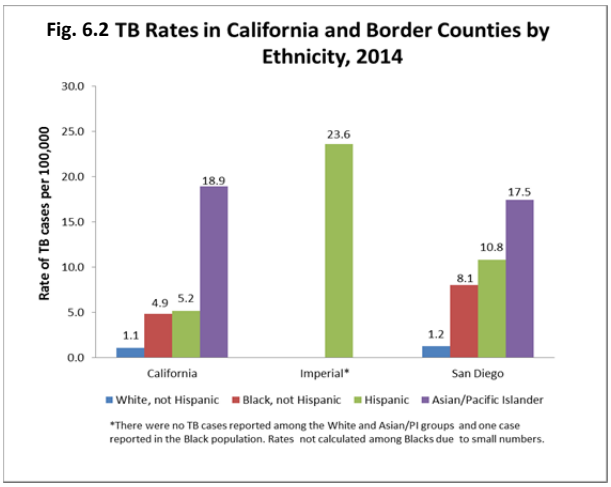
Source: California Department of Public Health
Tuberculosis Branch

Demographic Information

A large proportion of TB cases reported in California during 2010-2014 were of Hispanic ethnicity (37%). In the same time period, Imperial

and San Diego counties reported a larger proportion of Hispanic TB cases than the state average (92% and 53% respectively).

In California and the border counties, the TB case rate among Hispanics/Latinos was higher than among Whites. In 2014, the TB case rate among Hispanics/Latinos was nearly five times that of Whites in California. In San Diego County, the Hispanic/Latino TB rate was nearly nine times that of Whites. However, Asians and Pacific Islanders maintain the highest TB case rate in California and in San Diego. Nearly all TB cases occurred among the Hispanic/Latino group in Imperial County (n=35). There were no reported TB cases among the White and Asian groups. There was only one case reported among the African American/Black population (Fig. 6.2).



Source: California Department of Public Health Tuberculosis Branch

The majority of TB cases in California during 2010-2014 were foreign-born (78%). The most common birth country was Mexico, which accounted for 22% of all California TB cases. Border counties reported a higher percentage of Mexican-born cases than the state average: 59% of all Imperial County TB cases and 30% of all San Diego County TB cases were born in Mexico. However, Mexican-born cases are not confined to border regions. During this time period, Los Angeles County alone reported 32% of California's Mexican-born TB cases, the largest contribution by a local health jurisdiction.

Risk Factors

During 2010-2014, five percent of California TB cases were reported as being homeless. Approximately six percent of all TB cases in Imperial and seven percent in San Diego Counties were reported as homeless. Among Mexican-born TB cases, homelessness was less frequent (four percent) compared to non-Mexican born (ten percent) in Imperial County. Approximately seven percent were reported as homeless among both Mexican and non-Mexican born populations in San Diego County.

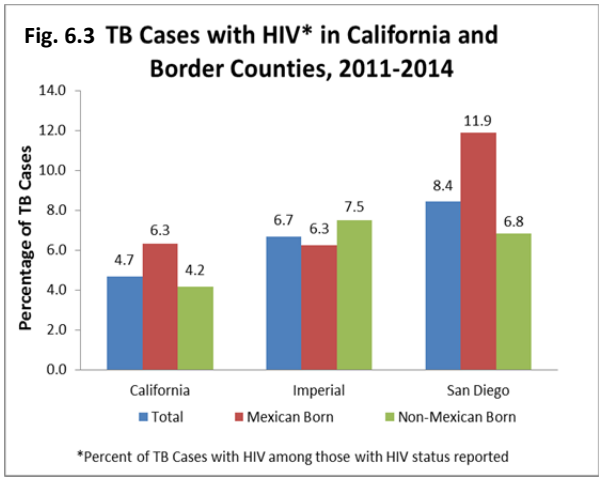
During the same time period, three percent of California TB cases were diagnosed in a correctional facility. These facilities include federal and state prisons, local jails, juvenile correctional facilities, and Immigration and Customs Enforcement (ICE) detention centers. In the border counties, a higher proportion of TB cases, and Mexican-born TB cases in particular, were diagnosed in a correctional facility. In Imperial County, 17% of TB cases and in San Diego County ten percent of TB cases were diagnosed in a correctional facility. Among Mexican-born cases, 17% in both Imperial County and San Diego County were diagnosed in a correctional facility.

During 2010-2014, TB cases in the border counties were more likely to have reported substance abuse (defined as one or more of the following: injecting or non-injecting drugs, excess alcohol use) compared to cases statewide. California reported 12% of TB cases as having a history of substance abuse, while 25% of TB cases in Imperial County and 19% in San Diego County had a history of substance abuse. Substance abuse was more common among Mexican-born TB cases in California (18%) compared to non-Mexican born cases (10%).

Co-morbidities: Diabetes and HIV/AIDS

Approximately 23% of all TB cases in California and in Imperial County and 21% in San Diego County reported also being diagnosed with diabetes during 2010-2014. In all three regions, Mexican-born TB cases were more likely than other TB cases to report diabetes co-morbidity (30% in California, 26% in Imperial, and 24% in San Diego). Identifying TB patients with diabetes is important because persons with both diseases may be at increased risk of death during TB treatment, or of relapse of TB following treatment.

As of 2011, California collects HIV status directly on the TB case report form. From 2011 to 2014, among cases with HIV status reported, nearly five percent of California cases were reported as HIV-infected. In Imperial County, about seven percent of TB cases were co-infected with TB and HIV, and in San Diego County about eight percent were co-infected. Mexican-born TB cases in California and in San Diego County were more likely to be co-infected when compared to non-Mexican-born TB cases, but the same was not true in Imperial County (Fig. 6.3). Knowledge of HIV status is important for appropriate diagnosis of TB and enables appropriate treatment of both TB and HIV. Treating HIV and TB improves outcomes of co-infected patients.



Source: California Department of Public Health Tuberculosis Branch

Drug Resistance

Drug resistance TB is a growing concern nationally and internationally. In California, the proportion of TB patients with drug resistance has changed little in the last decade. During 2010-2014, initial resistance to isoniazid (INH), a key first-line anti-TB drug, occurred in about eight percent of California and San Diego TB cases. Resistance to INH occurred in about three percent of Imperial TB cases.

Multidrug-resistant (MDR) TB is defined as resistance to two first line TB drugs: isoniazid and rifampin. MDR TB is more difficult to treat than drug-sensitive TB, often requiring 24 months of treatment with drugs that are costly and may cause serious complications for the patient. In California, 1.4% of TB cases were determined to be MDR TB from 2010-2014. San Diego had a slightly lower proportion of MDR TB cases (1.2%). Imperial County only reported one case of MDR TB during this time period

Outcomes

During 2010-2012 (2012 data is the most recent available), 86% of California TB cases that started on anti-TB therapy completed prescribed treatment for TB. Treatment completion for Mexican-born TB cases was similar. A slightly increased proportion of Mexican-born TB cases moved prior to completing treatment (about six percent compared to four percent of all California TB cases). San Diego County reported higher completion rates than the state with 88% of all TB cases completing treatment, while 84% of Mexican-born TB cases completed treatment. In Imperial County only 60% of all TB cases reported treatment completion. This was

due in part to a higher proportion of cases (21%) that moved or were lost to follow-up prior to treatment completion. Of the Mexican-born TB cases in Imperial County, 69% completed treatment. During 2010-2012, nine percent of California TB cases died due to TB. Of those, seven percent died while on TB treatment, while two percent died before being diagnosed or treated for TB. These findings were similar among California's Mexican-born TB cases.

CureTB

The San Diego County TB Control Branch operates CureTB, a binational referral system for patients with tuberculosis who cross the border during care. CureTB was developed in 1997 to improve the continuity of care for TB patients traveling between the United States (U.S.) and Mexico. In 2013, CureTB officially expanded their services to include referrals to Central America and other parts of Latin America. Referrals are accepted for suspect and verified active cases, contacts to infectious cases, and source case finding investigations. The CureTB staff is bilingual, bicultural, and familiar with the healthcare systems and TB standards of care of the countries with which they work. More information about the program and how to refer patients can be found at CureTB.org.

In 2013, CureTB received 276 requests for service from throughout the U.S., of which 65% were for suspect or verified active TB cases. The remaining requests included source case finding investigations, case notification requests and other TB control activities. Of the 79 verified active cases that departed from the US to Mexico in 2013 (excluding 7 who died), all of them have a final outcome to date; 78% completed treatment (62), 14% are currently lost (11) , 8% abandoned or initially refused treatment in Mexico (6), and none of them had treatment stopped by a Mexican provider. Referrals for persons from Immigration and Customs Enforcement (ICE) and other correctional facilities made up 35% of the 99 verified case referrals originating from the US to any other country, with the remaining 65% from local health departments. Of the 72 suspect cases originating from the US, 93% were referrals from Immigration and Customs Enforcement (ICE) and other correctional facilities with the remaining 7% from local health departments.

Do Not Board/Lookout List

The Centers for Disease Control and Prevention (CDC), in collaboration with the Department of Homeland Security, has implemented Federal travel restriction procedures to protect travelers and the public from communicable diseases that constitute a public health threat. At the request of CDC's Division of Global Migration and Quarantine, persons who have a communicable disease constituting a public health threat, in addition to meeting specified criteria may be placed on the Do Not Board list and issued a Border Lookout. Border lookouts are enforced by the Transportation Security Administration and Customs and Border Protection. In 2014, 9 non-adherent binational patients were placed on the border lookout list. Seven of these patients were from Mexico and 2 were from El Salvador. Three of these patients (33%) were located and successfully returned to care.

SEXUALLY TRANSMITTED INFECTIONS

Sexually Transmitted Infections (STIs) are a group of infections transmitted mainly or exclusively by sexual activity. There are more than two dozen of these infections caused by bacteria, viruses, and parasitic organisms, including HIV. (Guttmacher Institute, 2009).

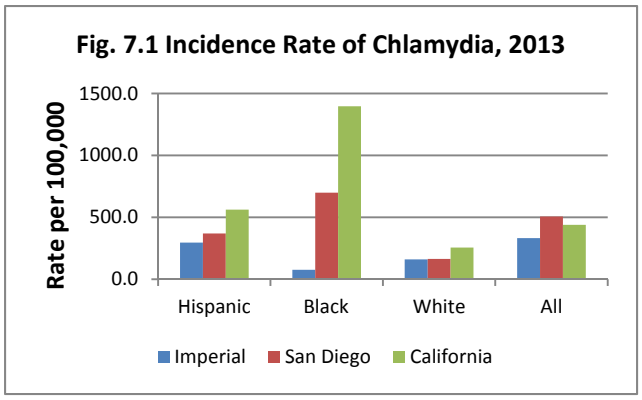
Large numbers of combined reported cases make STIs the most commonly reported communicable diseases in California. STIs can generally be treated and cured if diagnosed early. However, STIs oftentimes do not cause symptoms. Due to this, there is a high probability of individuals not seeking proper treatment, which can lead to serious health complications (Guttmacher Institute, 2009). Furthermore, because STIs are often asymptomatic, the true burden of disease is many times greater than the actual number of reported cases (CDPH, 2015b). This report will discuss three reportable bacterial sexually transmitted infections: chlamydia, gonorrhea, and syphilis (primary & secondary, and congenital), which are among the most commonly reportable STIs in the United States.

CHLAMYDIA BACKGROUND

Chlamydia infection is caused by the bacterium *Chlamydia trachomatis*. Approximately 30% of the cases can be asymptomatic but have the potential to cause several complications (Nelson, 2001). If left untreated, approximately 30% of women will develop pelvic inflammatory disease (PID) (Nelson, 2001), which is a major cause of infertility, ectopic pregnancy, and chronic pain as well as neonatal ophthalmia and pneumonia. As observed throughout United States and specifically in California, chlamydia is among the most prevalent of all STIs. In 2013, a total of 167,916 cases were reported, which represents a rate of 439.5 per 100,000 (CDPH, 2015b).

CHLAMYDIA IN THE CALIFORNIA BORDER REGION

In 2013, the most current data available, chlamydia rates were higher in San Diego (507.2 per 100,000) than in Imperial County (332.1 per 100,000). In the border region and California, Hispanics/Latinos and African-Americans/Blacks had higher rates when compared to Whites. In San Diego and throughout the state, African Americans/Blacks had the highest rates (699.5 and 921.4 per 100,000 respectively) but in Imperial County Hispanics/Latinos had the largest rate among all races (295.9 per 100,000) (Fig. 7.1). In 2013, San Diego ranked number eight[h] and Imperial County number 27th for the highest number of chlamydia cases compared to all other counties in California (CDPH, 2013). For the same year, San Diego County's African-American/Black females had the highest infection rate (863.2 per 100,000), which was more than four times higher than that of White females



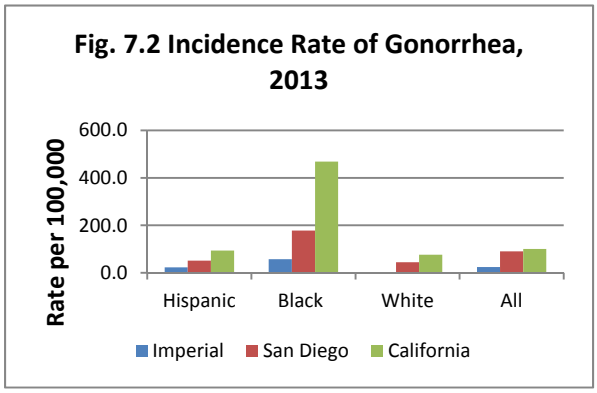
Source: California Department of Public Health Sexually Transmitted Diseases Control Branch

(202.3 per 100,000). Meanwhile, Hispanic/Latino females had a rate of 506.4 per 100,000 (CDPH, 2014).

GONORRHEA BACKGROUND

Gonorrhea is a sexually transmitted infection caused by the bacterium *Neisseria gonorrhoeae*. Transmission can occur via oral, vaginal, and rectal sex. It can also be transmitted from an untreated mother to her baby during childbirth (Nelson, 2001; CDC, 2015). Often gonorrhea is asymptomatic and detectable only through screening (CDC, 2015). Untreated gonococcal infection is associated with adverse reproductive health consequences in both females and males, such as pelvic inflammatory disease for females and urethritis for 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 be at higher risk of contracting HIV upon exposure (CDC, 2015). Gonorrhea infection can be treated and cured by the use of antibiotics, though the emergence of drug-resistant strains is affecting recommended treatment regimens in the US, including California (CDC, 2015).

GONORRHEA IN THE CALIFORNIA BORDER REGION



Source: California Department of Public Health Sexually Transmitted Diseases Control Branch

Gonorrhea is currently the second most common reportable communicable disease in California. Rates for gonorrhea declined between 2007 and 2009 in both California and the United States. However, beginning in 2010 in California, gonorrhea rates increased again. In 2013, California received a total of 38,365 reports of gonorrhea cases, which constitutes a rate of 100.4 cases per 100,000 (CDPH, 2014).

In 2013, the most current data available, Imperial County had a rate of 24.0 per 100,000, compared with California statewide which had a rate of 100.4 cases per 100,000. In San Diego County, the rate was 90.4 cases per 100,000. In 2013, throughout the State of California and in San Diego County, the African American/Black population had higher gonorrhea rates than their White and Hispanic/Latino counterparts (Fig. 7.2).

In Imperial County, African American/Black females had a rate of 19.0 per 100,000 and African American/Black males had a rate of 21.4 per 100,000. This was close to the 20.8 rate among the Hispanic/Latino males. In 2013, there were no reported gonorrhea cases among White females and males in Imperial County. The age groups most affected with gonorrhea in Imperial County for females were 15-19 and 20-24, and for males, 20-24 and 25-29 years of age.

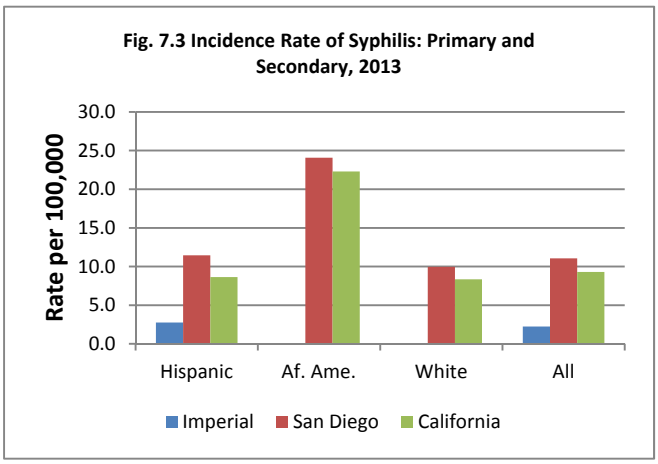
Similarly, in San Diego County, both African American/Black females and males had higher rates when compared with other racial/ethnic groups (130.1 and 229.1 per 100,000 respectively). Hispanic/Latino females had a rate of 29.5 compared to Hispanic/Latino males with 70.7 per 100,000. In San Diego County the age groups most affected for females were among 15-19 and 25-29 years old. Meanwhile, the highest gonorrhea rates among males were in the 15 and 44 years age group.

PRIMARY AND SECONDARY SYPHILIS BACKGROUND

Primary and Secondary Syphilis is a systemic sexually transmitted infection caused by the bacterium *Treponema pallidum*. Syphilis can be transmitted through direct contact with a syphilis sore (chancre). Sores 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. Pregnant women with the disease can pass it to the fetus (CDC, 2015). 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 when syphilis is present (CDC, 2015). Screening at-risk persons for syphilis is important given the availability of effective treatments and the duration of latent stages after symptom disappearance (CDPH, 2013b).

PRIMARY AND SECONDARY SYPHILIS IN THE CALIFORNIA BORDER REGION

In 2013, the most current data available, Imperial County had reported a rate of 2.2 per 100,000, for primary and secondary syphilis, which was lower than that of San Diego and California statewide. All the cases in Imperial County were in Latino/Hispanic males. San Diego's rate has increased since 2009. In 2013 the rate for San Diego County was 11.0 per 100,000, which was higher compared to the California statewide rate (9.3 per 100,000), which has increased as well. In San Diego, 97% of the cases are among males, and almost half of the cases are among African Americans/Black. The age groups with the highest rates among males are from 25 to 44 years-old (Fig. 7.3).



Source: California Department of Public Health Sexually Transmitted Diseases Control Branch

CONGENITAL SYPHILIS BACKGROUND

Congenital Syphilis is transmitted from the mother to her baby during pregnancy. All pregnant women should be tested for syphilis at the first prenatal visit, again in the third trimester (28 to 32 weeks gestation), and at delivery in women with high risk for syphilis (CDC, 2015). Syphilis infection during pregnancy increases the risk for stillbirth and giving birth to a baby who dies shortly after birth. After birth, if an infected baby is not treated immediately, he or she can develop seizures, deafness, developmental delay and death (CDC, 2015).

CONGENITAL SYPHILIS IN THE CALIFORNIA BORDER REGION

The rates for congenital syphilis in California decreased in 2011 and 2012 and then increased nearly twofold in 2013. Before 2011, the rates in San Diego and Imperial County were higher than statewide rates for California. In 2013, however, the statewide rate increased to almost double that of San Diego (11.1 and 4.6 per 100,000 respectively). Imperial County did not have any cases of congenital syphilis between 2011 and 2013.

Congenital Syphilis					
Population	2009	2010	2011	2012	2013
Imperial	63.6	32.6	-	-	-
San Diego	20	29.0	4.6	9.0	4.6
California	10.4	10.0	9.6	6.0	11.1

Incidence Rate of Congenital Syphilis per 100,000 live births by region, 2009-2011.
Source: California Department of Public Health Sexually Transmitted Diseases Control Branch

HIV/AIDS

BACKGROUND

Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) has been, and continues to be, the cause of many deaths worldwide, and one of the greatest public health challenges of the last decades.

In 2008, the case definitions for HIV infection and AIDS were revised into a single case definition that is based on three clinical categories (Stage I, II, and III) with Stage I as the asymptomatic acute or primary HIV infection stage (CD4 count >499 cells/μL), Stage II as a symptomatic HIV infection stage (CD4 count from 200 to 499 cells/μL), and Stage III as AIDS (CD4 count <200 cells/μL) (Schneider, 2008). AIDS is considered a syndrome that is not characterized by a specific set of symptoms but rather a variety of clinical manifestations caused by opportunistic infections due to lack of immune support. Among the most common are tuberculosis, *Pneumocystis carinii* pneumonia, cryptococcal meningitis, oropharyngeal and esophageal candidiasis, herpes, Kaposi's sarcoma, and other opportunistic infections. Once a person has been classified as having Stage III HIV disease (AIDS) for surveillance purposes, they are always classified as Stage III (AIDS) even after their health improves due to antiretroviral therapy.

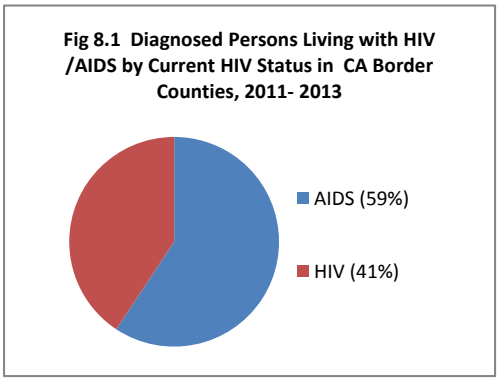
The routes of transmission for HIV include: sexual contact (heterosexual, homosexual, and bisexual), perinatal (during pregnancy, birth or breastfeeding), and parenteral (sharing paraphernalia for injecting drugs) (Stine, 2014). After initial HIV infection, about 50-70% of people develop flu-like symptoms while others have no symptoms at all. Unless tested early for HIV, HIV positive individuals run the risk of unknowingly transmitting HIV to another person and having worsening symptoms leading to stage III infection (AIDS).

The only way to confirm HIV status is by getting tested. People who are unknowingly infected with HIV can live long periods of time without ever showing symptoms or knowing they are infected. The CDC recommends that everyone between the ages of 13 and 64 get tested at least once. However, if a person is at increased risk they should be tested at least once a year (CDC, 2015d).

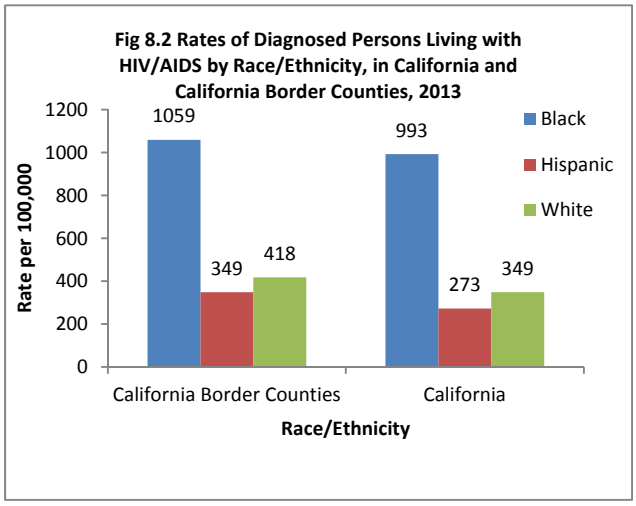
The HIV virus is a retrovirus that has a high replication rate. The use of antiretrovirals is designed to interfere with viral replication at different stages of the process. While there is treatment for HIV that can reduce viral load to undetectable levels, there currently is not a cure for AIDS (CDC, 2015b).The life expectancy of people infected with HIV has increased substantially, to near normal, since the widespread adoption of the use of antiretrovirals. Given the effectiveness of treatment, early testing and treatment has become a priority in improving the health conditions of individuals infected with HIV and preventing further transmission of HIV.

HIV/AIDS STATUS IN THE BORDER REGION

In 2013, the total number of people who had been diagnosed and were living with HIV infection in California was 121,371. Among those living with HIV infection, 60% were classified as AIDS (Stage III) cases and 40% were HIV (non-AIDS, Stage I or II) cases. For the same year, California border counties (Imperial and San Diego) had 12,718 individuals diagnosed and living with HIV infection; of these, 59% were classified as AIDS and 41% as HIV (non-AIDS) cases (Fig. 8.1). In the California border counties during 2013, 499 persons were newly diagnosed with HIV.



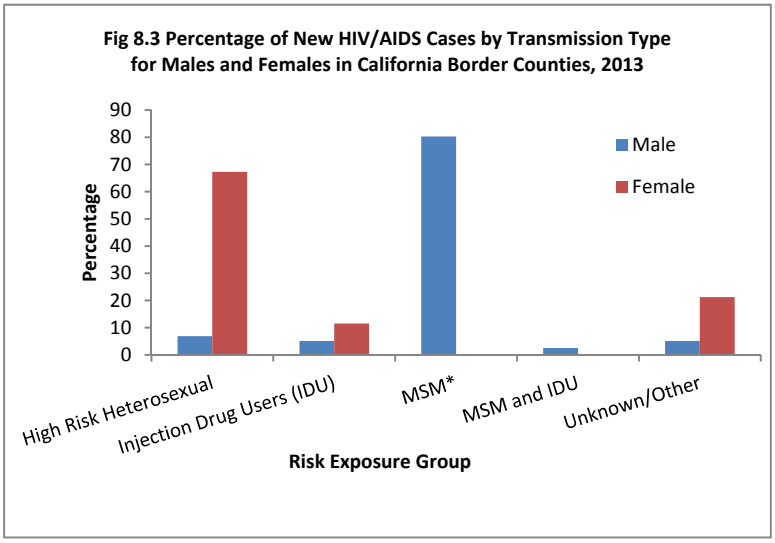
Source: California Department of Public Health, Office of AIDS, 2015



Source: California Department of Public Health, Office of AIDS, 2015

In California and California border counties during 2013, the African-American/Black population represented the most affected race/ethnicity with the highest rate of persons living with HIV/AIDS (993 and 1059 per 100,000 respectively) when compared to the Hispanic/Latino and White populations (Figure 8.2). The rate of HIV for Hispanics/Latinos living in border counties was 349 per 100,000 (n=4,197), while for Whites it was 418 per 100,000 (n= 6,327). Similarly, from 2011 to 2013, African-American/Blacks had the highest rates of new HIV/AIDS diagnoses in California border counties each year compared to Hispanics/Latinos and Whites. At the end of 2013, the majority (89%, n=11,340) of people living with HIV/AIDS in California border counties were male, whereas females represented 10% (n=1,259) of living cases and transgender persons represented 1% (n=119) of living cases. California and California border counties have similar percentages of persons living with HIV when compared across gender groups. For new cases of HIV/AIDS in the border counties in 2013, the gender distribution is very similar to that for living cases, with males representing 90% and women representing 10% of new cases.

In Imperial and San Diego Counties, 63% of new HIV/AIDS diagnoses in 2013 were among people between the ages of 20 and 39 years, and 82% were between the ages of 20 and 49 years. Among new male cases diagnosed in Imperial and San Diego counties in 2013, 83% total were among men who have sex with men (MSM), including 3% who were also injection drug users (MSM/IDU). Among females diagnosed in these counties during 2013, the predominant risk exposure was high-risk heterosexual contact, which accounted for 7% of all new cases and 67% of new diagnoses among females (Fig. 8.3; CDPH-OOA, 2013).



Source: California Department of Public Health, Office of AIDS, 2015
*MSM=Men who have sex with men

IMMUNIZATION AND VACCINE PREVENTABLE DISEASES

BACKGROUND

Immunizations are one of the best ways to prevent dangerous or even potentially lethal infectious diseases. Thanks to vaccines, millions of deaths have been avoided worldwide. In the United States the rate of vaccination is consistently high, which provides better control of communicable diseases.

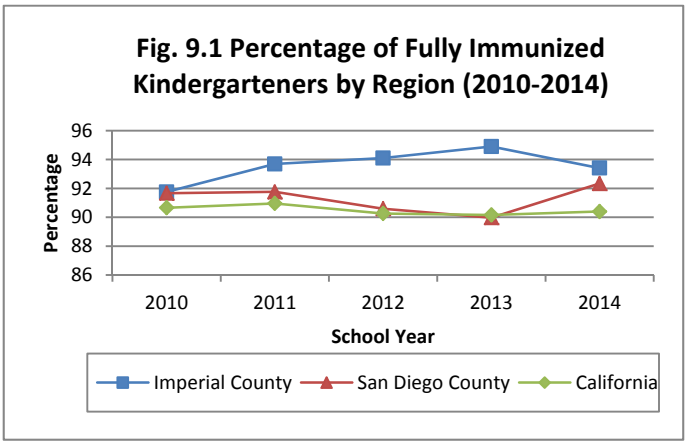
Vaccines work to increase immunity by creating antibodies against specific diseases. They also function by creating group immunity, known as herd immunity, and for this to occur the number of persons vaccinated within a population must be high enough (Nelson, 2001). This type of immunity is particularly important to protect small children that cannot yet be vaccinated, the elderly population, and immune-compromised individuals.

In the United States, childhood immunizations include protection against: Hib (hemophilus influenza type B), PCV (pneumococcal disease), RV (rotavirus), DTaP (diphtheria, tetanus, and pertussis), polio, MMR (measles, mumps, and rubella), hepatitis B, hepatitis A, poliomyelitis, seasonal influenza and varicella. In California, it is required for all children entering kindergarten and elementary school to provide vaccination proof for the following diseases: diphtheria, hepatitis B, measles, mumps, rubella, pertussis, poliomyelitis, tetanus, and varicella. (CDPH, 2014).

Vaccines are one of the greatest public health achievements. As a result of immunizations, several dangerous and potentially lethal diseases are continuously averted. Immunizations also protect from severe forms of disabilities and save the public health sector from high expenses derived from these diseases.

IMMUNIZATION IN THE BORDER REGION

Over a ten-year period (2004-2014), the proportion of vaccination coverage with all required immunizations among children four to six years of age in California and its border counties have remained close to or above 90%. In 2014, California reported that 90.4% of all school-age children entering kindergarten had all required immunizations, compared to Imperial County (93.4%) and San Diego County (92.3%) (Fig. 9.1). Healthy People's 2020 target for required immunizations for children entering kindergarten is 95% per vaccine. For the same period of time, in Imperial County and San Diego County, 95% and 94% of the children received four or more doses of DTaP respectively; 97% in Imperial County and 94% in San Diego County received three or more doses of polio. Ninety-five percent of children in Imperial County and 94% in San Diego received a second dose of MMR; 98% in Imperial



Source: California Department of Public Health Immunization Branch

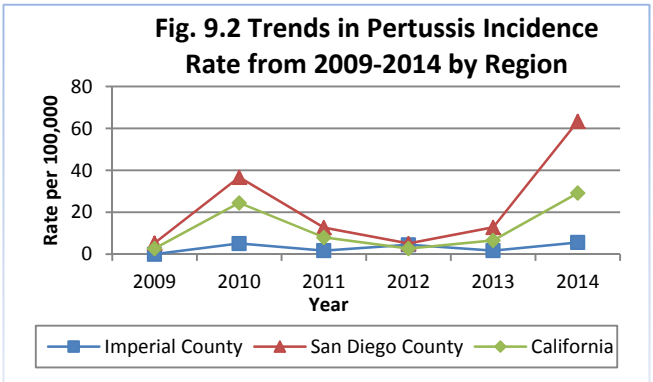
County and 95% in San Diego County received three or more doses of hepatitis B, and 98% received one or more doses of varicella in Imperial County, compared to 96% in San Diego County.

VACCINE PREVENTABLE DISEASES IN THE CALIFORNIA BORDER REGION

In 2013, according to the most recent data available, the CDPH-Immunization Branch reported for Imperial County no cases for hepatitis A, three cases of pertussis (1.63 per 100,000), and no varicella deaths or hospitalizations. For San Diego County, 40 cases for hepatitis A were reported (1.26 per 100,000), nine cases of acute hepatitis B (0.28 per 100,000), 15 cases of meningococcal disease (0.47 per 100,000), 408 pertussis cases (12.82 per 100,000), and two varicella hospitalizations. There were no measles cases reported for Imperial County in 2013, and only two cases were reported for San Diego County.

Pertussis Outbreak in the California Border Region

In 2010, California experienced its worst outbreak of pertussis in more than 50 years, with more than 9,100 confirmed cases (rate of 24.6 per 100,000) and 10 infant deaths (CDPH, 2010). In 2014, there were 29.2 cases of pertussis per 100,000 in California, which represents an increased rate since the 2010 outbreak. In 2014, there were 63.4 cases of pertussis per 100,000 in San Diego County, which is higher than the California statewide rate. In comparison, in 2014 Imperial County had a rate of 5.6 cases per 100,000 (Fig. 9.2).



Source: California Department of Public Health Immunization Branch

Tdap Immunization on Students entering 7th grade in the California Border Region

To protect California's youth, new legislation was passed in 2010 requiring Tdap vaccination for all California students. Under the new law, all 7-12 grade students were required to provide documentation of receiving the Tdap vaccine prior to the beginning of the school year (CDPH, 2010). In 2014, California had 97.8% of students with Tdap vaccination upon entry to seventh grade. Similarly, San Diego had 97.3% students with Tdap vaccination and Imperial County had 99.4%.

Measles Outbreak in the California Border Region

In 2014, there were a total of 75 measles cases with onset in the State of California. Of the 75 cases, six measles cases were reported in San Diego County. In December 2014, a large measles outbreak started in California among people who visited or worked at Disneyland, spreading throughout California and to at least half a dozen other states. Fourteen patients with disease onset in December 2014 are presumed to be associated with the Disneyland outbreak.

Of the total 14 confirmed cases, two were from San Diego County. The outbreak was declared over as of April 17, 2015 (CDPH, 2015). Imperial County did not report any cases for the same period of time (CDPH, Immunization Branch, 2014). For measles prevention, children receive at least two doses of MMR (Measles, Mumps and Rubella) vaccine; the first dose at 12 months and the second one is given before the children begin kindergarten (CDPH, 2015). Two doses of measles vaccine are more than 97% effective in preventing the disease.

CONCLUSION

This report covered selected topics of border health such as, demographics, access to healthcare, obesity, diabetes, mental health, tuberculosis, STIs, HIV/AIDS, immunizations, and vaccine preventable diseases. The proximity between California and Baja California creates a complex and dynamic space where infectious diseases can easily cross borders. Furthermore, cultural characteristics, attitudes, and beliefs also impact the health of the population, particularly among Hispanics/Latinos living in the California border region.

The size of the population of the California border region continues to experience growth. In Imperial County, Hispanics/Latinos make up the majority of the population, while in San Diego they are the largest minority. The Hispanic/Latino population in the California border region is less likely to "speak English well", graduate from college, and more likely to live at or below 200% of the FPL. In addition, Hispanics/Latinos in the border region and in the State of California as a whole have the lowest rates of health insurance coverage compared to Whites and all ethnicities combined; 90.2% and 95.6% of Whites in San Diego County and Imperial County respectively had health insurance in 2012, compared to just 73.8% of Hispanics/Latinos in San Diego County and 79.4% in Imperial County.

Important indicators that help assess the health of the community are chronic diseases, which include obesity and diabetes. As of 2013, 23.7% of adults in San Diego County and 45.1% of adults in Imperial County were obese; while both San Diego County and the State of California as a whole met the HP2020 target for obesity, Imperial County did not and has the highest rates of obesity in the entire state. This highlights the importance of health promotion programs and the creation of policies and laws that modify the environment for promoting better health behaviors. Similarly, diabetes is a significant and growing problem in the region, where 8.5% of adults in San Diego County and 20.6% of adults in Imperial County reported having been diagnosed with diabetes. In terms of mental health, data from the border region shows that Hispanics/Latinos report more family and social life impairment due to emotional stress than their White counterparts; 7.3% of Hispanics/Latinos in San Diego County reported "severe" social life impairment in the past year compared to 5.8% of Whites. In Imperial County, 92.9% of White respondents reported no family life impairment (though this data was statistically unstable), compared to 87.7% of Hispanic/Latinos. In San Diego County, 6.2% of Hispanic/Latinos reported "severe" family life impairment, compared to 4.9% of Whites. Despite this, in the border region and the State of California overall, Hispanic/Latinos have had significantly lower rates of suicide than their White counterparts and all ethnicities combined.

Infectious diseases, like tuberculosis, STIs, HIV/AIDS, and vaccine-preventable-diseases continue to be a significant challenge in the California border region. In 2014, Imperial County saw a decrease in TB case rates while San Diego experienced a slight increase compared to 2013 rates. In California and the border counties, the rate of TB was higher among Hispanics/Latinos than Whites. A large proportion of TB cases in California and the border counties were among people of Mexican origin. TB cases in the border counties had higher frequency of characteristics such as homelessness, diagnosed in a correctional facility, substance abuse and medical co-morbidities such as HIV/AIDS compared to the state. Continued collaboration with health partners in Mexico and public health interventions aimed at reducing TB among the Mexican-born are needed in order to effectively control TB and other infectious diseases in California. According to the CDPH Office of AIDS, in 2013, California border counties had 12,718 total persons living with HIV infection (59% classified as AIDS and 41% as HIV cases). The vast majority of the population living with HIV/AIDS in the border region

is male, and sexual contact continues to be the main mode of transmission (MSM and heterosexual).

The OBBH mission is to increase the communication and collaboration on the California Border region with the focus of improving health in the region. During the past years OBBH has collaborated with partners to address priority issues mentioned in this report. Some examples of collaborative projects include: Binational symposiums on childhood obesity and HIV/AIDS, binational health summit to form workgroups to address HIV/AIDS, mental health, obesity, and TB; binational epidemiology meetings on monitoring, notification, surveillance and reporting of infectious diseases. Finally, OBBH is the co-lead for the Binational Consortium of the Californias, a mechanism developed for public, private, and academic entities that work on border health issues, to work together to optimize the health in the border region.

Differences in health outcomes have highlighted key health needs of the region and have helped to identify resources and services for California residents. The California Department of Public Health, Office of Binational Border Health (OBBH) develops this report to inform the legislature on the health needs of the California border region and to assist in the education of public health professionals. This information is important to enable a more focused approach to address the needs of the region. For more information about health issues that affect California's border region, visit the Office of Binational Border Health's website at www.cdph.ca.gov/programs/cobbh.

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Table 1.1 Percent Change in California and Border Counties by Race/Ethnicity (2004-2014)			
Population	**2004**	**2014**	**% Change**
Imperial			
Asian/Pacific Islander	3,526	1,547	-56.1
Black	5,570	5,956	6.9
Hispanic	119,888	150,773	25.8
Multi	895	1,086	21.3
Native Amer/Alaskan	2,018	1,798	-10.9
White	27,947	25,584	-8.5
All	159,844	186,744	16.8
San Diego			
Asian/Pacific Islander	292,792	350,016	19.5
Black	152,515	149,663	-1.9
Hispanic	834,197	1,075,218	28.9
Multi	69,270	102,508	48.0
Native Amer/Alaskan	23,372	28,825	23.3
White	1,658,909	1,491,935	-10.1
All	3,031,055	3,198,165	5.5
California			
Asian/Pacific Islander	4,335,235	5,014,573	15.7
Black	2,260,877	2,216,250	-2.0
Hispanic	12,565,010	14,996,759	19.4
Multi	752,782	1,017,655	35.2
Native Amer/Alaskan	211,919	305,404	44.1
White	16,400,124	14,900,962	-9.1
All	36,454,471	38,451,604	5.5

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

[a] *Population total in July*

[b] *Pacific Islander*

[c] *Native American/Alaskan Native*

Table 1.2 Education Level Completed by Ethnicity and Region (2011-2012)

Population	Less than High School		Graduated High School		Some College, Vocational School, or AA/AS Degree		BA/BS, MA/MS or PhD degree, or some graduate school		No formal education	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial										
Hispanic	42.6	(31.5, 53.6)	15.8	(10.7, 20.9)	25.5	(16.4, 34.7)	14.9	(7.8, 22.1)	1.2*	(0.3, 2.0)
White	15.5*	(0.0, 33.2)	35.0	(18.1, 51.8)	12.8*	(4.6, 21.1)	36.7	(21.2, 52.2)	0.0	-
All	36.8	(26.9, 46.3)	18.6	(13.3, 23.9)	25.7	(17.4, 34.0)	18.3	(11.9, 24.6)	0.9*	(0.3, 1.6)
San Diego										
Hispanic	28.1	(23.9, 32.3)	25.6	(21.8, 29.4)	27.1	(22.6, 31.5)	17.5	(14.1, 21.0)	1.7	(1.0, 2.4)
White	3.2	(2.1, 4.2)	20.5	(18.1, 22.9)	27.5	(25.3, 29.8)	38.8	(36.4, 41.2)	0.5	(0.3, 0.7)
All	11.1	(9.5, 12.7)	22.1	(20.1, 24.1)	27.5	(25.3, 29.8)	38.8	(36.4, 41.2)	0.5	(0.3, 0.7)
California										
Hispanic	32.0	(30.5, 33.6)	28.7	(27.3, 31.3)	22.1	(20.8, 23.4)	14.2	(13.2, 15.2)	3.0	(2.3, 3.6)
White	4.8	(4.3, 5.3)	22.5	(21.6, 23.3)	27.2	(26.3, 28.1)	45.5	(44.5, 46.5)	0*	-
All	14.9	(14.3, 15.6)	24.3	(23.6, 25.0)	24.9	(24.2, 25.6)	34.8	(34.1, 35.5)	1.1	(0.9, 1.3)

Data: 2011-2012 California Health Interview Survey
[a] Percentage: of those belonging to a certain racial/ethnic group, what percent are educated by educational attainment
[b] 95% Confidence Interval
**Statistically unstable*
(-)Data Unavailable

Table 2.1 Health Insurance Coverage for All Ages by Ethnicity and Region (2001-2012)

Population	2001		2003		2005		2007		2009		2011-2012	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial												
Hispanic	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)	79.4	(73.2, 85.6)
White	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)	95.6 *	(90.7, 100.0)
All	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)	82.5	(77.2 - 87.7)
San Diego												
Hispanic	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)	73.8	(70.3, 77.3)
White	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)	90.2	(88.1, 92.3)
All	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)	84.2	(84.2, 86.0)
California												
Hispanic	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)	78.2	(77.1, 79.3)
White	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)	90.6	(90.0, 91.3)
All	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)	85.3	(84.7, 85.8)

Data: 2001-2012 California Health Interview Survey

[a] *Percentage: of those belonging to a certain racial/ethnic group, what percent are insured*

[b] 95% Confidence Interval

*Statistically Unstable

Table 2.2 Percent of the Populations with Employer Health Benefits by Ethnicity and Region (2011-2012)

Population	Accepted Health Benefits		Employer didn't offer health benefits	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial				
Hispanic	51.2	(35.3, 67.0)	35.8	(20.5, 51.0)
White	82.4*	(60.6, 100.0)	12.5*	(0.0, 34.5)
All	54.7	(41.1, 68.4)	34.2	(20.7, 47.6)
San Diego				
Hispanic	47.1	(41.1, 53.1)	26.7	(21.2, 32.3)
White	66.7	(62.4, 70.9)	11.6	(8.4, 14.9)
All	60.8	(57.5, 64.1)	16.7	(14.1, 19.4)
California				
Hispanic	47.5	(45.5, 49.6)	29.2	(27.2, 31.1)
White	67.1	(65.7, 68.5)	13.3	(12.3, 14.3)
All	59.9	(58.8, 61.0)	19.3	(18.4, 20.3)

Data: 2011-2012 California Health Interview Survey
[a] Percentage: of those belonging to a certain racial/ethnic group, what percent accepted employer's insurance
[b] 95 % Confidence Interval
**Statistically Unstable*

Table 2.3 Percent of the Populations Who Are Insured by Ethnicity and Region (2011-2012)

Population	Medicare&Medicaid		Medicare Only		MediCal Only		Health Families/CHID		Employment, Based		Private	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial												
Hispanic	5.4	(3.1, 7.8)	0.6*	(0.1, 1.0)	31.9	(23.7, 40.0)	3.4*	(1.3, 5.4)	33.7	(25.7, 41.7)	1.1*	(0.0, 2.5)
White	2.3*	(0.6, 4.1)	6.6*	(0.0, 17.4)	13.3*	(0.0, 27.6)	-	-	53.2	(35.9, 70.4)	-	-
All	4.8	(2.9, 6.8)	1.4*	(0.0, 3.1)	30.3	(22.9, 37.7)	2.7*	(1.0, 4.4)	36.4	(29.3, 43.5)	1.3*	(0.1, 2.6)
San Diego												
Hispanic	2.3	(1.5, 3.0)	0.7*	(0.1, 1.4)	22.5	(19.0, 26.1)	3.6	(2.4, 4.8)	36.8	(33.1, 40.6)	3.5	(1.8, 5.2)
White	1.8	(1.3, 2.4)	2.6	(1.8, 3.4)	4	(2.8, 5.2)	0.6*	(0.2, 1.0)	57.7	(55.0, 60.5)	6.3	(5.0, 7.6)
All	2	(1.6, 2.4)	1.7	(1.2, 2.1)	11.8	(10.2, 13.4)	1.6	(1.1, 2.0)	51	(48.8, 53.2)	5.1	(4.1, 6.1)
California												
Hispanic	2.7	(2.3, 3.0)	0.7	(0.6, 0.9)	28.2	(26.9, 29.5)	3.9	(3.3, 4.4)	34.7	(33.5, 36.0)	2.9	(2.5, 3.4)
White	2.3	(2.1, 2.5)	2.2	(2.0, 2.5)	6	(5.5, 6.6)	0.7	(0.5, 0.8)	54.3	(53.3, 55.2)	7.2	(6.7, 7.7)
All	2.9	(2.7, 3.1)	1.4	(1.3, 1.6)	16.7	(16.0, 17.3)	2.0	(1.8, 2.2)	46.2	(45.5, 47.0)	5.3	(5.0, 5.7)

Data: 2011-2012 California Health Interview Survey
[a] Percentage: of those belonging to a certain racial/ethnic group, what percent are insured by type
[b] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 2.4 Percent of the Populations Who Are Insured with HMO[a] by Ethnicity and Region (2009-2012)				
Population	**2009**		**2011-2012**	
	%[b]	**95% C.I.[c]**	**%[b]**	**95% C.I.[c]**
Imperial				
Hispanic	35	(28.6, 41.4)	34.3	(26.8, 41.7)
White	36.9	(25.5, 48.2)	24.6	(10.5, 38.7)
All	34.2	(28.8, 39.6)	34.6	(27.7, 41.4)
San Diego				
Hispanic	50.1	(45.7, 54.5)	47.1	(43.2, 51.0)
White	53.4	(50.2, 56.5)	50.7	(47.9, 53.6)
All	52.5	(50.0, 54.9)	50.3	(48.1, 52.5)
California				
Hispanic	49.8	(48.0, 51.6)	46.6	(45.3, 48.0)
White	45.7	(44.6, 46.9)	46.4	(45.4, 47.3)
All	49.1	(18.2, 50.1)	48.2	(47.4, 48.9)

Data: 2009-2012 California Health Interview Survey
[a] *Health Maintenance Organization*
[b] *Percentage: of those belonging to a certain racial/ethnic group, what percent have an HMO plan*
[c] *95 % Confidence Interval*
**Statistically Unstable*

Table 2.5 Percent of the Population's Insurance Status for the Past Year by Ethnicity and Region (2011-2012)

Population	Had no insurance the entire past year		Had insurance only part of the past year	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial				
Hispanic	17.3	(11.1, 23.5)	10.7	(6.0, 15.5)
White	3.5*	(0.0, 9.2)	-	-
All	15.1	(9.8, 20.4)	11.3	(6.1, 16.4)
San Diego				
Hispanic	21.7	(18.3, 25.1)	11.8	(9.3, 14.4)
White	8.9	(6.6, 11.2)	6.6	(4.8, 8.4)
All	13.8	(12.0, 15.6)	8.5	(7.1, 9.9)
California				
Hispanic	18.5	(17.4, 19.5)	10	(9.1, 10.8)
White	8.5	(7.8, 9.1)	7	(6.3, 7.6)
All	13.1	(12.5, 13.7)	8.2	(7.7, 8.6)

Data: 2011-2012 California Health Interview Survey
[a] Percentage: of those belonging to a certain racial/ethnic group, what percent were insured the past year
[b] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 3.1. Percent of Adults (Age 18+) Who Are Obese (BMI[a] ≥30) by Race/Ethnicity and Region (2005-2013)

Population	2005		2007		2009		2012		2013	
	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]
Imperial										
Hispanic	27.9	(21.5, 34.2)	41.2	(30.3, 52.1)	32.2	(23.6,40.8)	42.9	(32.1, 53.7)	48.1	(34.4, 61.8)
White	35.0	(24.6, 45.4)	33.0	(23.7, 42.2)	30.3	(18.7, 41.8)	29.2	(11.7, 46.7)	32.8*	(2.7, 62.9)
All	30.1	(24.7, 35.4)	39.5	(30.8, 48.2)	31.4	(24.3, 38.4)	41.7	(32.2, 51.2)	45.1	(32.9, 57.2)
San Diego										
Hispanic	26.6	(22.1, 31.0)	30.3	(24.8, 35.9)	28.2	(23.4, 32.9)	28.4	(24.4, 32.3)	27.9	(20.8, 34.9)
White	16.3	(14.5, 18.1)	19.2	(16.8, 21.7)	20	(17.1, 22.9)	20.1	(17.7, 22.5)	19.9	(16.1, 23.6)
All	18.4	(16.7, 20.1)	21.7	(19.5, 23.9)	21.9	(19.5, 24.3)	22.1	(20.1, 24.0)	23.7	(20.4, 27.0)
California										
Hispanic	27.3	(26.0, 28.7)	29.9	(28.3, 31.5)	29.9	(27.7, 32.0)	32.6	(31.1, 34.0)	32.6	(30.0, 35.2)
White	19.2	(18.6, 19.9)	20.4	(19.7, 21.2)_	21.1	(20.0, 22.1)	21.9	(21.1, 22.7)	21.6	(20.0, 23.1)
All	21.2	(20.6, 21.8)	22.6	(21.9, 23.3)	22.7	(21.8, 23.6)	24.8	(24.1, 25.5)	24.7	(23.4, 26.0)

Data: 2005-2013 California Health Interview Survey
[a] *Body Mass Index*
[b] *Percentage: of those belonging to a certain racial/ethnic group, what percent are obese*
[c] *95 % Confidence Interval*
**Statistically Unstable*

Table 3.2. Percent of Adults (Age 18+) Who Are Overweight (BMI[a] 25.0-29.99) by Race/Ethnicity and Region (2005-2013)

Population	2005		2007		2009		2012		2013	
	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]
Imperial										
Hispanic	37.6	(30.5, 44.7)	33.0	(34.1, 41.8)	37.7	(28.8, 46.6)	35.5	(25.9, 45.0)	37.7	(24.4, 50.9)
White	33.7	(23.9, 43.4)	35.9	(26.8, 44.9)	32.3	(21.3, 43.2)	46.2	(28.8, 63.5)	18.0*	(3.1, 32.9)
All	35.8	(30.0, 41.6)	34.2	(27.1, 41.3)	36.7	(29.4, 44.0)	36.0	(27.6, 44.3)	22.6	(22.6, 44.5)
San Diego										
Hispanic	35.9	(31.2, 40.6)	34.3	(28.9, 39.6)	37.9	(31.9, 44.0)	40.7	(36.0, 45.4)	31.2	(24.1, 38.3)
White	36.7	(34.1, 39.3)	32.1	(29.5, 34.7)	32.0	(28.8, 35.1)	36.7	(33.7, 39.7)	38.1	(33.2, 43.0)
All	35.8	(33.6, 37.9)	32.4	(30.2, 34.7)	33.4	(30.7, 36.2)	36.4	(34.0, 38.9)	33.7	(30.1, 37.3)
California										
Hispanic	38.1	(36.7, 39.6)	37.1	(35.4, 38.7)	36.4	(34.1, 38.7)	38.1	(36.6, 39.7)	39.2	(36.5, 42.0)
White	34.4	(33.6, 35.2)	34.3	(33.4, 35.2)	33.9	(32.6, 35.2)	35.3	(34.4, 36.3)	34.5	(32.8, 36.3)
All	34.3	(33.6, 34.9)	33.9	(33.1, 34.6)	33.6	(32.5, 34.7)	35.0	(34.3, 35.8)	36.0	(34.6, 37.4)

Data: 2005-2013 California Health Interview Survey
[a] *Body Mass Index*
[b] *Percentage: of those belonging to a certain racial/ethnic group, what percent are overweight*
[c] *95 % Confidence Interval*
**Statistically Unstable*

Table 3.3 Age Distribution of Obese (BMI[a] ≥30) Adults (Age 18+) by Region (2005-2012)								
Population	**2005**		**2007**		**2009**		**2012**	
	%[b]	**95% C.I.[c]**	**%[a]**	**95% C.I.[c]**	**%[a]**	**95% C.I.[c]**	**%[a]**	**95% C.I.[c]**
Imperial								
18-24	6.9*	(1.6, 12.2)	4.9*	(0.1, 9.7)	5.1*	(0.2, 9.9)	14.2*	(2.1, 26.4)
25-39	31.2	(21.1, 41.4)	40.5	(21.9, 59.2)	36.9	(20.9, 52.9)	15.3	(6.7, 23.9)
40-64	50.3	(39.8, 60.8)	40.4	(26.3, 54.5)	46.0	(32.8, 59.3)	57.1	(41.6, 72.6)
65-79	9.0	(5.0, 13.1)	11.3	(5.9, 16.8)	11.4	(6.3, 16.5)	12.4*	(3.5, 21.3)
80+	2.6*	(0.2, 4.9)	2.8*	(0.1, 5.5)	-	-	-	-
San Diego								
18-24	9.6	(6.0, 13.2)	7.6	(4.8, 10.3)	8.1	(3.6, 12.7)	9.6	(5.9, 13.3)
25-39	30.9	(26.2, 35.5)	30.3	(23.9, 36.7)	22.1	(16.7, 27.6)	28.3	(23.5, 33.1)
40-64	45.6	(40.7, 50.5)	50.1	(44.3, 56.0)	55.2	(49.1, 61.4)	48.7	(43.7, 53.6)
65-79	12.0	(8.6, 15.5)	10.0	(8.0, 12.0)	12.2	(9.2, 15.1)	11.1	(8.7, 13.5)
80+	1.8*	(0.7, 2.9)	2.0	(1.3, 2.7)	2.3	(1.6, 3.1)	2.4	(1.6, 3.2)
California								
18-24	9.4	(8.2, 10.6)	7.7	(6.6, 8.8)	10.0	(8.2, 11.8)	7.8	(6.9, 8.8)
25-39	29.5	(28.0, 31.0)	29.4	(27.7, 31.2)	25.5	(23.2, 27.7)	26.7	(25.0, 28.3)
40-64	48.7	(47.2, 50.3)	50.4	(48.7, 52.1)	49.9	(47.6, 52.1)	50.8	(49.1, 52.4)
65-79	10.2	(9.4, 11.0)	10.5	(9.8, 11.2)	12.5	(11.5, 13.4)	12.5	(11.7, 13.3)
80+	2.1	(1.8, 2.5)	2.0	(1.8, 2.3)	2.2	(1.8, 2.6)	2.3	(2.0, 2.6)

Data: 2005-2012 California Health Interview Survey
[a] Body Mass Index
[b] Percentage: of those who are obese, what percent belong to a certain age group
[c] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 3.4 Age Distribution of Overweight (BMI[a] 25.0-29.99) Adults (Age 18+) by Region (2005-2012)

Population	2005		2007		2009		2012	
	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]
Imperial								
18-24	9.3	(4.1, 14.5)	16.6	(7.9, 25.4)	12.8*	(0.0, 27.7)	9.1*	(3.5, 14.7)
25-39	24.5	(14.9, 34.1)	17.9	(10.9, 24.9)	27.0	(16.3, 37.7)	38.3	(24.0, 52.6)
40-64	47.1	(37.0, 57.2)	49.0	(37.4, 60.6)	43.6	(31.3, 56.0)	38.5	(26.8, 50.1)
65-79	14.7	(7.7, 21.6)	12.7	(7.6, 17.8)	12.2	(7.1, 17.4)	12.0*	(4.3, 19.7)
80+	5.5*	(0.4, 8.5)	3.7*	(1.2, 6.3)	4.3*	(1.7, 6.9)	2.1*	(0.8, 3.4)
San Diego								
18-24	9.5	(6.9, 12.1)	7.8	(4.9, 10.7)	10.8	(6.5, 15.1)	7.0	(4.8, 9.3)
25-39	29.8	(26.2, 33.4)	24.5	(20.7, 28.4)	23.2	(18.8, 27.5)	28.1	(23.8, 32.4)
40-64	45.0	(41.3, 48.7)	50.8	(46.7, 54.8)	50.1	45.1, 55.0)	49.5	(45.3, 53.7)
65-79	12.5	(10.1, 14.9)	12.0	(10.2 13.8)	11.7	(9.7, 13.7)	11.6	(9.9, 13.4)
80+	3.2	(2.2, 4.2)	4.9	(3.8, 6.1)	4.3	(3.3, 5.3)	3.8	(2.9, 4.6)
California								
18-24	9.6	(8.7, 10.5)	9.5	(8.5, 10.5)	9.1	(7.9, 10.3)	10.5	(9.5, 11.4)
25-39	30.1	(28.9, 31.4)	26.9	(25.5, 28.2)	25.5	(23.6, 27.4)	26.7	(25.3, 28.1)
40-64	44.3	(43.1, 45.5)	48.1	(46.8, 49.5)	49.5	(47.5, 51.5)	45.5	(44.1, 46.9)
65-79	12.3	(11.6, 13.0)	11.7	(11.1, 12.3)	12.1	(11.2, 12.9)	13.2	(12.5, 13.9)
80+	3.7	(3.3, 4.0)	3.8	(3.5, 4.2)	3.8	(3.5, 4.1)	4.2	(3.8, 4.5)

Data: 2005-2012 California Health Interview Survey
[a] Body Mass Index
[b] Percentage: of those who are overweight, what percent belong to a certain age group
[c] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 3.5. Risk Ratio for Age Group (BMI[a] ≥30) by Obesity (2012)	
Reference	**18-24**
Imperial County	
18-24	1.00*
25-39	1.08*
40-64	4.02*
65-79	0.87*
80+	-
San Diego County	
18-24	1.00
25-39	2.95
40-64	5.07
65-79	1.16
80+	0.25
California	
18-24	1.00
25-39	3.42
40-64	6.51
65-79	1.60
80+	0.29

Data: 2011-2012 California Health Interview Survey
[a] Body Mass Index
**Statistically Unstable*
(-) Data Unavailable

Table 3.6 Distribution of Overweight (BMI[a] 25.0, 29.99) or Obese (BMI[a] ≥30) Adolescents by Number of Fruits or Vegetables Eaten Daily (2005-2012)

Population	2005		2007		2009		2011, 2012	
	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]
Imperial								
Eat 5+ Fruits/Vegetables	53.7*	(20.0, 87.4)	-	-	-	-	12.3*	(0.4, 24.3)
Eat <5 Fruits/Vegetables	46.3*	(12.6, 80.0)	100.0*	(100.0, 100.0)	96.5*	(89.5, 100.0)	87.7*	(75.7, 99.6)
San Diego								
Eat 5+ Fruits/Vegetables	33.7*	(13.7, 53.7)	17.4*	(2.1, 32.6)	3.5*	(0.0, 8.1)	29.6	(14.7, 44.4)
Eat <5 Fruits/Vegetables	66.3*	(46.3, 86.3)	82.6	(67.4, 97.9)	96.5*	(91.9, 100.0)	70.4	(55.6, 85.3)
California								
Eat 5+ Fruits/Vegetables	29.3	(23.1, 35.4)	19.4	(14.1, 24.6)	17.3	(11.4, 23.2)	21.8	(16.7, 27.0)
Eat <5 Fruits/Vegetables	70.7	(64.6, 76.9)	80.6	(75.4, 85.9)	82.7	(76.8, 88.6)	78.2	(73.0, 83.3)

Data: 2005-2012 California Health Interview Survey
[a] Body Mass Index
[b] Percentage: of those who are overweight or obese, what percent belong to a certain food group?
[c] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 3.7 Distribution of Overweight (BMI[a] 25.0, 29.99) or Obese (BMI[a] ≥30) Adolescents by Number of Days a Week They Were Physically Active for an Hour (2005-2012)

Population	2007		2009		2012	
	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]	%[b]	95% C.I.[c]
Imperial						
0	30.0*	(0.0, 62.8)	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	25.1*	(0.0 , 51.7)
3	-	-	41.2*	(0.0, 83.2)	-	-
4	-	-	-	-	23.9*	(0.0 , 49.7)
5	-	-	-	-	13.5*	(0.0 , 29.0)
6	-	-	-	-	-	-
7	30.2*	(0.0, 74.7)	-	-	22.8*	(2.8 , 42.8)
San Diego						
0	9.9*	(0.0 , 22.0)	14.5*	(2.3 , 26.6)	4.8*	(1.2 , 8.5)
1	1.7*	(0.0 , 5.0)	19.2*	(2.8 , 35.6)	6.8*	(0.0 , 13.6)
2	14.6*	(2.0 , 27.2)	3.7*	(0.0 , 10.0)	17.5	(7.3 , 27.8)
3	22.1*	(7.9 , 36.4)	22.9*	(6.2 , 39.7)	16.3*	(6.6 , 25.9)
4	7.3*	(0.0 , 17.8)	15.2*	(0.0 , 33.8)	2.7*	(0.2 , 5.3)
5	32.1*	(11.3 , 52.9)	15.3*	(2.3 , 28.3)	23.8	(10.2 , 37.4)
6	4.0*	(0.0 , 11.6)	1.7*	(0.0 , 4.9)	9.1*	(1.2 , 17.0)
7	8.4*	(0.0 , 18.5)	7.6*	(0.0 , 18.6)	19.0*	(5.0 , 32.9)
California						
0	9.2	(4.8 , 13.6)	20.7	(12.0 , 29.4)	10.1	(6.6 , 13.6)
1	10.3	(5.7 , 14.9)	7.5	(4.2 , 10.8)	10.6	(7.2 , 14.0)
2	14.8	(10.3 , 19.2)	16.2	(9.7 , 22.6)	15.1	(11.1 , 19.1)
3	18.4	(13.5 , 23.3)	18.0	(11.2 , 24.9)	15.8	(10.8 , 20.8)
4	10.3	(6.0 , 14.6)	8.5	(4.7 , 12.2)	12.6	(9.3 , 15.9)
5	17.7	(12.6 , 22.8)	14.2	(9.3 , 19.0)	13.6	(10.3 , 16.9)
6	4.7*	(1.7 , 7.7)	3.3*	(1.1 , 5.6)	6.7	(4.0 , 9.3)
7	14.7	(10.0 , 19.3)	11.6	(6.2 , 17.0)	15.5	(11.3 , 19.7)

Data: 2007-2012 California Health Interview Survey
[a] Body Mass Index
[b] Percentage: of those who are overweight or obese, what percent belong to a certain physical activity group
[c] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 4.1 Percent of Adults (Age 18+) Who Have Been Diagnosed with Diabetes by Ethnicity and Region (2005-2013)

Population	2005		2007		2009		2011-2012		2013	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial										
Hispanic	10.4	(6.5, 14.2)	10.4	(7.2, 13.7)	9.1	(5.7, 12.4)	6.4	(3.3, 9.6)	24.2	(13.3, 35.1)
White	12.6	(6.1, 19.1)	12.8	(7.0, 18.5)	7.1	(2.8, 11.5)	3.3	(0.9, 5.6)	6.2*	(0.0, 13.3)
All	10.9	(7.7, 14.2)	11.0	(8.2, 13.7)	9.6	(6.7, 12.5)	5.8	(3.2, 8.3)	20.6	(11.6, 29.6)
San Diego										
Hispanic	6.5	(4.4, 8.6)	7.5	(5.4, 9.5)	10.5	(6.3, 14.8)	8.0	(5.8, 10.2)	10.5	(5.9, 15.2)
White	5.1	(4.1, 6.1)	5.2	(4.2, 6.2)	4.9	(4.2, 5.7)	6.5	(5.3, 7.8)	7.1	(5.1, 9.2)
All	5.8	(4.8, 6.7)	6.3	(5.2, 7.3)	7.8	(6.0, 9.7)	7.8	(6.7, 9.0)	8.5	(6.4, 10.7)
California										
Hispanic	8.2	(7.4, 9.0)	9.2	(8.2, 10.2)	10.7	(9.1, 12.3)	9.9	(9.0, 10.8)	6.6	(5.8, 7.4)
White	5.8	(5.5, 6.2)	6.7	(6.3, 7.1)	6.3	(5.8, 6.7)	7.2	(6.7, 7.6)	11.6	(9.8, 13.4)
All	7.0	(6.6, 7.3)	7.8	(7.4, 8.2)	8.5	(7.8, 9.1)	8.4	(7.9, 8.8)	8.7	(7.9, 9.5)

Data: 2005-2013 California Health Interview Survey

[a] Percentage: of those belonging to a certain racial/ethnic group, what percent are diabetic

[b] 95 % Confidence Interval

**Statistically Unstable*

Table 4.2 Diabetes Mellitus Mortality Rates by Race/Ethnicity and Region (2012-2013)				
Population	**2012**		**2013**	
	Number	**Rate[a]**	**Number**	**Rate[a]**
Imperial				
Hispanic	27	23.7	31	27.6
White	7	16.1	9	20.2
All	38	23.5	43	26.5
San Diego				
Hispanic	169	31.6	140	24.1
White	370	17.3	349	16.5
All	652	20.6	614	19.2
California				
Hispanic	2215	29.8	2338	29.9
White	3800	17.1	3733	16.6
All	7877	20.9	7998	20.8

Data: California Health Statistics and Informatics
[a] Age-Adjusted Mortality Rate per 100,000

Table 4.3 Age Distribution of Adults (Age 18+) Who Have Been Diagnosed with Diabetes by Region (2005-2012)

Population	2005		2007		2009		2011-2012	
	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]	%[a]	95% C.I.[b]
Imperial								
18-24	-	-	-	-	7.0*	(0.0, 19.9)	-	-
25-39	13.3*	(0.0, 26.6)	-	-	-	-	-	-
40-64	35.2	(21.0, 49.4)	50.9	(38.0, 63.8)	47.7	(32.9, 62.5)	55.4	(34.6, 76.2)
65-79	40.1	(25.1, 55.1)	42.3	(29.4, 55.1)	34.2	(21.4, 47.0)	35.0	(15.0, 55.1)
80+	7.7*	(1.5, 14.0)	-	-	7.5*	(1.2, 13.7)	-	-
San Diego								
18-24	0.9*	(0.0, 2.6)	1.1*	(0.0, 2.5)	8.6*	(0.0, 19.1)	4.8*	(0.0, 10.9)
25-39	11.3	(7.1, 15.5)	7.3	(3.3, 11.3)	5.2*	(2.1, 8.3)	10.5	(5.0, 16.1)
40-64	49.9	(41.6, 58.2)	54.2	(46.1, 62.4)	58.1	(46.5, 69.7)	53.3	(45.8, 60.9)
65-79	28.9	(21.3, 36.5)	24.7	(18.6, 30.9)	19.5	(13.9, 25.2)	24.3	(18.8, 29.8)
80+	9.1*	(3.3, 14.9)	12.7	(8.5, 16.8)	8.5	(5.4, 11.7)	7.0	(4.8, 9.2)
California								
18-24	1.9	(0.8, 3.0)	1.1	(0.6, 1.6)	2.1*	(0.8, 3.4)	1.6	(0.8, 2.4)
25-39	10.6	(8.8, 12.4)	8.4	(6.7, 10.0)	6.7	(5.1, 8.4)	7.4	(5.9, 8.9)
40-64	50.6	(48.0, 53.2)	56.4	(53.9, 59.0)	57.0	(53.2, 60.7)	54.7	(52.2, 57.2)
65-79	28.4	(26.2, 30.7)	26.8	(24.8, 28.8)	26.3	(23.7, 29.0)	28.3	(26.2, 30.4)
80+	8.4	(7.1, 9.7)	7.3	(6.3, 8.3)	7.9	(6.7, 9.1)	8.1	(7.1, 9.0)

Data: 2005-2012 California Health Interview Survey
[a] Percentage: of those who are diabetic, what percent belong to a certain age group
[b] 95 % Confidence Interval
**Statistically Unstable*
(-) Data Unavailable

Table 5.1 Family Life Impairment in the past 12 months (2011-2012)						
Population	No family life impairment†		Moderate†		Severe†	
	%[a]	95% CI[b]	%[a]	95% CI[b]	%[a]	95% CI[b]
Imperial						
Hispanic	87.7%	(82.9, 92.6)	8.4%	(4.2, 12.5)	3.9%*	(1.5, 6.3)
White	92.9%*	(87.9, 97.9)	6.0%*	(1.3, 10.6)	-	-
All	86.6%	(80.9, 92.3)	7.7%	(4.3, 11.1)	5.7%*	(0.9, 10.5)
San Diego						
Hispanic	86.4%	(83.2, 89.7)	7.4%	(4.9, 9.8)	6.2%	(3.8, 8.6)
White	88.1%	(86.1, 90.1)	7.0%	(5.3, 8.6)	4.9%	(3.7, 6.2)
All	87.7%	(86.0, 89.4)	6.7%	(5.5, 8.0)	5.5%	(4.3, 6.8)
California						
Hispanic	86.1%	(85.1, 87.2)	8.0%	(7.2, 8.8)	5.9%	(5.1, 6.6)
White	86.5%	(85.7, 87.2)	7.9%	(7.3, 8.5)	5.7%	(5.1, 6.2)
All	86.4%	(85.9, 87.0)	7.7%	(7.3, 8.1)	5.9%	(5.5, 6.3)

† Data: 2011-2012 California Health Interview Survey
[a] Percentage: of those belonging to a racial/ethnic group, what percent had family life impairment
[b]95% Confidence Intervals
**Statistically Unstable*
(-) Data Unavailable

Table 5.2 Social Life Impairment in the past 12 months (2011-2012)						
Population	**No social life impairment†**		**Moderate†**		**Severe†**	
	%[a]	**95% CI[b]**	**%[a]**	**95% CI[b]**	**%[a]**	**95% CI[b]**
Imperial						
Hispanic	87.9%	(82.9, 92.8)	8.6%	(4.2, 12.9)	3.6%*	(1.4, 5.7)
White	92.6%*	(87.5, 97.7)	2.7%*	(0.3, 5.2)	4.7%*	(0.4, 8.9)
All	86.7%	(80.9, 92.4)	9.7%	(4.2, 15.1)	3.7%	(1.8, 5.5)
San Diego						
Hispanic	85.7%	(82.3, 89.1)	7.0%	(4.4, 9.6)	7.3%	(4.8, 9.8)
White	87.8%	(85.8, 89.9)	6.4%	(4.7, 8.0)	5.8	(4.5, 7.1)
All	87.4%	(85.7, 89.2)	6.6%	(5.2, 8.0)	6.0%	(4.8, 7.1)
California						
Hispanic	85.9%	(84.9, 87.0)	7.7%	(6.8, 8.5)	6.4%	(5.6, 7.2)
White	86.0%	(85.2, 86.8)	6.5%	(5.9, 7.0)	7.6%	(7.0, 8.2)
All	86.2%	(85.6, 86.7)	7.0%	(6.5, 7.4)	6.9%	(6.4, 7.3)

† Data: 2011-2012 California Health Interview Survey

[a] Percentage: of those belonging to a racial/ethnic group, what percent had social life impairment

[b]95% Confidence Intervals

**Statistically Unstable*

Table 5.3 Ever Seriously Thought about Committing Suicide in the past 12 months (2011-2012)				
Population	**Thought about committing suicide†**		**Never thought about committing suicide†**	
	%[a]	**95% CI[b]**	**%[a]**	**95% CI[b]**
Imperial				
Hispanic	3.5%*	(1.4, 5.5)	96.5%*	(94.5, 98.6)
White	6.4%*	(1.1, 11.6)	93.6%*	(88.4, 98.9)
All	6.3%*	(1.5, 11.1)	93.7%*	(88.9, 98.5)
San Diego				
Hispanic	5.3%	(3.4, 7.2)	94.7%	(92.8, 96.6)
White	9.2%	(7.4, 10.9)	90.8%	(89.1, 92.6)
All	7.4%	(6.2, 8.5)	92.6%	(91.5, 93.8)
California				
Hispanic	6.5%	(5.7, 7.2)	93.5%	(92.8, 94.3)
White	11.0%	(10.3, 11.7)	89.0%	(88.3, 89.7)
All	8.8%	(8.4, 9.3)	91.2%	(90.7, 91.6)

† Data: 2011-2012 California Health Interview Survey
[a] Percentage: of those belonging to a racial/ethnic group, what percent thought of committing suicide
[b]95% Confidence Intervals
**Statistically Unstable*

Table 5.4 Suicide Mortality Cases By Age Group 2013†‡							
Population	**10-14**	**15-19**	**20-24**	**25-44**	**45-64**	**65-84**	**85+**
Imperial	0	0	2	3	5	2	0
San Diego	5	22	39	104	163	74	23
California	29	149	301	1159	1544	639	169

†Data: California Department of Public Health Center for Health Statistics and Informatics
‡Rates per 100,000

Table 5.5 Suicide Mortality Cases by Gender 2013†‡		
Population	Male	Female
Imperial		
Hispanic	6	1
White	4	1
All	10	2
San Diego		
Hispanic	37	81
White	245	13
All	321	109
California		
Hispanic	554	107
White	2100	697
All	3054	936

† Data Source, the California Department of Public Health Center for Health Statistics and Informatics

Table 6.1 Tuberculosis Case Rates per 100,000 Population in California and Border Counties (2005-2014)										
Population	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
California	7.9	7.4	7.2	7	6.4	6	5.9	5.8	5.7	5.6
Imperial County	19.4	19.4	16.6	10.6	18.9	13.7	13.9	16.8	21.2	19.9
San Diego County	10	10.2	9	8.4	7	6.9	8.1	7.4	6.5	6.8

†2005-2014 Data obtained from CDPH Tuberculosis Control Branch

Table 7.1 Cases and Rates of Chlamydia and Gonorrhea by Region and Race/Ethnicity (2012-2013)								
Population	Chlamydia†‡				Gonorrhea†‡			
	2012		2013		2012		2013	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
Imperial								
Hispanic	489	340.1	428	295.9	22	15.3	33	22.8
Black	2	38.3	4	76.3	1	19.2	3	57.2
White	29	120.8	38	160.6	3	12.5	0	0.0
All	582	326.3	595	332.1	35	19.6	43	24.0
San Diego								
Hispanic	3733	364.4	3837	369.1	416	40.6	534	51.4
Black	996	651.7	1075	699.5	251	164.2	273	177.6
White	2517	166.2	2499	164.8	556	36.7	673	44.4
All	16547	524.7	16112	507.2	2603	82.5	2871	90.4
California*§								
Hispanic	83564	575.5	54325	367.7	11341	78.1	10328	69.9
Black.	32872	1490.0	20405	921.4	9734	441.2	7775	351.1
White	38328	256.0	25107	167.8	10293	68.7	8517	56.9
All	169,774	448.3	167916	439.5	33782	89.2	38365	100.4

†Data: 2012-2013 California Department of Public Health Sexually Transmitted Diseases Branch 3/5/2015
‡Data: 2013 California Department of Public Health Sexually Transmitted Diseases Branch's STD in California 2013 Annual Report
§Data: 2012 California Department of Public Health Sexually Transmitted Diseases Branch's STD in California 2012 Annual Report

Table 7.2 Cases and Rates of Syphilis by Region and Race/Ethnicity, 2012- 2013								
Population	Syphilis: Primary and Secondary†‡				Syphilis: Congenital †‡			
	2012		2013		2012		2013	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
Imperial								
Hispanic	1	0.7	4	2.8	0	0	0	0
Black	0	0.0	0	0.0	0	0	0	0
White	1	4.2	0	0.0	0	0	0	0
All	2	1.1	4	2.2	0	0	0	0
San Diego								
Hispanic	102	10.0	119	11.4	3	16.1	1	5.6
Black	25	16.4	37	24.1	0	0.0	0	0.0
White	170	11.2	151	10.0	1	6.5	1	6.6
All	334	10.6	351	11.0	4	9.0	2	4.6
California*§								
Hispanic	1276	8.6	1276	8.6	15	6.1	24	9.8
Black	494	22.3	494	22.3	7	26.4	8	30.0
White	1248	8.3	1248	8.3	6	4.4	8	5.8
All	2977	7.9	3554	9.3	30	6.0	56	11.1

†Data: 2012-2013 California Department of Public Health Sexually Transmitted Diseases Branch 3/5/2015
‡Rates per 100,000
**Data: 2013 California Department of Public Health Sexually Transmitted Diseases Branch's STD in California 2013 Annual Report*
§Data: 2012 California Department of Public Health Sexually Transmitted Diseases Branch's STD in California 2012 Annual Report

Table 8.1 Total Number of Individuals Living with HIV, AIDS, or HIV and AIDS in California Border Counties, by Gender and Race/Ethnicity (2011-2013)

Population	2011								2012								2013					
	Male		Female		TR*		ALL		Male		Female		TR*		ALL		Male		Female		ALL	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Blacks																						
AIDS	753	11.5	163	23.3	17	24.6	933	12.8	766	11.6	181	24.5	17.0	24.3	947	12.9	773	11.4	188	24.7	961	12.7
HIV	506	11.4	120	24.4	12	20.7	638	12.8	525	11.7	126	25.7	11.0	19.3	651	13.1	559	12.0	128	25.3	687	13.3
HIV & AIDS	1259	11.5	283	23.8	29	22.8	1571	12.8	1291	11.6	307	25	28.0	22	1598	12.9	1332	11.6	316	24.9	1648	13.0
Hispanic																						
AIDS	2147	32.8	275	39.3	30	43.5	2452	33.5	2199	33.2	281	38.0	31.0	44.3	2480	33.7	2283	33.7	287	37.7	2570	34.1
HIV	1266	28.4	181	36.9	28	48.3	1475	29.5	1354.0	30.2	180	36.7	28.0	49.1	1534	30.8	1435	30.7	192	38.0	1627	31.4
HIV & AIDS	3413	31	456	38.3	58	45.7	3927	31.9	3553	32.0	461	37.4	59.0	46.5	4014	32.5	3718	32.5	479	37.8	4197	33.0
White																						
AIDS	3415	52.2	216	30.9	18	26.1	3649	49.9	3381	51.0	227	30.7	17.0	24.3	3608	49.0	3475	51.3	240	31.5	3715	49.3
HIV	2483	55.7	162	33	16	27.6	2661	53.2	2395	53.4	151	30.8	16.0	28.1	2546	51.2	2460	52.6	152	30.1	2612	50.4
HIV & AIDS	5898	53.6	378	31.8	34	26.8	6310	51.3	5776	52.0	378	30.7	33.0	26	6154	49.9	5935	51.8	392	31	6327	49.7
All																						
AIDS	6541	100	699	100	69	100	7309	100	6627	100	740	100	70.0	100	7367	100	6778	100.0	762	100	7540	100
HIV	4454	100	491	100	58	100	5003	100	4483	100	491	100	57.0	100	4974	100	4673	100	505	100	5178	100
HIV & AIDS	10995	100	1190	100	127	100	12312	100	11110	100	1231	100	127.0	100	12341	100	11451	100	1267	100	12718	100

†2011-2013 Data obtained from California Department of Public Health, Office of AIDS
**Transgender*

Table 8.2 Total Number of Individuals Living with HIV, AIDS, and HIV or AIDS in California, by Gender and Race/Ethnicity (2011-2013)

Population	2011								2012								2013					
	Male		Female		TR*		ALL		Male		Female		TR*		ALL		Male		Female		ALL	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Black																						
AIDS	9686	15.6	2739	34.6	270	30.5	12695	17.9	10195	16.0	2871	34.8	279.0	30.9	13066	18.2	10374	16.0	2908	34.7	13282	18.1
HIV	5759	15.5	1806	33.1	161	30.9	7726	17.9	6357	15.8	1905	33.2	167.0	30.7	8262	18.0	6682	15.9	1974	33.0	8656	18.0
HIV & AIDS	15445	15.6	4545	34	431	30.6	20421	17.9	16552	15.9	4776	34.1	446.0	30.8	21328	18.1	17056	15.9	4882	34.0	21938	18.1
Hispanic																						
AIDS	20440	32.9	2647	33.5	359	40.5	23446	33	21389	33.6	2787	33.8	367.0	40.6	24176	33.6	22009	33.9	2830	33.8	24839	33.9
HIV	11400	30.7	1875	34.4	209	40.1	13484	31.3	12582.0	31.2	1967	34.2	221.0	40.6	14549	31.6	13391	31.8	2058	34.4	15449	32.1
HIV & AIDS	31840	32.1	4522	33.8	568	40.4	36930	32	33971	32.7	4754	34.0	588.0	40.6	28725	24.3	35400	33.1	4888	34.1	40288	33.2
White																						
AIDS	28942	46.6	2048	25.9	178	20.1	31168	43.9	28370	45	2059	25.0	175.0	19.4	30429	42.3	29004	44.7	2126	25.4	31130	42.5
HIV	17747	47.8	1451	26.6	111	21.3	19309	44.8	18710.0	46.5	1496	26.0	113.0	20.8	20206	43.9	19350	45.9	1555	26.0	20905	43.5
HIV & AIDS	46689	47	3499	26.2	289	20.5	50477	44.3	47080	45.3	3555	25	288.0	19.9	50635	42.9	48354	45.2	3681	25.6	52035	42.9
All																						
AIDS	62168	100	7905	100	886	100	70959	100	63716	100	8249	100	904.0	100	71965	100	64888	100	8374	100	73262	100
HIV	37105	100	5456	100	521	100	43082	100	40269	100	5746	100	544.0	100	46015	100	42129	100	5980	100	48109	100
HIV & AIDS	99273	100	13361	100	1407	100	114041	100	103985	100	13995	100	1448.0	100	117980	100	107017	100	14354	100	121371	100

†2011-2013 Data obtained from California Department of Public Health, Office of AIDS
**Transgender*

Table 8.3 Total Number of Individuals with New HIV, AIDS, or HIV and AIDS diagnoses in California Border Counties, by Gender and Risk Exposure Group (2011-2013)

Population	2011						2012						2013					
	Male		Female		ALL		Male		Female		ALL		Male		Female		ALL	
Exposure Group	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
High Risk	37	7.3	27	5.3	64	12.6	27	5.5	45	9.2	72	14.7	31	6.2	35	7.0	66	13.2
Injection Drug Users	20	3.9	8	1.6	28	5.5	19	3.9	6	1.2	25	5.1	23	4.6	6	1.2	29	5.8
MSM‡	369	72.5	0	0.0	369	72.5	356	72.7	0	0.0	356	72.7	359	71.9	0	0.0	359	71.9
MSM‡ who are injection drug users	20	3.9	0	0.0	20	3.9	23	4.7	0	0.0	23	4.7	11	2.2	0	0.0	11	2.2
*Other/Unknown**	24	4.7	4	0.8	28	5.5	9	1.8	5	1.0	14	2.9	23	4.6	11	2.2	34	6.8
Total	470	92.3	39	7.7	509	100	434	88.6	56	11.4	490	100	447	89.6	52	10.4	499	100

†2011-2013 Data obtained from California Department of Public Health, Office of AIDS
*Other/unknown includes perinatal cases in order to protect confidentiality
Note: Data represents living cases reported to eHARS by December 23, 2014
‡ Men who have sex with men

Table 8.4 Total Number of Individuals with New HIV/AIDS diagnoses in California Border Counties, by Gender and Race/Ethnicity (2011-2013)

Population	2011						2012						2013					
	Male		Female		ALL		Male		Female		ALL		Male		Female		ALL	
Race/Ethnicity	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Black	62	12.2	10	2.0	72	14.2	41	8.4	17	3.5	58	11.8	51	10.2	12	2.4	63	12.6
Hispanic	200	39.3	12	2.4	212	41.7	195	39.8	16	3.3	211	43.1	196	39.3	20	4.0	216	43.3
*Other**	26	5.1	4	0.8	30	5.9	31	6.3	9	1.8	40	8.2	34	6.8	4	0.8	38	7.6
White	182	35.8	13	2.6	195	38.3	167	34.1	14	2.9	181	36.9	166	33.3	16	3.2	182	36.5
Total	470	92.3	39	7.7	509	100.0	434	88.6	56	11.4	490	100.0	447	89.6	52	0.4	499	100.0

†2011-2013 Data obtained from California Department of Public Health, Office of AIDS
**Other combines Asian, Native Hawaiian/Pacific Islander, and Multi Race groups to protect confidentiality.*
Note: Data represents living cases reported to eHARS by December 23, 2014

Table 8.5 Total Number of Individuals with New HIV/AIDS diagnoses in California Border Counties, by Gender, Race, Age, and Risk Exposure Group (2011-2013)

Population	2011		2012		2013	
Gender	#	%	#	%	#	%
Female	39	7.7	56	11.4	52	10.4
Male	470	92.3	434	88.6	447	89.6
Total	509	100.0	490	100.0	499	100.0
Race						
Black	72	14.2	58	11.8	63	12.6
Hispanic	212	41.7	211	43.1	216	43.3
White	195	38.3	181	36.9	182	36.5
Asian	20	3.9	26	5.3	21	4.2
*Other***	10	2.0	14	2.9	17	3.4
Total	509	100.0	490	100.0	499	100.0
Age						
0-12	2	0.4	1	0.2	1	0.2
13-19	21	4.1	8	1.6	9	1.8
20-29	148	29.1	168	34.3	168	33.7
30-39	142	27.9	129	26.3	147	29.5
40-49	108	21.2	104	21.2	94	18.8
50-59	66	13.0	63	12.9	70	14.0
60+	22	4.3	17	3.5	10	2.0
Total	509	100.0	490	100.0	499	100.0
Risk Exposure						
High Risk	64	12.6	72	14.7	66	13.2
Injection Drug Users	28	5.5	25	5.1	29	5.8
MSM‡	369	72.5	356	72.7	359	71.9
MSM‡ who are injection drug users	20	3.9	23	4.7	11	2.2
*Other/Unknown****	28	5.5	14	2.9	34	6.8
Total	509	100.0	490	100.0	499	100.0

†2011-2013 Data obtained from California Department of Public Health, Office of AIDS
**Sex at birth presented in place of gender to protect confidentiality of transgender groups with small cells (<5)*
***Other combines Asian, Native Hawaiian/Pacific Islander, and Multi Race groups to protect confidentiality.*
****Other/unknown includes perinatal cases in order to protect confidentiality*
Note: Data represents living cases reported to eHARS by December 23, 2014
‡ Men who have sex with men

Table 8.6 Total Number of Individuals with New HIV/AIDS Diagnoses in California Border Counties, 2011-2013

Population	2011		2012		2013	
	#	Rate*	#	Rate*	#	Rate*
Race/Ethnicity						
Black	72	46.52	58	37.264	63	40.5
Hispanic	212	18.251	211	17.829	216	17.9
White	195	12.811	181	11.944	182	12.0
All	509	15.412	490	14.733	499	14.9

Data Source: California Department of Public Health, Office of AIDS
**Rate Per 100,000*

Table 9.1 Immunization Levels for Kindergarteners by Region (2012-2014)						
Population	2012†		2013†		2014†	
	#	%	#	%	#	%
Total						
Imperial	2,747	100	2,963	100	3,110	100
San Diego	42,787	100	43,253	100	43,827	100
California	530,397	100	533,680	100	535,234	100
All*						
Imperial	2,585	94.10	2,812	94.90	2,905	93.41
San Diego	38,759	90.59	38,916	89.97	40,468	92.34
California	478,743	90.26	481,158	90.16	483,877	90.40
DTaP§						
Imperial	2,642	96.18	2,870	96.86	2,969	95.47
San Diego	39,543	92.42	39,720	91.83	41,017	93.59
California	490,637	92.50	491,985	92.19	494,450	92.38
Polio‡						
Imperial	2,651	96.51	2,881	97.23	3,002	96.53
San Diego	39,546	92.43	39,797	92.01	41,153	93.90
California	491,106	92.59	494,356	92.63	497,773	93.00
MMR ¥						
Imperial	2,625	95.56	2,853	96.29	2,960	95.18
San Diego	39,534	92.40	39,658	91.69	41,008	93.57
California	491,467	92.66	492,757	92.33	495,369	92.55
Hep B €						
Imperial	2,729	99.34	2,926	98.75	3,051	98.10
San Diego	40,472	94.59	40,549	93.75	41,639	95.01
California	504,728	95.16	505,734	94.76	507,823	94.88
Var £						
Imperial	2,695	98.11	2,926	98.75	3,049	98.04
San Diego	40,637	94.98	40,771	94.26	41,890	95.58
California	507,106	95.61	508,410	95.26	510,873	95.45

†Vaccine Data was obtained from the CDPH Immunization Branch for the school years 2010-2011 to 2014-2015.
** Received all the required vaccines and doses*
§ Received 4 or more doses of the DTaP vaccine
‡ Received 3 or more doses of the Polio vaccine
¥ Received 2 doses of the MMR vaccine
€ Received 3 or more doses of the Hepatitis B vaccine
£ Received 1 dose of the varicella vaccine

Table 9.2 Kindergarten Students Vaccine and Exemption Rates by Region (2010-2014)										
Population	**2010†**		**2011†**		**2012†**		**2013†**		**2014†**	
	#	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Fully Immunized*										
Imperial	2,657	91.75	2,612	93.69	2,585	94.1	2,812	94.9	2,905	93.41
San Diego	38,353	91.67	39,764	91.76	38,759	90.59	38,916	89.97	40,468	92.34
California	462,235	90.66	481,533	90.96	478,743	90.26	481,158	90.16	483,877	90.4
PME**										
Imperial	4	0.14	1	0.04	1	0.04	2	0.07	3	0.1
San Diego	87	0.21	89	0.21	65	0.15	102	0.24	97	0.22
California	962	0.19	871	0.16	915	0.17	991	0.19	1,034	0.19
PBE***										
Imperial	12	0.41	8	0.29	6	0.22	19	0.64	14	0.45
San Diego	1,316	3.15	1,447	3.34	1,658	3.88	1,944	4.49	1,518	3.46
California	11,868	2.33	12,665	2.39	14,791	2.79	16,817	3.15	13,592	2.54

†Vaccine Data was obtained from the CDPH Immunization Branch for the school years 2010-2011 to 2014-2015.
**The number of students who have all the recommended vaccines and doses*
***The number of students who requested a permanent medical exemption*
****The number of students who requested a personal belief exemption*

Table 9.3 Child Care Facilities Vaccine and Exemption Rates by Region (2010-2014)										
Population	**2010†**		**2011†**		**2012†**		**2013†**		**2014†**	
	#	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Fully Immunized*										
Imperial	2,656	94.22	2,660	95.7	2,655	96.41	2,484	97.22	2,728	97.39
San Diego	42,188	90.83	43,495	95.79	40,227	89.53	40,017	89.54	40,456	89.51
California	443,240	90.63	463,453	89.51	431,931	89.17	434,227	89.25	434,922	89.37
PME**										
Imperial	2	0.07	2	0.07	9	0.33	3	0.12	3	0.11
San Diego	67	0.14	147	0.31	110	0.24	85	0.19	273	0.6
California	843	0.17	1,131	0.22	1,313	0.27	1,402	0.29	2,734	0.56
PBE***										
Imperial	9	0.32	11	0.39	9	0.33	6	0.23	3	0.11
San Diego	1,397	3.01	1,503	3.12	1,639	3.65	1,722	3.85	1,525	3.37
California	11,910	2.44	13,450	2.6	14,081	2.91	14,325	2.94	12,981	2.67

†Vaccine Data was obtained from the CDPH Immunization Branch for the school years 2010-2011 to 2014-2015.
**The number of students who have all the recommended vaccines and doses*
***The number of students who requested a permanent medical exemption*
****The number of students who requested a personal belief exemption*

Table 9.4 7th Grade Students Vaccine and Exemption Rates by Region (2012-2014)									
Population	**2012†**			**2013†**			**2014†**		
	#	**# Enrolled**	**%**	**#**	**# Enrolled**	**%**	**#**	**# Enrolled**	**%**
TDAP*									
Imperial	2,928	2,939	99.6	2,962	2,989	99.1	2,954	2,972	99.39
San Diego	38,786	40,244	96.4	37,843	39,260	96.39	38,697	39,774	97.29
California	495,923	510,378	97.2	474,952	491,908	96.55	478,689	489,643	97.76
PME**									
Imperial	1	2,939	0.03	3	2,989	0.1	1	2,972	0.03
San Diego	77	40,244	0.19	49	39,260	0.12	68	39,774	0.17
California	831	510,378	0.16	943	491,908	0.19	709	489,643	0.14
PBE***									
Imperial	10	2,939	0.34	24	2,989	0.8	17	2,972	0.57
San Diego	1,381	40,244	3.43	1,368	39,260	3.48	1,009	39,774	2.54
California	13,624	510,378	2.67	16,013	491,908	3.26	10,245	489,643	2.09

†Vaccine Data was obtained from the CDPH Immunization Branch for the school years 2012-2013 to 2014-2015
**The number of students who have received the TDAP vaccination*
***The number of students who requested a permanent medical exemption*
****The number of students who requested a personal belief exemption*

Table 9.5 Cases and Rates of Vaccine-preventable-Disease and by Region (2009-2014)												
Population	2009†		2010†		2011†		2012†		2013†		2014‡¥§	
	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate	#	Rate
Pertussis*												
Imperial	0	0	9	5.13	3	1.69	8	4.48	3	1.7	10	5.6
San Diego	163	5.30	1,140	36.74	398	12.73	162	5.15	408	12.8	2016	63.4
California	998	2.69	9,159	24.55	3,016	8.03	1,023	2.70	2,537	6.6	11,164	29.2
Measles**												
Imperial	0	0	0	0	0	0	0	0	0	0	0	-
San Diego	1	0.32	5	1.61	4	1.28	0	0.0	2	0.63	13	-
California	9	0.23263	27	0.72368	31	0.8251	8	0.2115	18	0.47221	107	-
Meningococcal *												
Imperial	1	0.58	0	0.0	0	0.0	0	0.0	0	0.0	-	-
San Diego	10	0.32	11	0.35	4	0.13	8	0.25	15	0.47	-	-
California	131	0.35	121	0.32	110	0.29	88	0.23	111	0.29	-	-
Hepatitis A*												
Imperial	6	3.46	4	2.28	2	1.13	5	2.81	0	0.00	-	-
San Diego	25	0.81	19	0.61	12	0.38	38	1.20	40	1.25	-	-
California	229	0.62	217	0.58	161	0.43	210	0.55	255	0.67	-	-
Hepatitis B*												
Imperial	3	1.73	0	0.00	0	0.00	0	0.00	2	1.12	-	-
San Diego	1	0.03	10	0.32	19	0.61	14	0.44	9	0.28	-	-
California	206	0.56	214	0.57	155	0.41	141	0.37	139	0.36	-	-

†Vaccine Preventable Disease Data was obtained from the CDPH Vaccine-Preventable Diseases Surveillance in California 2013 Annual Report
‡Pertussis 2014 Data was obtained from California Department of Public Health Pertussis Report, 3/18/2015
¥2014 Measles data was obtained from CDPH California Measles Surveillance Update, 2/9/15.
§2014 Measles data reported contains both 2014 and 2015 Cases.
** Rate per 100,000*
*** Rate per 1,000,000*
(-) Missing Data

Table 9.6 The Number of Cases of Vaccine-Preventable-Disease and by Region, 2009-2013					
Population	**2009†**	**2010†**	**2011†**	**2012†**	**2013†**
Mumps					
Imperial	1	0	0	0	0
San Diego	1	0	1	1	2
California	15	29	43	34	30
Rubella					
Imperial	0	0	0	0	0
San Diego	0	0	0	0	0
California	1	1	0	1	0
Tetanus					
Imperial	1	0	0	0	0
San Diego	0	0	1	0	0
California	5	0	3	4	4
Varicella					
Imperial	0	1	0	1	0
San Diego	11	9	10	5	2
California	46	56	48	37	31
All H. Influenza					
Imperial	0	0	0	0	0
San Diego	9	2	3	4	1
California	52	30	42	32	46
HI type B					
Imperial	0	0	0	0	0
San Diego	0	0	1	0	0
California	1	0	1	0	0

†Vaccine Preventable Disease Data was obtained from the CDPH Vaccine-Preventable Diseases Surveillance 2013 Annual Report.