2017 -2018

Border Health Status Report to the Legislature

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Introduction

The California border region, defined as the area within 62 miles (100 km) on the north side of the U.S.-Mexico border, is a unique region in the State of California. There are geographical, demographical and health-related differences between this area and other regions of California. The goal of this report is to highlight those differences with a specific focus on health. This report summarizes demographic information and health indicators including obesity, diabetes, mental health, tuberculosis (TB), sexually transmitted infections (STIs), HIV and vaccine-preventable diseases in the California border region. This report describes the burden of each of these diseases in the southern border region counties (San Diego and Imperial). To understand the health disparities that exist among the border region counties, it is important to include California as a reference point. Sources including Healthy Border 2020 and Healthy People 2020 were reviewed for guidance as to the most important health indicators in the California border region. The Healthy Border 2020 is a binational initiative that works in collaboration with Mexico to address priority binational health concerns along this border region. The Healthy People 2020 is a 10-year U.S. national initiative that works to improve the health of Americans. The 2017-2018 Border Health Status Report to the Legislature health indicators were selected on the basis of results from border health key-informant interviews and results obtained from a survey conducted among border health stakeholders.

The population data used in this report were obtained from the State of California, Department of Finance (DOF). Race, education, unemployment, obesity and diabetes data were obtained from the 2016-2017 California Health Interview Survey (CHIS). CHIS is the nation's largest state health survey and a very important source of data for various health indicators at the ethnic and racial level. CHIS is conducted by the University of California, Los Angeles, Center for Health Policy Research in collaboration with the California Department of Public Health (CDPH). CHIS research scientists consider some data unreliable. As recommended by CHIS research scientists, unreliable data were not used in this report. Communicable disease data were obtained directly from the CDPH, Office of AIDS, TB Control Branch, Sexually Transmitted Disease Branch and Vaccine-Preventable Disease Epidemiology Section. When available, we will present the number of cases and the rate (i.e., the number of cases divided by the population). For the CHIS data, we will provide the percent of cases, because the data obtained represent a randomly selected subgroup of the population, and total numbers are not provided.

Throughout this report, we compare data primarily from Latino and White populations and include other races when their rates or proportions were higher than the two main groups we are referencing for this report. Latino will be used for race/ethnicity instead of Latino/Hispanic.

This report, "2017-2018 Border Health Status Report to the Legislature," provides a summary of the current health status in the California border region[1]. The report was prepared by CDPH's Office of Binational Border Health (OBBH). It summarizes important health indicators for border communities in California but is not a fully comprehensive report of all health issues in the California border region. Instead, the report aims to provide a general overview of the health status of the population living in the California border region.

[1]In the past, the Border Health Status Report had been prepared and published for a single calendar year. However, this report, "2017-2018 Border Health Status Report to the Legislature" has been prepared to encompass calendar years 2017 and 2018.

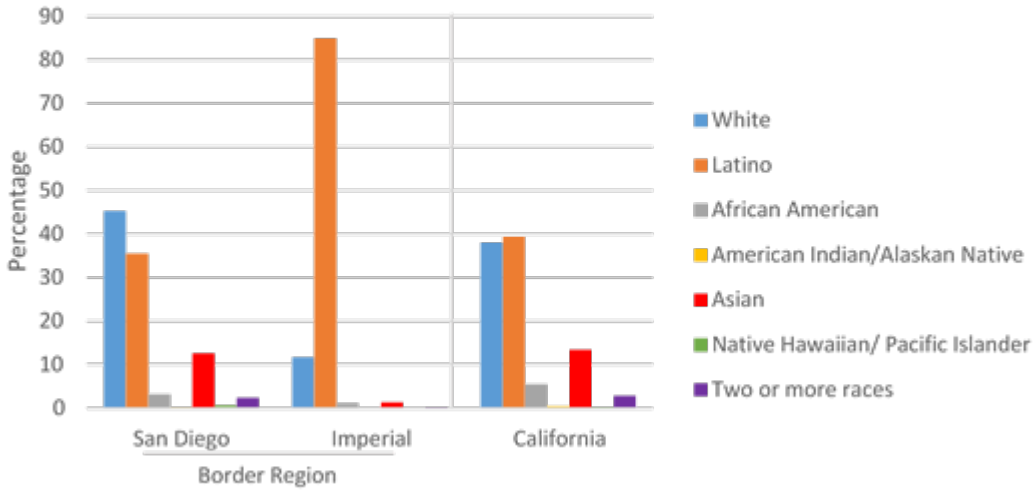
Demographics

DEMOGRAPHICS

The population of the border region of California, composed of San Diego and Imperial counties, has steadily grown from 2010 to 2017. During this period, San Diego County's population increased by 8%, and Imperial County's population increased by 9%, both of which are higher than the statewide increase of 7%. In 2017, the California DOF projected that there were 3,528,080 individuals living in the border region, most of whom were living in San Diego County (n=3,337,456) and a smaller number of whom were living in Imperial County (n=190,624) (DOF, 2018).

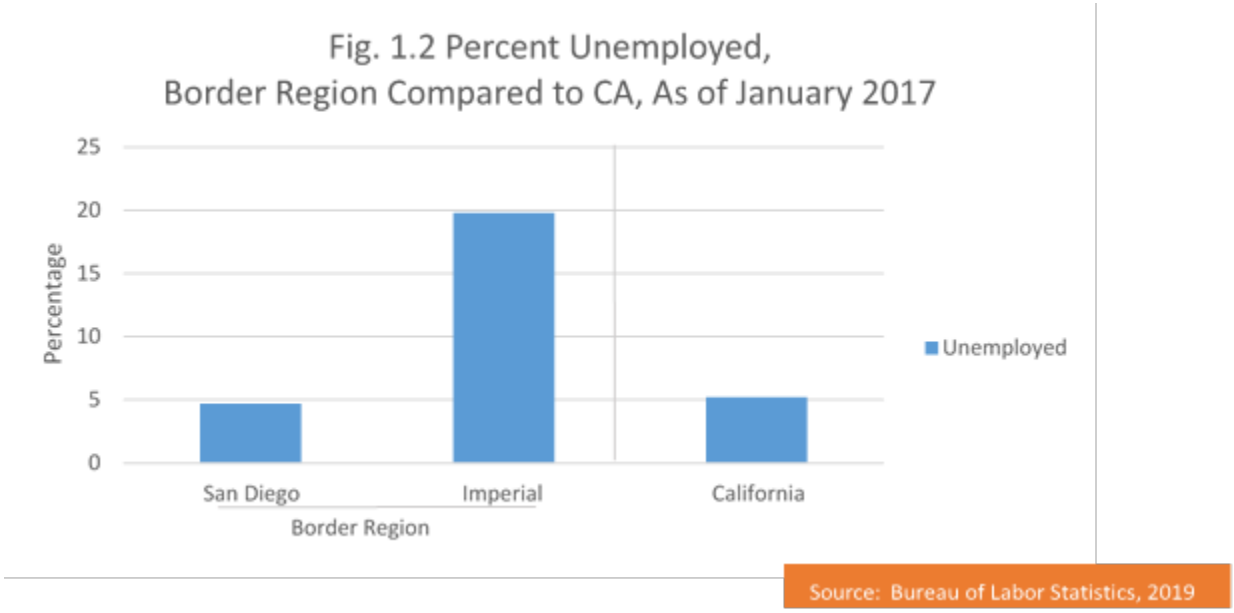
The population in California, including the border region, is racially and ethnically diverse. In data from 2016-2017, Whites made up the majority (45%) of the population in San Diego County, whereas Latinos constituted a large minority group of 36% (CHIS, 2016-2017). In Imperial County, most of the population was Latino (85%), whereas Whites accounted for 12% (CHIS, 2016-2017). As shown in Figure 1.1, in the State of California, Whites and Latinos made up approximately the same proportion, at 38% and 39% of the total population, respectively (Fig. 1.1) (CHIS, 2016-2017).

Fig 1.1 Race and Ethnicity Distribution, Border Region Compared to CA, 2016-2017

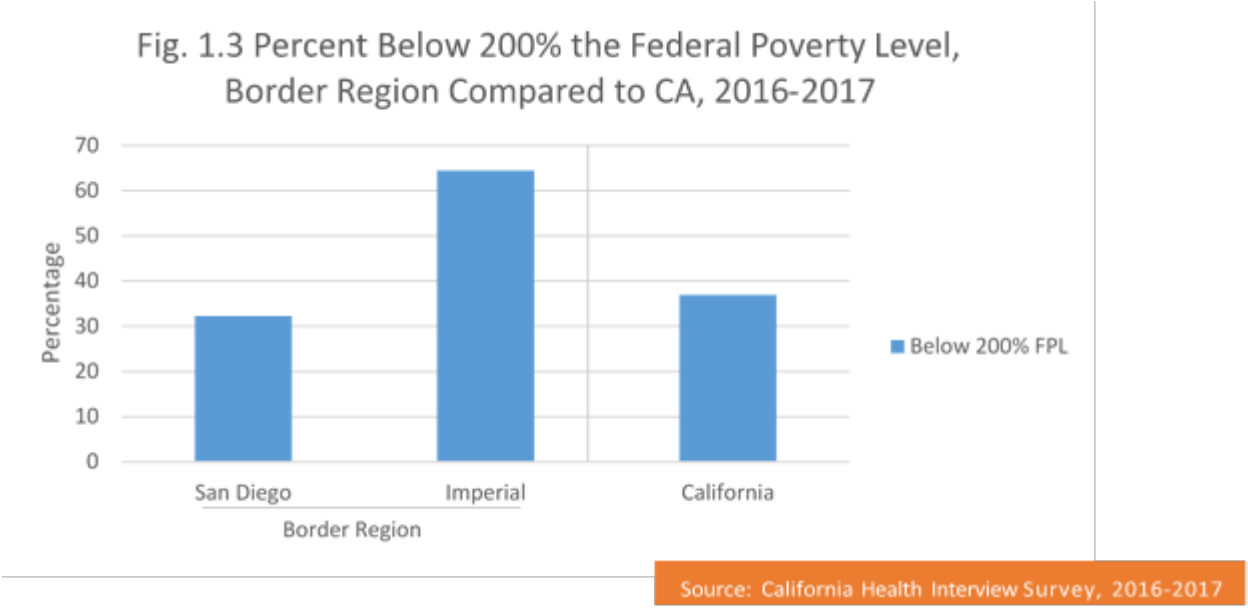


Source: California Health Interview Survey, 2016-2017

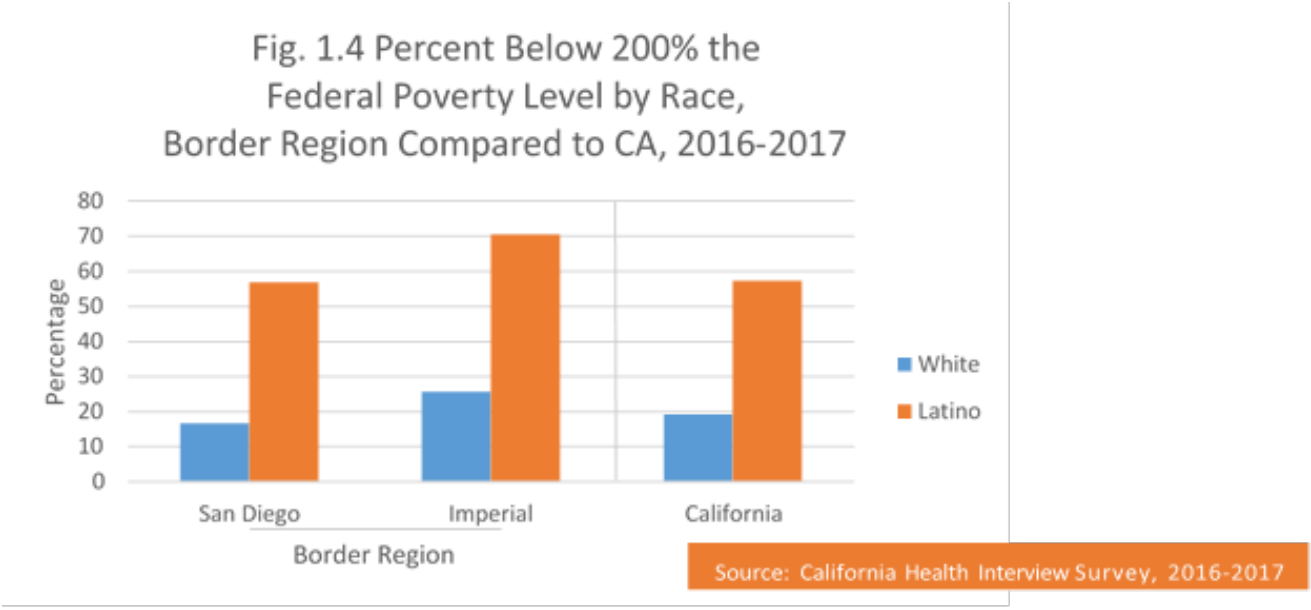
In 2016-2017, San Diego County reported that 5% (74,295 cases) of the population was unemployed, whereas Imperial County reported that approximately 20% (15,131 cases) was unemployed (CHIS, 2016-2017). Statewide, the unemployment rate was 5% (997,286 cases) (Fig. 1.2) (Bureau of Labor Statistics, 2019).



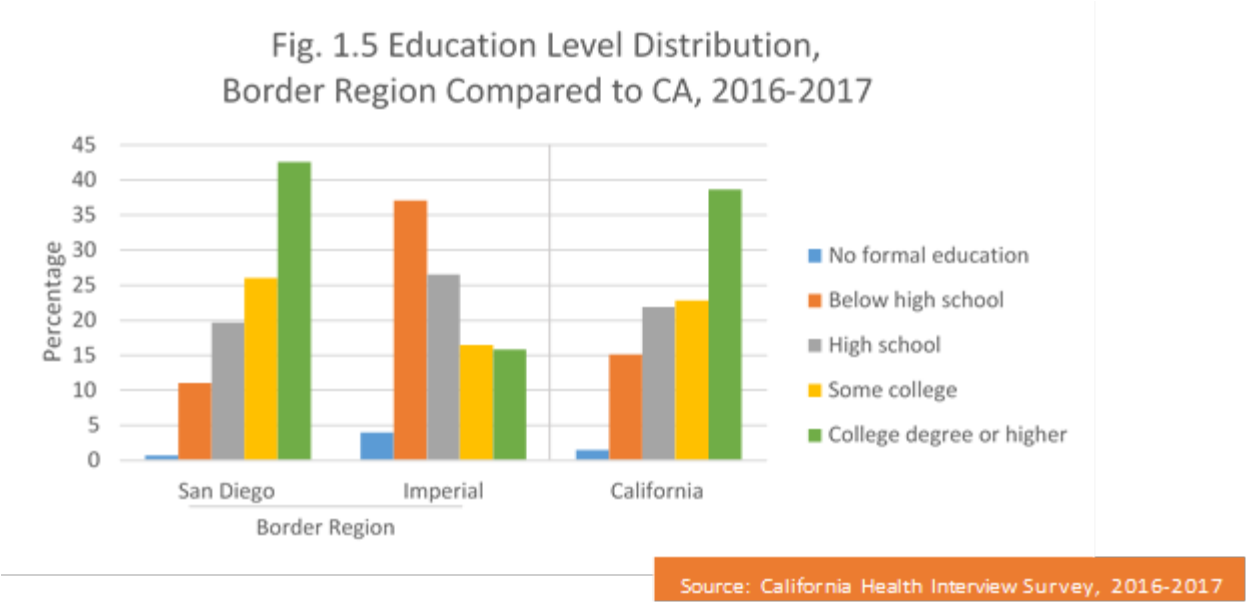
In 2016-2017, 32% of San Diego County residents were living below 200% of the Federal Poverty Level (FPL), as compared with nearly two-thirds (65%) of Imperial County residents and 37% of California residents (Fig. 1.3) (CHIS, 2016-2017).



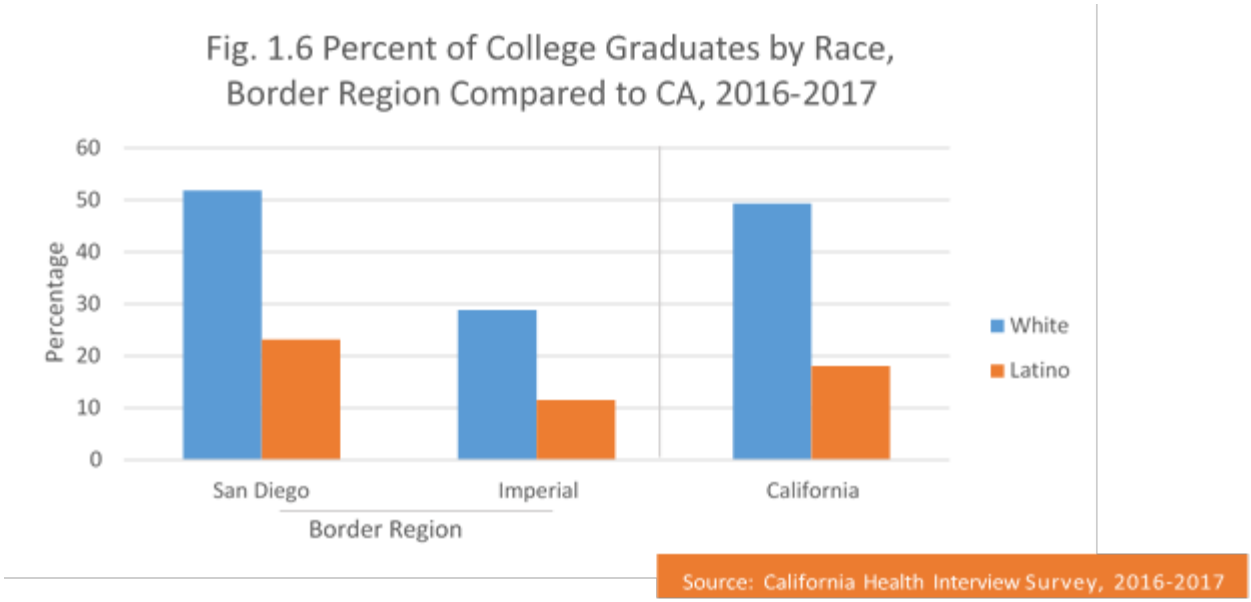
A comparison by race/ethnicity indicated that the Latino population consistently had a higher percent of people living below 200% of the Federal Poverty Level in the California border region. The same result was observed in California statewide (Fig. 1.4) (CHIS, 2016-2017).



In 2016-2017, 43% of San Diego County residents had a college degree or higher, whereas 41% of Imperial County residents had education below a high school diploma. Statewide, 39% of Californians had a college degree or higher, and 17% (n=4,445,000) had education below a high school diploma (Fig. 1.5) (CHIS, 2016-2017).



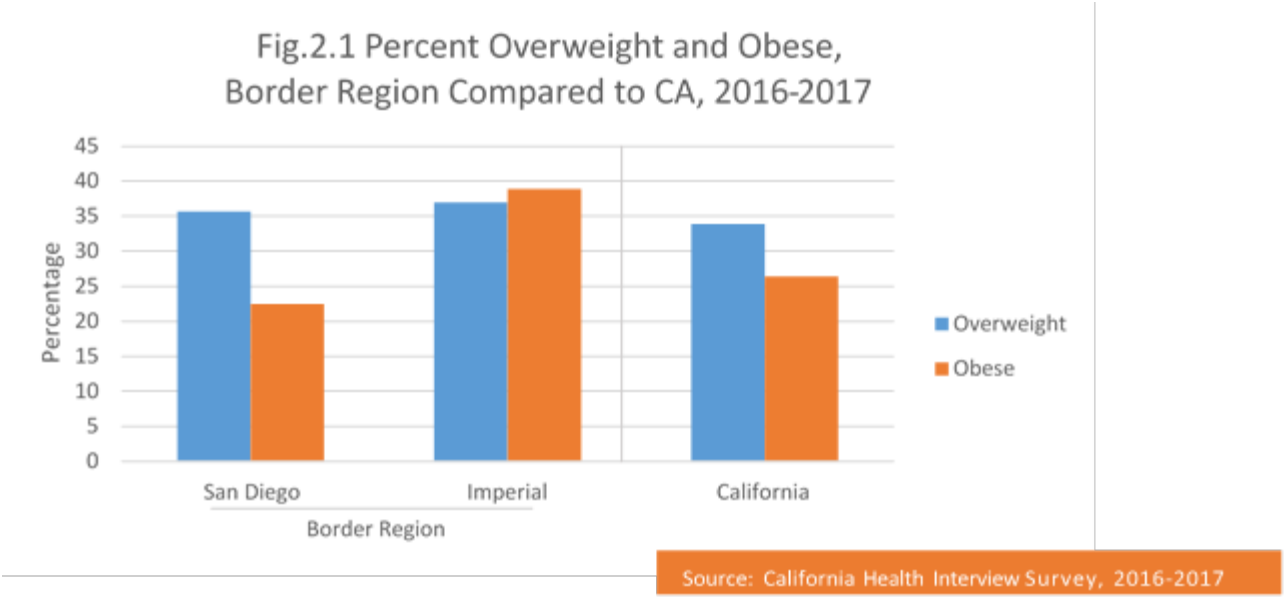
When the percent of college graduates was compared by race/ethnicity, the Latino population, as compared with the White population, consistently had a lower percent of people in the California border region and in California statewide who did not graduate from college (Fig. 1.6) (CHIS, 2016-2017).



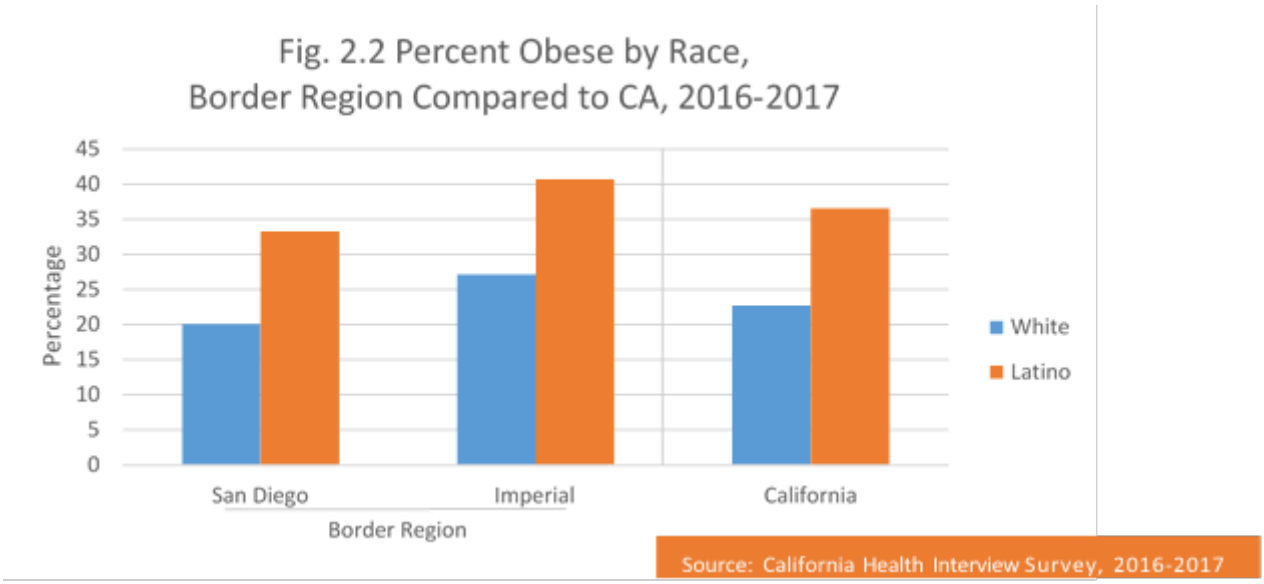
Obesity

The California border region, like the rest of the state, has experienced an increase in obesity rates, particularly in the Latino population. Obesity is associated with various health risks, including some of the leading causes of death, such as diabetes, heart disease, stroke and some types of cancer. Various behavioral, societal and environmental factors are associated with obesity, such as caloric intake, physical inactivity, education and genetics (CDC, 2017). The most common estimator of body fat is the body mass index (BMI) measure. For adults, a BMI between 25.0 and 29.9 kg/m^2 is categorized as overweight, and a BMI between 30.0 and 39.9 kg/m^2 is categorized as overweight or obese (NIH, n.d.).

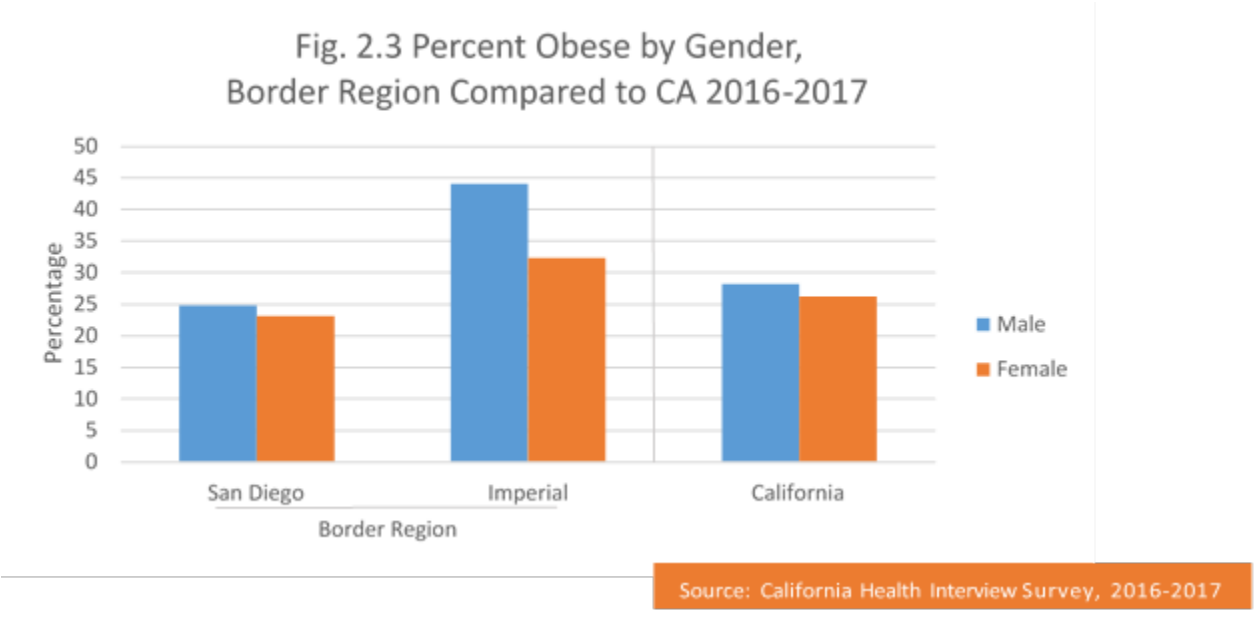
Data for adults from 2016-2017 indicated the prevalence of obesity in San Diego County to be 23%, whereas the percent of obesity in Imperial County was 39%. This level more than doubled when overweight and obesity were combined; the level for San Diego County increased to 58%, and that for Imperial increased to 76%. Neither county met the Healthy People 2020 objective for healthy weight among adults, which aims to increase the percent of adults at a healthy weight to above 30.5%. The rate of obesity in California was similar to that in San Diego County and was lower than that in Imperial County (Fig. 2.1) (CHIS, 2016-2017).



Differences by race/ethnicity existed among obese adults in the California border region. The Latino population had a consistently higher rate of obesity than the White population. In San Diego County, 33% of the Latino population was obese, as compared with only 20% of the White population. Meanwhile, in Imperial County, 41% of the Latino population was obese, as compared with 27% of the White population. The same findings were true for California statewide (Fig. 2.2) (CHIS, 2016-2017).



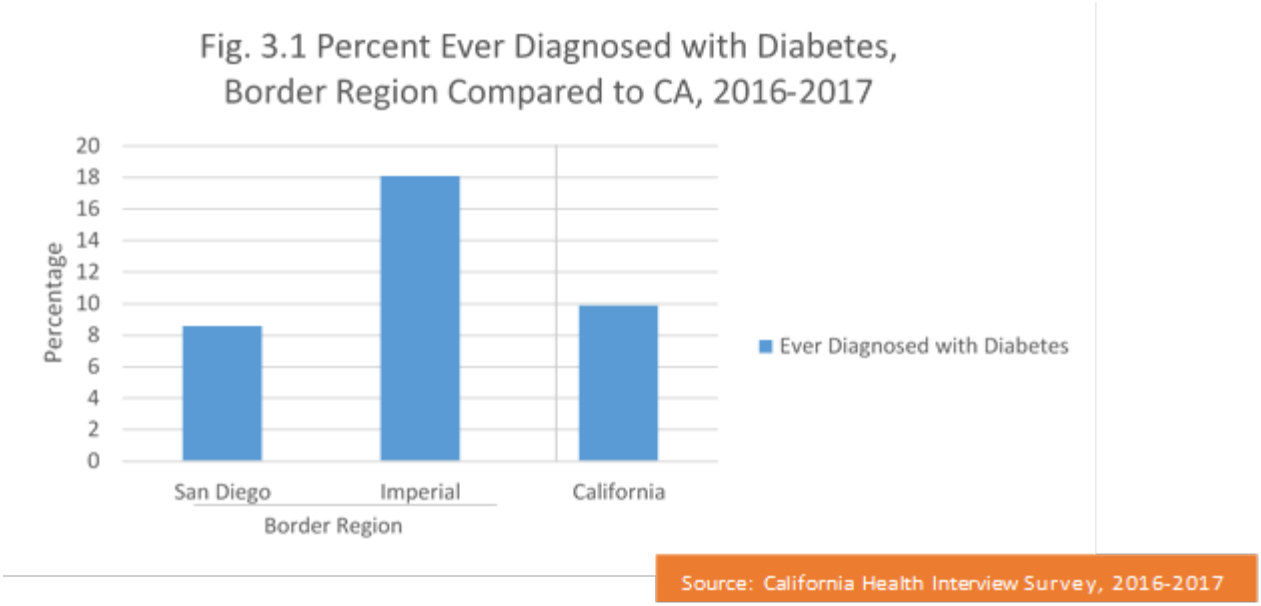
Compared with females, males had a greater proportion of obesity in San Diego County, Imperial County and California. This trend was more apparent in Imperial County, where 44% of males were obese, as compared with 32% of females. San Diego County had a lower rate of obesity than California, for both males and females (Fig. 2.3) (CHIS, 2016-2017).



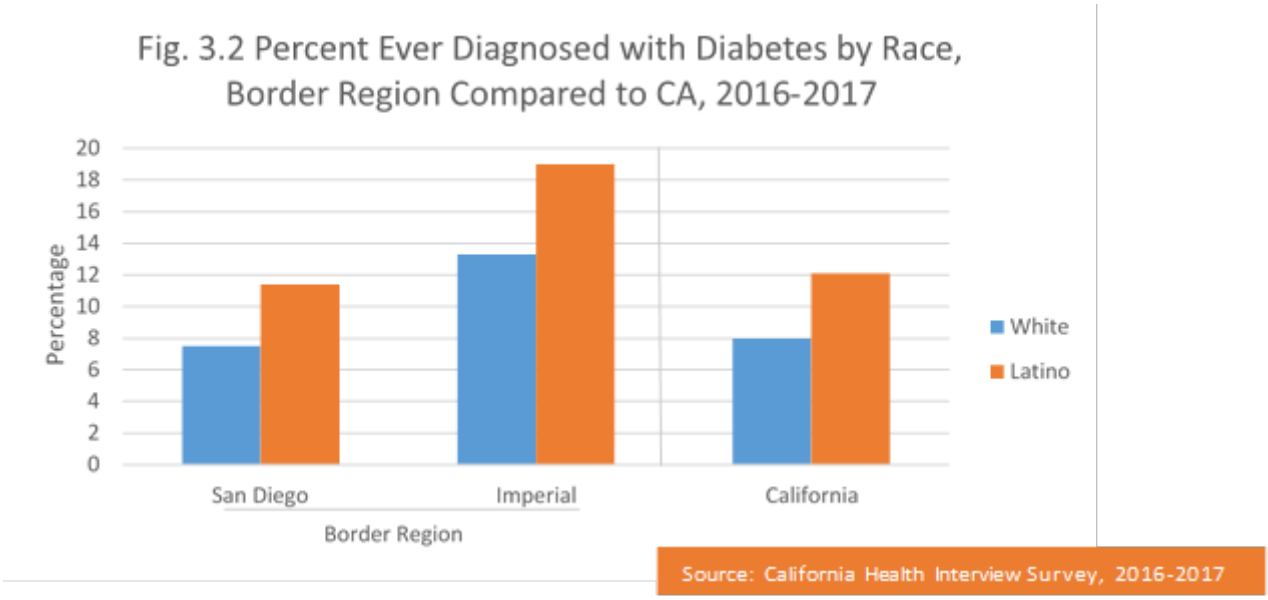
Diabetes

The border counties, particularly Imperial County, have among the highest diabetes rates in the State of California. Risk factors for type 2 diabetes, such as obesity and a lack of physical activity are preventable and should be the focus of diabetes primary prevention programs. In the U.S. and California, Hispanic/Latino individuals, African- Americans, American-Indians and Pacific Islanders have a higher risk of type 2 diabetes (CDC, 2017).

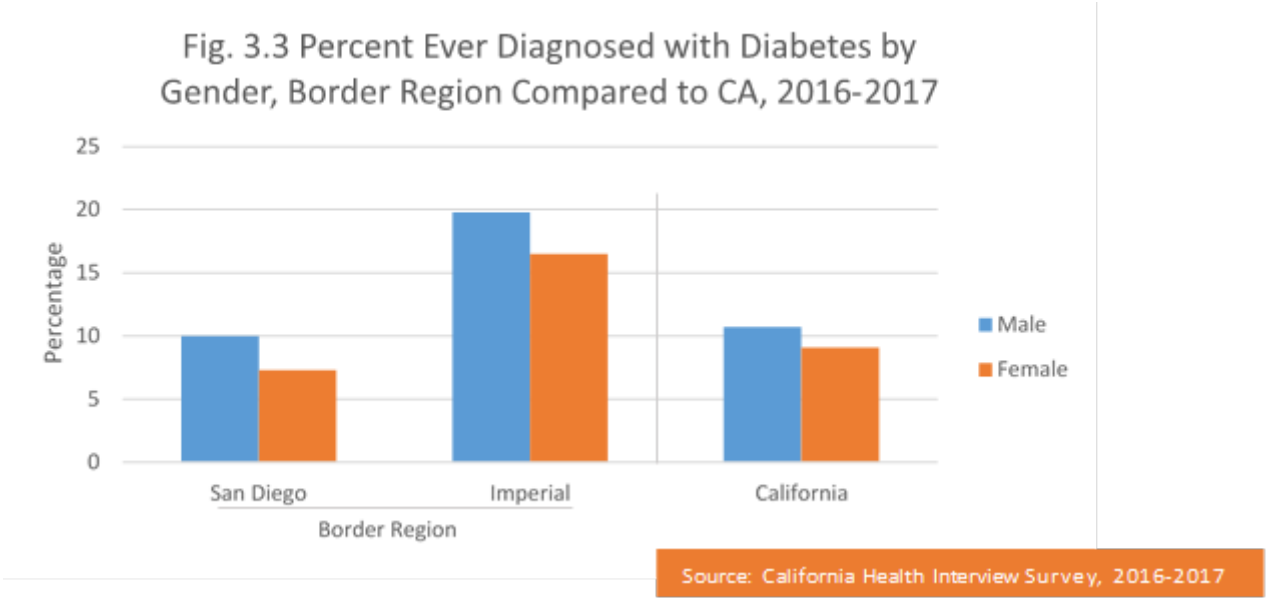
According to CHIS data from 2016-2017, 9% of adults in San Diego County had ever been diagnosed with diabetes, as compared with 18% in Imperial County and 10% in California (CHIS, 2016-2017) (Fig. 3.1).



Differences in race/ethnicity existed among adults diagnosed with diabetes in the California border region. The Latino population had a consistently higher rate of diabetes than the White population. In San Diego County, 11% of Latinos and 8% of Whites had ever been diagnosed with diabetes. Meanwhile in Imperial County, 19% of Latinos and 13% of Whites had ever been diagnosed with diabetes. The same was true for California, where 12% of Latinos and 8% Whites had ever been diagnosed with diabetes (Fig. 3.2) (CHIS, 2016-2017)



Compared with females, a higher percent of males had been diagnosed with diabetes in the border region and in California. In San Diego County, 10% of males had ever been diagnosed with diabetes, as compared with 7% of females. In Imperial County, 20% of males had ever been diagnosed with diabetes, as compared with 17% of females. In California statewide, 11% of males had ever been diagnosed, as compared with 9% of females (Fig. 3.3) (CHIS, 2016-2017).

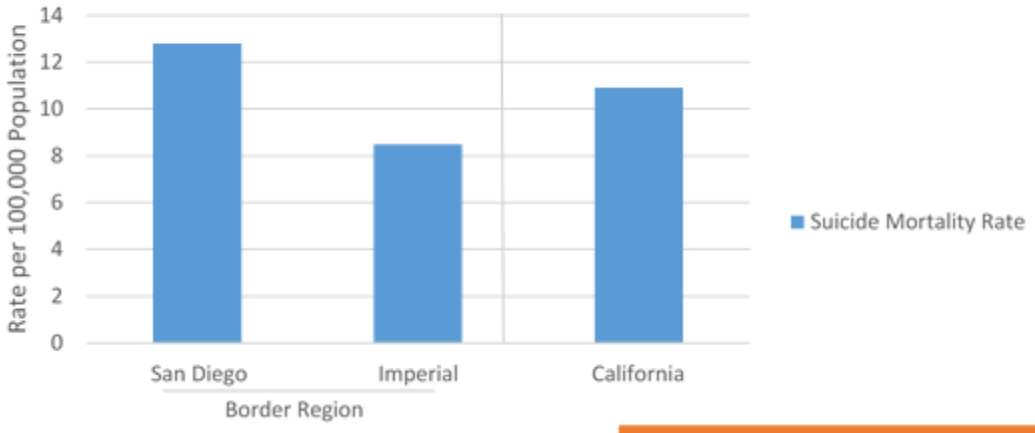


Mental Health & Suicide

Mental health is an important part of overall health and well-being. Suicide is a serious but preventable public health problem that can have lasting harmful effects on individuals, families and communities (CDC, 2019). In California, the rate of suicide was 10.9 suicides per 100,000 population in 2016; this represents a 14.8% increase from the rate in 1999. (CDC, 2019).

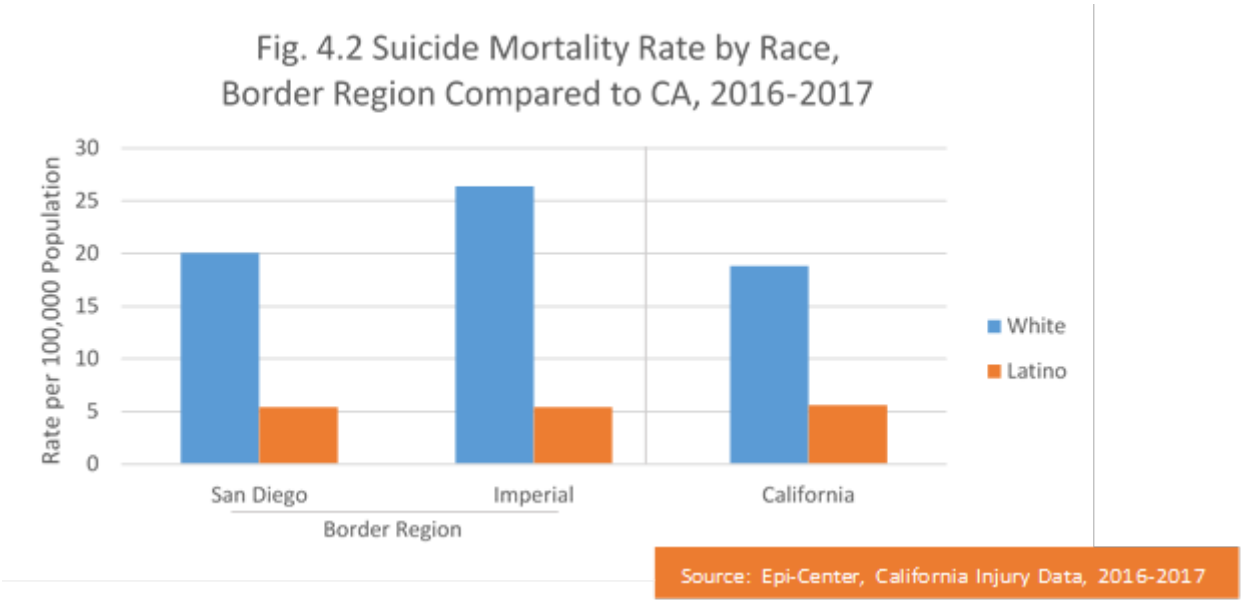
According to EpiCenter-California Injury Data, the suicide mortality rate in San Diego County was 13 per 100,000 population (844 cases). Meanwhile, the suicide rate in Imperial County was 9 suicides per 100,000 population (32 cases), as compared with the rate in California of 11 per 100,000 population (8,600 cases) (Fig. 4.1) (CDPH, 2019). Imperial County has achieved the Healthy People 2020 goal of a rate below 10 suicides per 100,000 population (Healthy People 2020, 2019).

Fig. 4.1 Suicide Mortality Rate, Border Region Compared to CA, 2016-2017

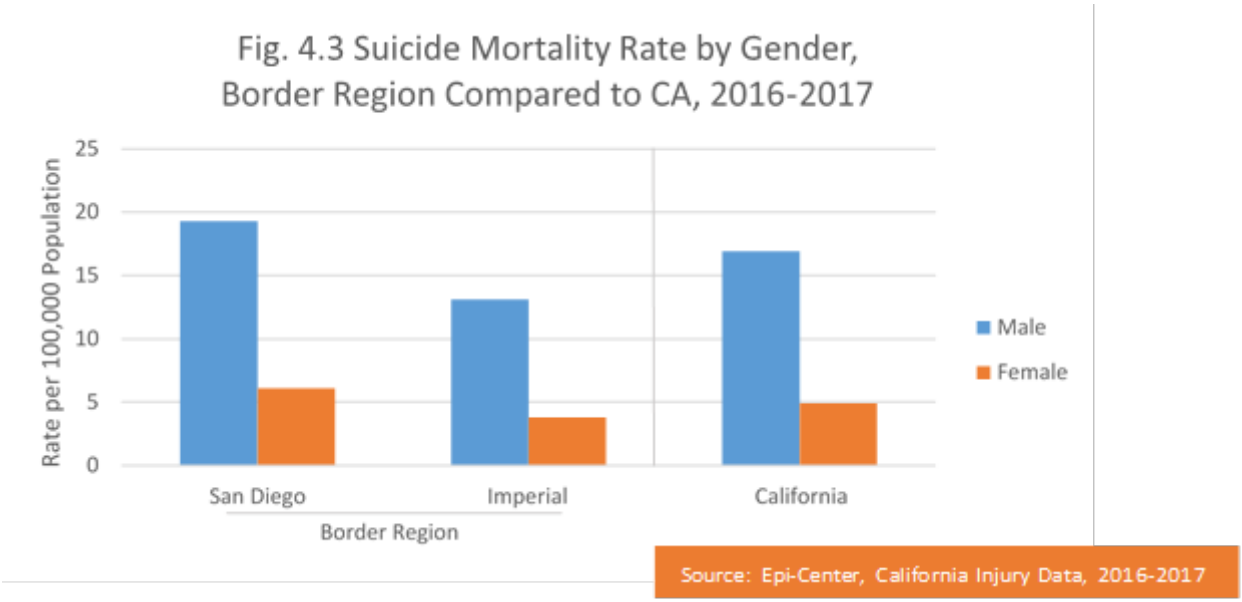


Source: Epi-Center, California Injury Data, 2016-2017

Differences in race/ethnicity exist among adults who committed suicide in the California border region. The White population had a consistently higher rate of suicide than the Latino population. In San Diego County, Latinos had a rate of five per 100,000 (123 cases), as compared with Whites, with a rate of 20 per 100,000 (613 cases). In Imperial County, the Latino population had a rate of 5 per 100,000 (17 cases), and the White population had a rate of 26 per 100,000 (11 cases). In California, Latinos had a rate of 6 per 100,000 (1,748 cases), and Whites had a rate of 19 per 100,000 (5,625 cases) (Fig. 4.2) (CDPH, 2019).



Compared with females, males had a greater proportion of suicide in the border region and in California. In San Diego County, 19 per 100,000 males (643 cases) committed suicide, as compared with 6 per 100,000 females (201 cases). In Imperial County, 13 per 100,000 males (25 cases) committed suicide, as compared with 4 per 100,000 females (seven cases). California had similar rates: 17 per 100,000 males (6,643 cases) committed suicide, as compared with 5 per 100,000 females (1,957 cases) (Fig. 4.3) (CDPH, 2019).

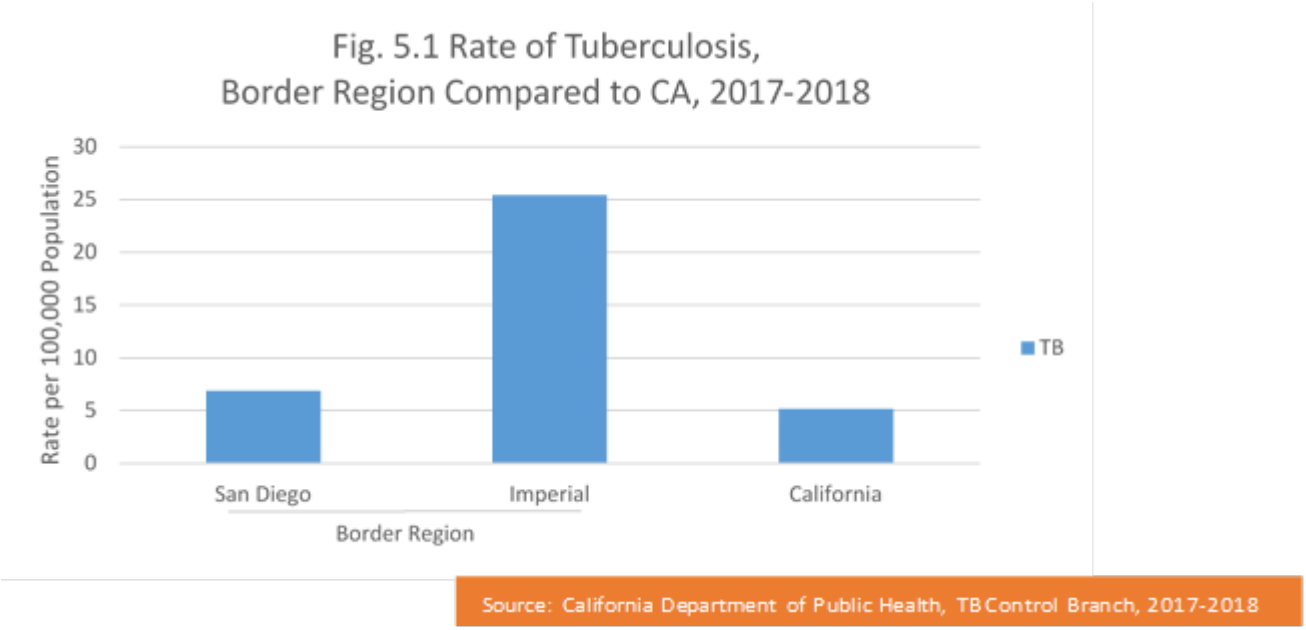


Tuberculosis

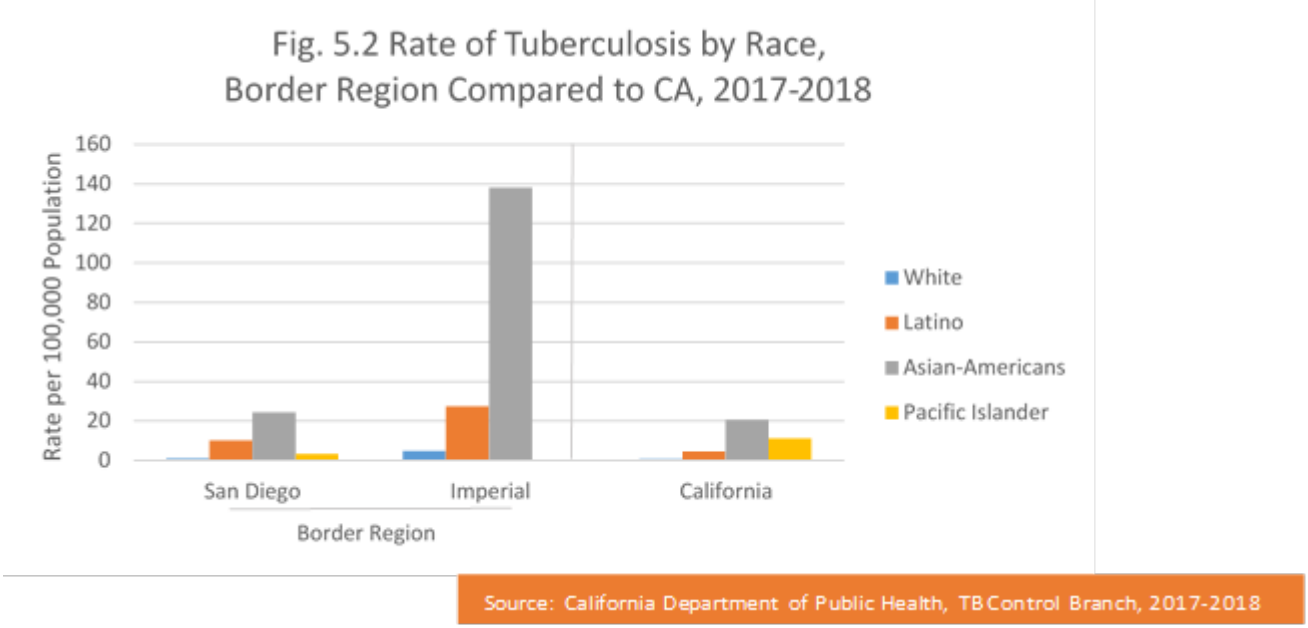
Tuberculosis (TB) continues to cause illness and death in California and the California border region. During 2017-2018, the TB case rate in California was 5 per 100,000 (4,150 cases). California's case rate has remained consistently higher than the national case rate (3 per 100,000 in 2018), and California has reported the most TB cases in the United States. The decline in TB cases has slowed in recent years. Between the peak of the epidemic in 1992 and 2000, the number of cases fell by an average of 6% each year; between 2000 and 2013, the rates declined 4% each year; between 2013 and 2017 there was only a 1% average decrease in cases each year. In fact, between 2017 and 2018, there was a 2% increase in TB cases. During 2014-2016, for which recent complete outcome data are available, 10% (625 cases) of individuals with TB in California died from TB.

CDPH is committed to preventing, controlling and eventually eliminating TB in California. Progress toward TB elimination in California is likely to be hastened by strong collaborations with national and international health partners.

California border counties are substantial contributors to the state's TB burden, contributing 14% of the reported TB cases during 2017-2018. During this time, Imperial County reported a case rate of 25 per 100,000 (96 cases), the highest rate among all California counties. San Diego County reported a case rate of 7 per 100,000 (463 cases). Both counties reported a higher rate than that of California (Fig. 5.1).



Differences in race/ethnicity existed among cases of TB in the California border region. In San Diego County, Asian-Americans had the highest rate of infection with a rate of 24 per 100,000 population, as compared with Latinos, with a rate of 10 per 100,000 population, and Whites, with a rate of 1 per 100,000 population. The same racial pattern was mirrored in Imperial County with Asian-Americans having the highest rate, 138 per 100,000 population, as compared with Latino, with a rate of 27 per 100,000 population, and Whites, with a rate of 5 per 100,000 population. The race disparity persisted on the state level with Asian-Americans having the highest rate, 21 per 100,000 population, as compared with Latinos, with a rate of 5 per 100,000 population, and Whites, with a rate of 1 per 100,000 population.



Most individuals with TB in California during 2017-2018 were born outside the United States (82%). The most common birth country was Mexico, which accounted for 21% (871 cases) of all California TB cases. Border counties reported a higher rate of individuals with TB born in Mexico than the state average: 60% (58 cases) of all Imperial County TB cases and 28% (128 cases) of all San Diego County TB cases.

Mycobacterium bovis Surveillance

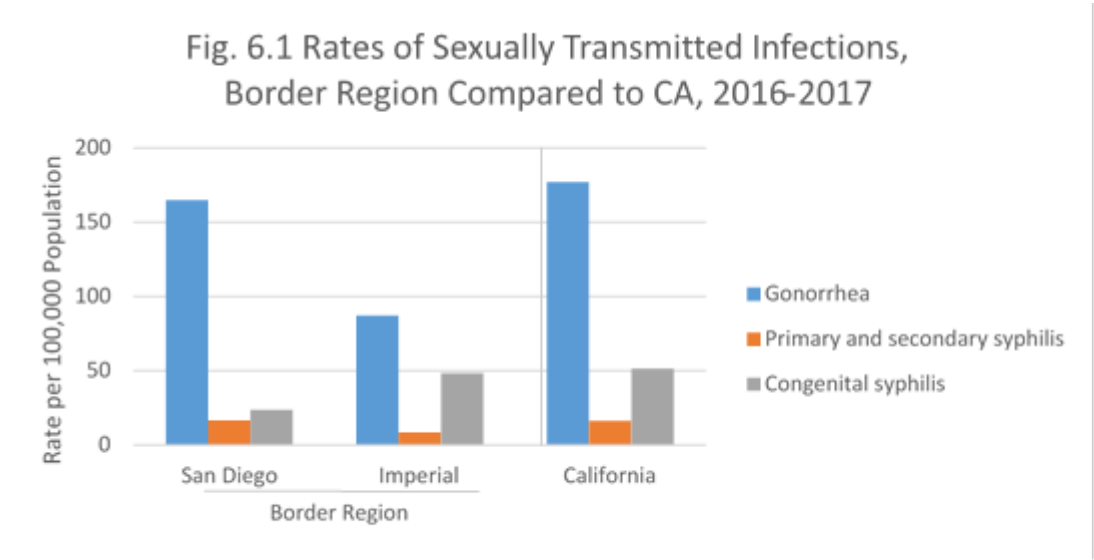
Mycobacterium bovis (*M. bovis*) is part of the *Mycobacterium tuberculosis* complex and causes TB disease in animals and humans, significantly contributing to TB morbidity in children. Transmission occurs through consumption of contaminated, unpasteurized dairy products. There were 90 cases (3% of genotyped cases) with genotyping results indicating *M. bovis* infection in California during 2016-2017, the most recent years for which complete data are avail- able. During this time, approximately one-third of *M. bovis* cases occurred in the border region; San Diego County reported 29% of all *M. bovis* cases, the highest rate in California, and Imperial reported an additional two cases. Another 28% were reported in Los Angeles County. Nearly half the *M. bovis* cases reported consumption of raw dairy products made outside the U.S., predominantly originating in Mexico.

Sexually Transmitted Infections

Sexually transmitted infections (STIs) are the most commonly reported communicable diseases in California and in the California border region. In the past five years, the rates for STI have increased in the United States and California, as well as the California border region. STIs can generally be treated and cured if diagnosed early; however, STIs often do not cause symptoms. Consequently, there is a high probability of individuals not seeking proper treatment, thus potentially leading to serious health complications. Moreover, because STIs are often asymptomatic, and therefore their identification is dependent on screening, the true burden of disease is many times greater than the actual number of reported cases (Satterwhite et al., 2013). Furthermore, some STI cases have demonstrated resistance to antibiotics, and the amount of antibiotic-resistant STI cases is expected to continue to increase. This report will discuss the burden of two reportable bacterial STIs in Imperial and San Diego counties: gonorrhea and syphilis (primary, secondary, and congenital), which are among the most commonly reported STIs in California and the U.S.

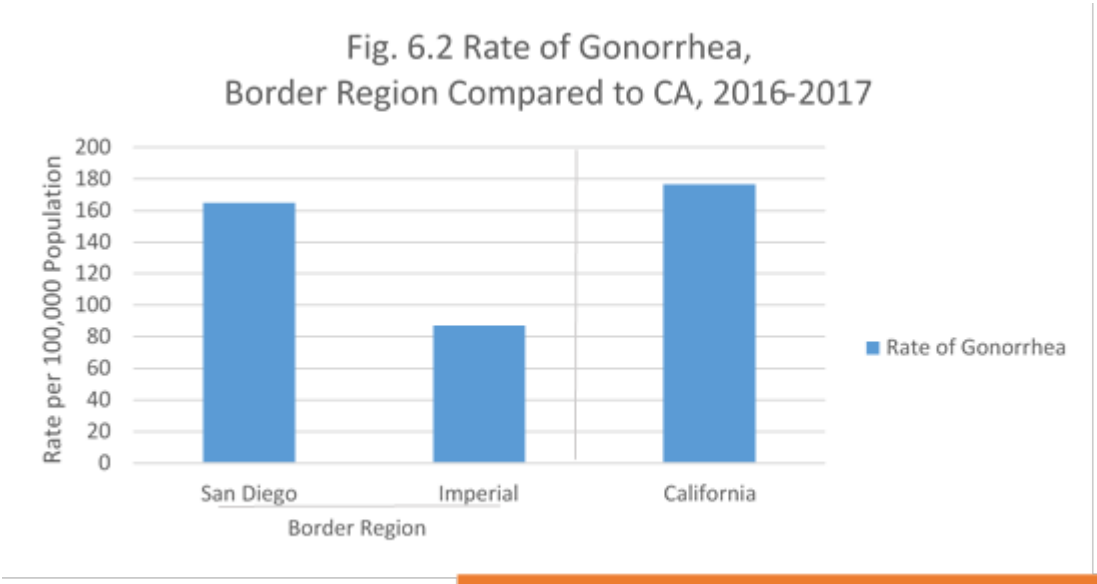
Combined data of STIs from 2016-2017 are displayed in Fig. 6.1. We examine each category according to the number of cases and rates in the following graphs (Fig. 6.1) (CHIS, 2016-2017).

Fig. 6.1 Rates of Sexually Transmitted Infections, Border Region Compared to CA, 2016-2017



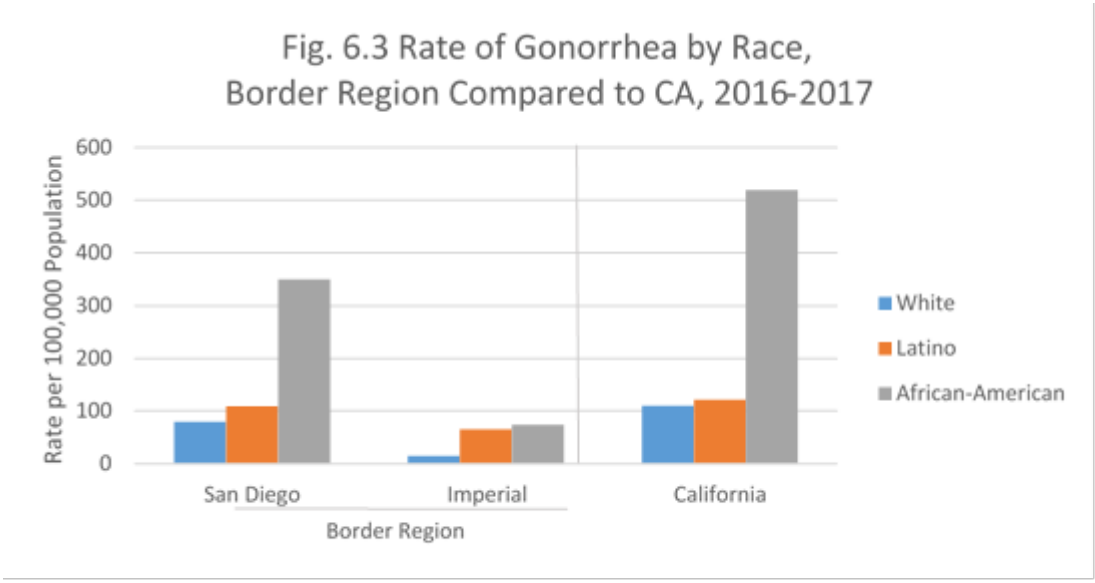
Source: California Department of Public Health, STD Control Branch, 2016-2017

In San Diego County, the rate for gonorrhea was 165 per 100,000 (10,947 cases); meanwhile, in Imperial County, the rate was 87 per 100,000 (327 cases), as compared with California, which had a rate of 177 per 100,000 (140,005 cases) (Fig. 6.2) (CDPH, 2019). Both the California border region and California have reached the Healthy People 2020 goal of fewer than 252 new cases per 100,000 among individuals 15-44 years of age (Fig. 6.2) (Healthy People 2020, 2019).



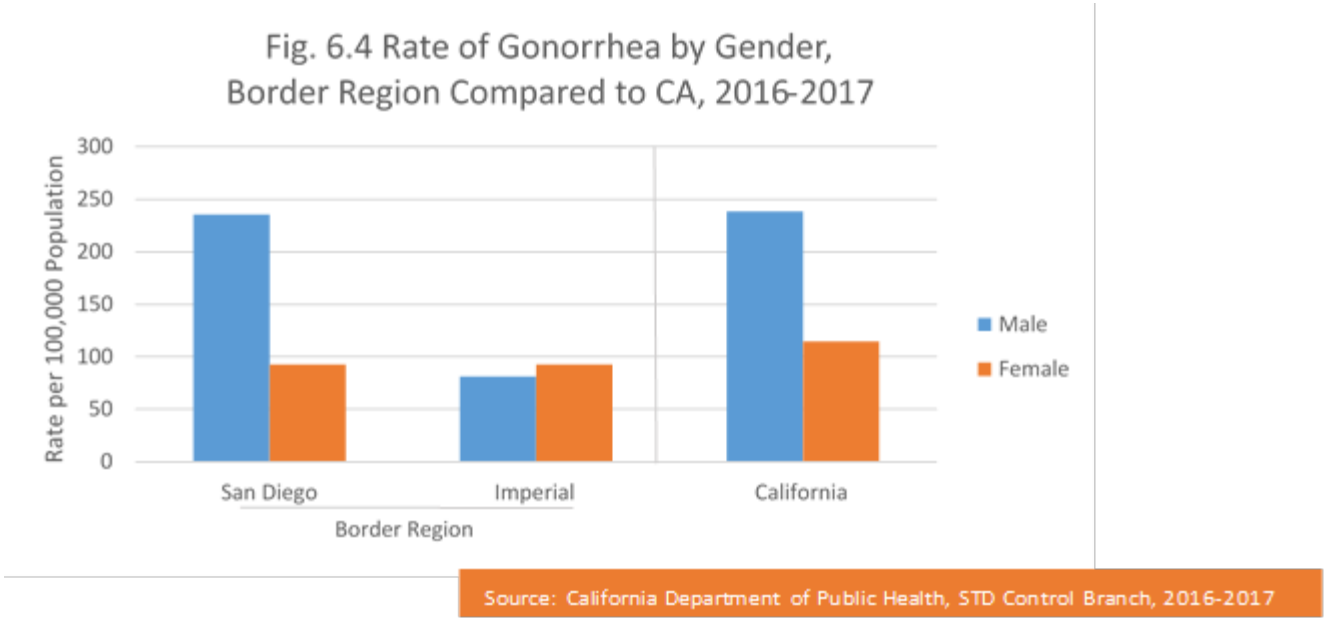
Source: California Department of Public Health, STD Control Branch, 2016-2017

In 2016-2017, the African-American population in San Diego County, Imperial County and California had higher rates of gonorrhea than the White and Latino populations. In San Diego County, African-Americans had a rate of 349 per 100,000 (1,108 cases), and in Imperial County, the rate was 74 per 100,000 (seven cases), as compared with California, which had a rate of 519 per 100,000 (23,640 cases) (Fig. 6.3) (CDPH, 2019).

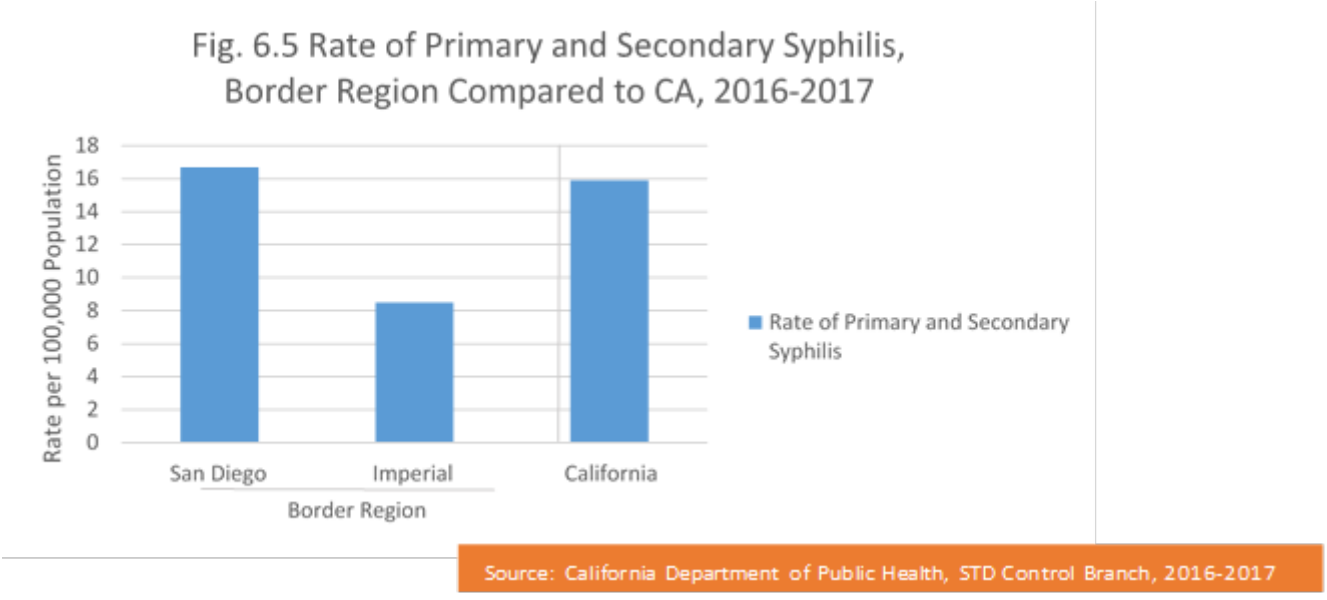


Source: California Department of Public Health, STD Control Branch, 2016-2017

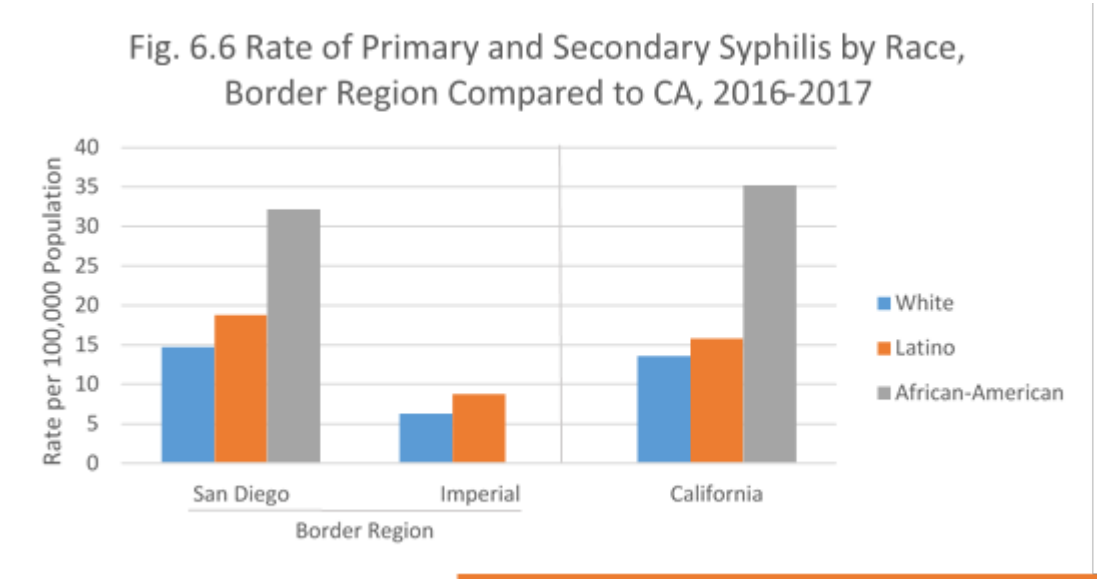
Compared with females during 2016-2017, males had a higher rate of infection in San Diego County and California, but not in Imperial County. In San Diego County, the rate was 236 per 100,000 (7,866 cases) among males and 93 per 100,000 (3,056 cases) among females; in Imperial County, the rate was 81 per 100,000 (155 cases) among males and 93 per 100,000 (172 cases) among females. In California, the rate was 238 per 100,000 (94,020 cases) among males and 114 per 100,000 (45,490 cases) among females (Fig. 6.4) (CDPH, 2019).



During 2016-2017, the rate of primary and secondary syphilis in San Diego County was 17 per 100,000 (1,111 cases). Imperial County had a rate of 9 per 100,000 (32 cases), and California had a rate of 16 per 100,000 (12,560 cases) (Fig 6.5) (CDPH, 2019).

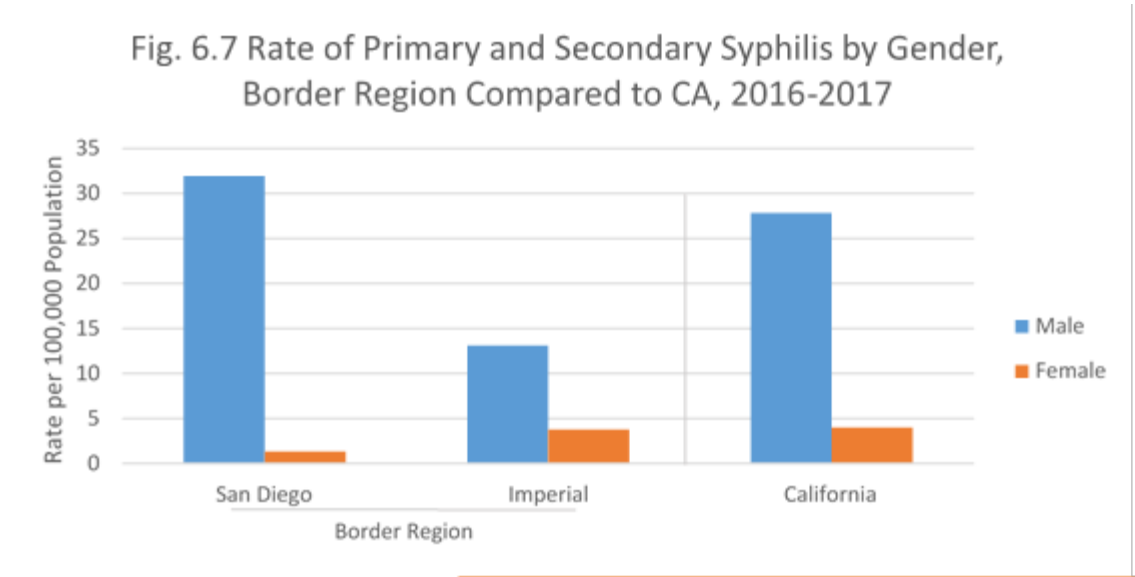


African-Americans in San Diego County, Imperial County and California had higher rates of primary and secondary syphilis than those among the White and Latino populations. In 2016-2017, in San Diego County, African- Americans had a rate of 32 per 100,000 (102 cases), Latinos had a rate of 19 per 100,000 (425 cases), and Whites had a rate of 15 per 100,000 (453 cases). In Imperial County, the rate for Latinos was 9 per 100,000 (27 cases), and that for Whites was 6 per 100,000. There were no cases among African-Americans in Imperial County. As compared with the rate in California of 35 per 100,000 (1,603 cases) among African-Americans, the rate for Latinos was 9 per 100,000, and that for Whites was 6 per 100,000 (Fig. 6.6) (CDPH, 2019).



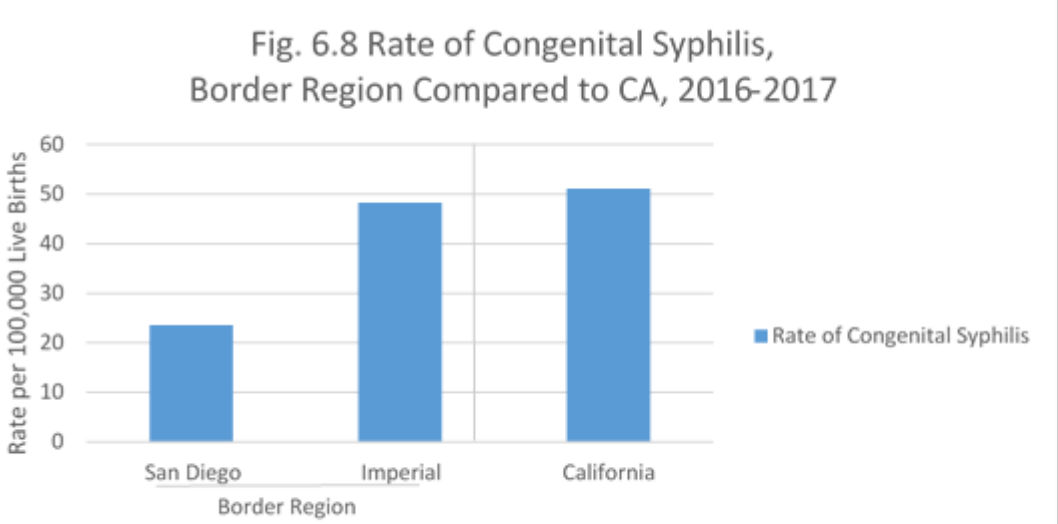
Source: California Department of Public Health, STD Control Branch, 2016-2017

During 2016-2017, males had a higher rate than females of primary and secondary syphilis in the border region and California. In San Diego County, the rate among males was 32 per 100,000 (1,064 cases), and the rate among females was 1 per 100,000 (47 cases); in Imperial County the rate among males was 13 per 100,000 (25 cases), and that among females was 4 per 100,000 (seven cases). In California, the rate among males was 28 per 100,000 (10,953 cases) and the rate among females was 4 per 100,000 (1,605 cases) (Fig. 6.7) (CDPH, 2019).



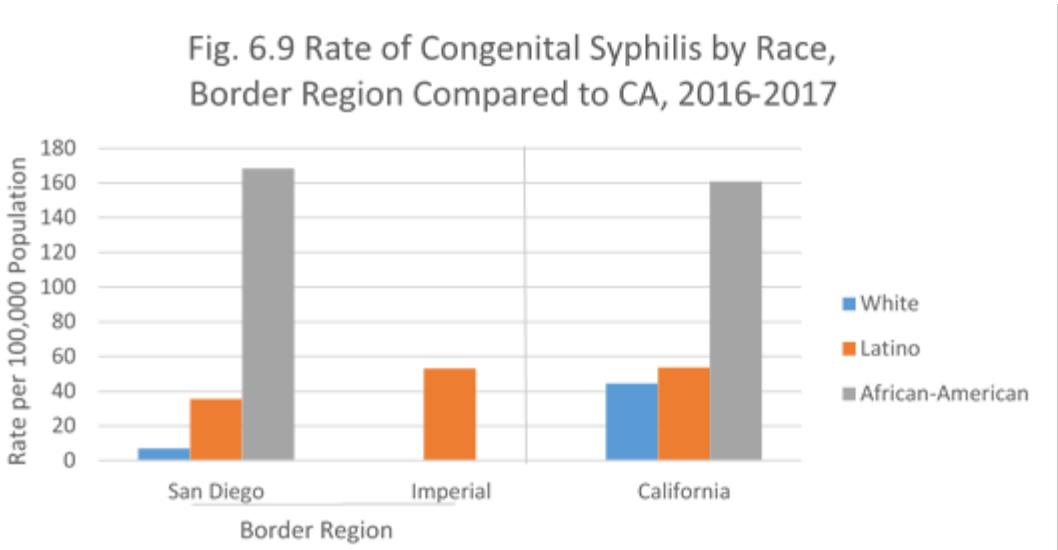
Source: California Department of Public Health, STD Control Branch, 2016-2017

The rates for congenital syphilis in the California border region and in California have been steadily increasing in the past five years. In 2016-2017, the rate was 24 per 100,000 live births (20 cases) in San Diego County. Imperial had a rate of 48 per 100,000 (three cases). California had a rate of 51 per 100,000 (497 cases) (Fig. 6.8) (CDPH, 2019). The rates in San Diego County, Imperial County and California were greater than the Healthy People 2020 goal of fewer than 10 new cases per 100,000 live births for congenital syphilis (Healthy People 2020, 2019).



Source: California Department of Public Health, STD Control Branch, 2016-2017

In a comparison by race/ethnicity, the rates of congenital syphilis were higher among African-Americans than Latinos and Whites in San Diego County and California. There were no cases among African-Americans or Whites in Imperial County (Fig. 6.9) (CDPH, 2019).

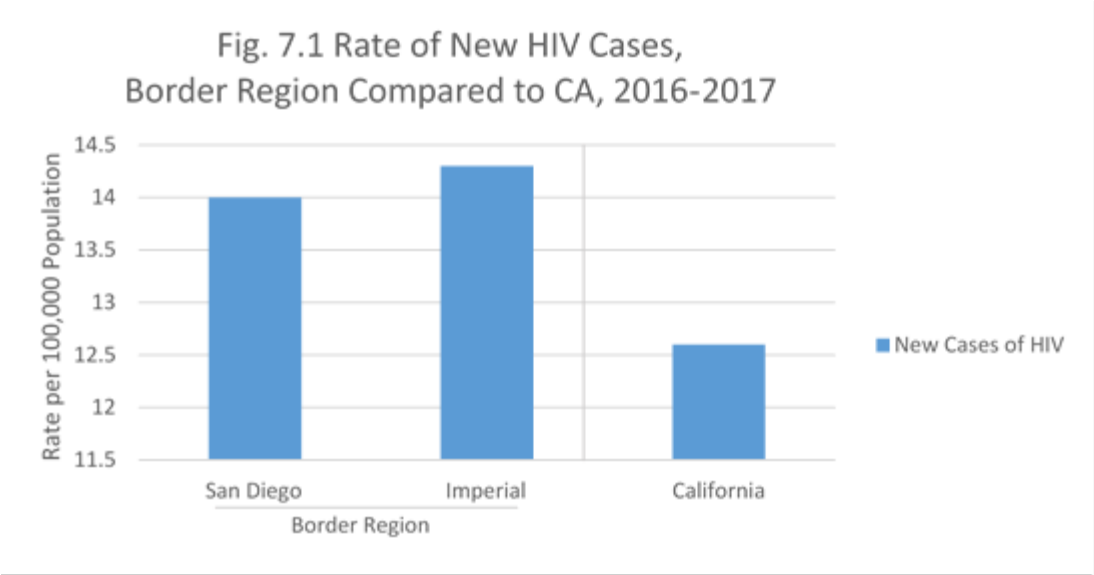


Source: California Department of Public Health, STD Control Branch, 2016-2017

HIV/AIDS

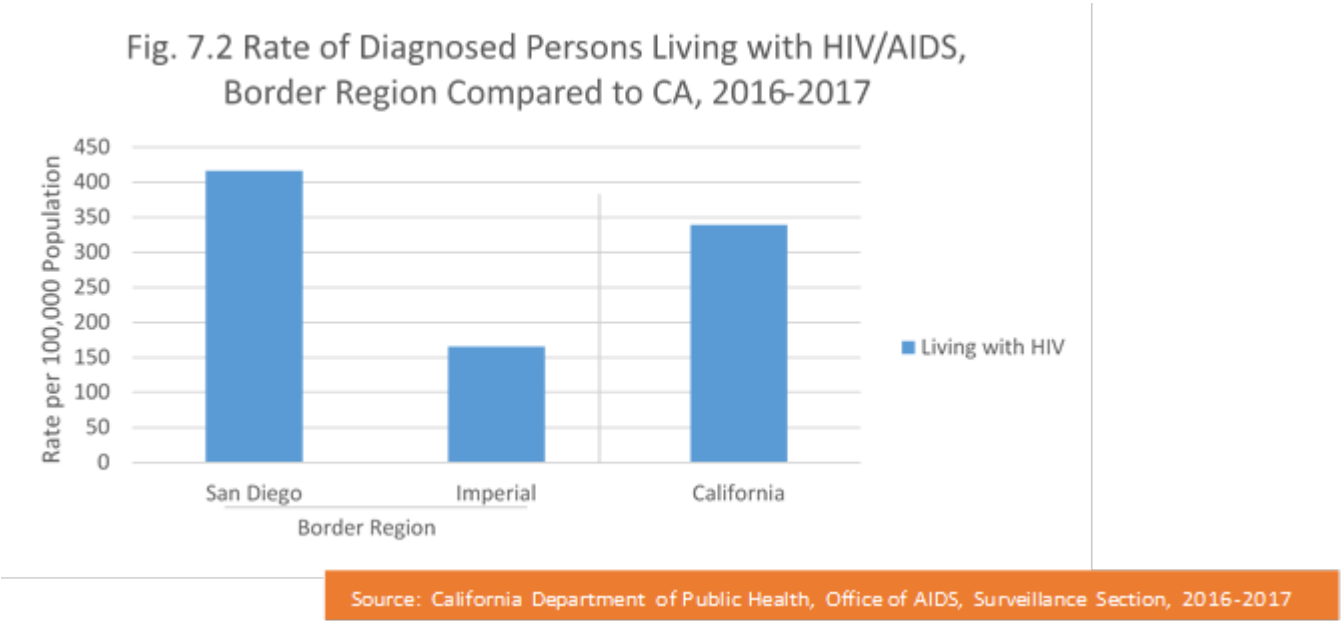
During the 2016-2017 period, the border counties had a higher rate of new cases than California. Moreover, the border region had many affected individuals who crossed the border repeatedly to seek treatment or visit family or relatives on either side of the border. In this chapter, we present two types of data: new cases of HIV for the 2016- 2017 period, and cases of previously diagnosed individuals living with HIV.

Combined data from 2016-2017 indicate that the rate for new cases of HIV was 14 per 100,000 (927 cases) among adults in San Diego County; meanwhile, in Imperial County, the rate was 14 per 100,000 (54 cases), as compared with the California rate of 13 per 100,000 (9,973 cases) (Fig. 7.1) (CDPH, 2019).

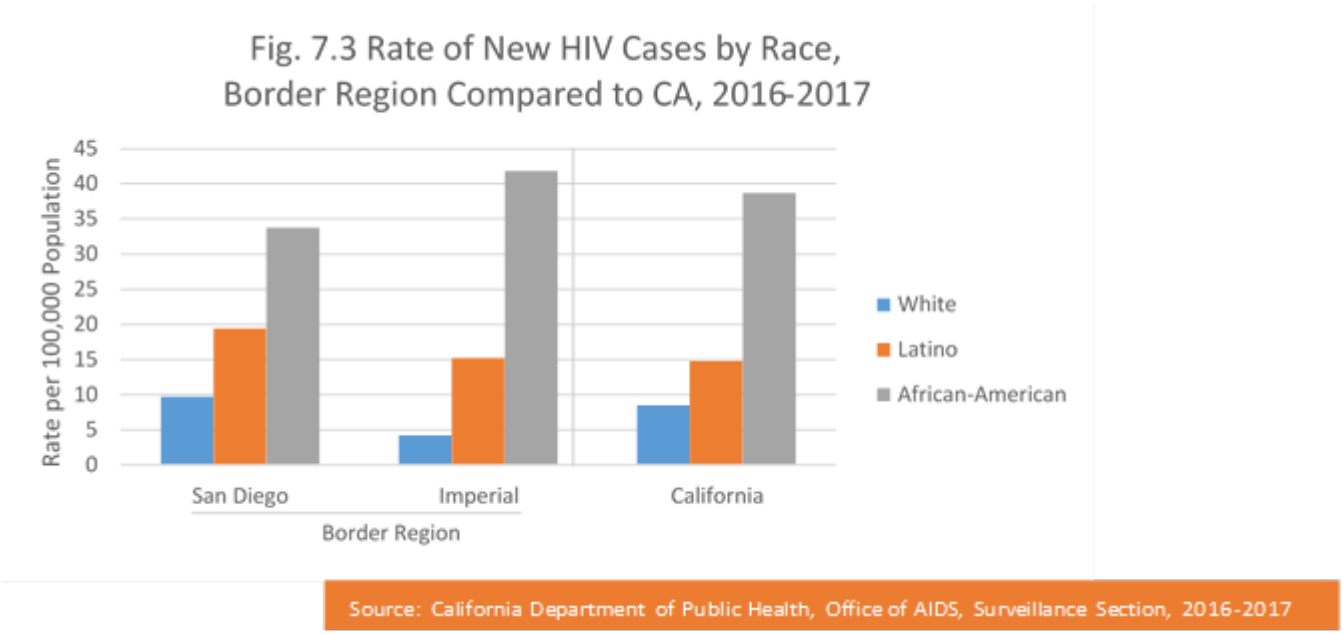


Source: California Department of Public Health, Office of AIDS, Surveillance Section, 2016-2017

The rate of cases living with HIV in San Diego County was 417 cases per 100,000 (27,618 cases) and was 166 per 100,000 (624 cases) in Imperial County. California had a rate of 339 cases per 100,000 (267,990 cases) cases living with HIV (Fig. 7.2) (CDPH, 2019).

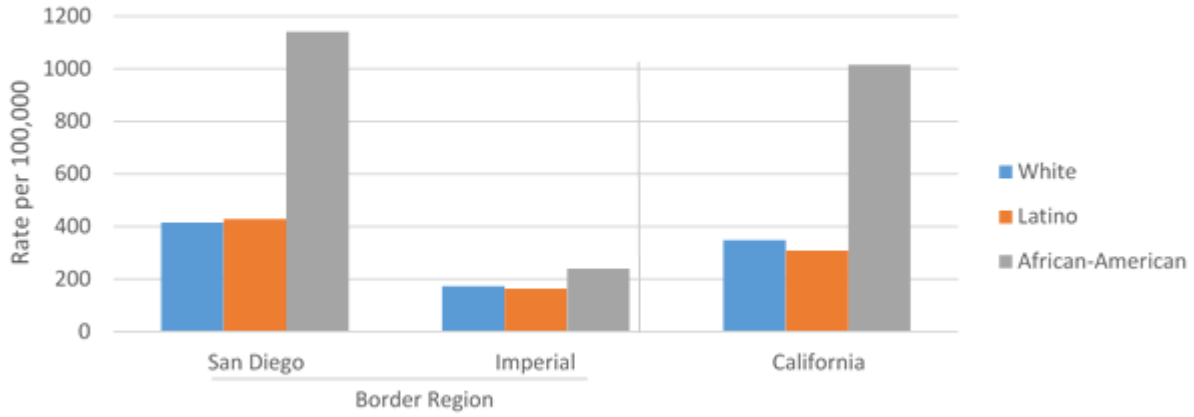


Differences in race/ethnicity existed among new cases of HIV in the California border region. In San Diego County, African-Americans had a rate of 34 per 100,000 (107 cases), as compared with Latinos, with a rate of 19 per 100,000 (436 cases), and Whites, with a rate of 10 per 100,000 (299 cases). This same racial pattern was mirrored in Imperial County, in which the African-American population had a rate of 42 per 100,000 (four cases), as compared with the Latino population, which had a rate of 15 per 100,000 (47 cases), and the White population, which had 4 per 100,000 (two cases). As compared with the findings in California, the race disparity persisted: African-Americans had a rate of 39 per 100,000 (1,759 cases), Latinos had a rate of 15 per 100,000 (4,588 cases), and Whites had a rate of 9 per 100,000 (2,585 cases) (Fig. 7.3) (CHIS, 2016-2017).



Differences in race/ethnicity existed among cases living with HIV in the California border region. In San Diego County, African-Americans had a rate of 1,140 per 100,000 (3,608 cases), as compared with Latinos, with a rate of 429 per 100,000 (9,651 cases), and Whites, with a rate of 416 per 100,000 (12,804 cases). This same racial pattern was mirrored in Imperial County, where African-Americans had a rate of 241 per 100,000 (23 cases), as compared with Latinos, with a rate of 164 per 100,000 (506 cases), and Whites, with a rate of 174 (83 cases) per 100,000. As compared with the findings in California, the race disparities persisted: African-Americans had a rate of 1,016 per 100,000 (46,122 cases), Latinos had a rate of 309 (95,949 cases), and Whites had a rate of 349 per 100,000 (105,841 cases) (Fig. 7.4) (CHIS, 2016-2017).

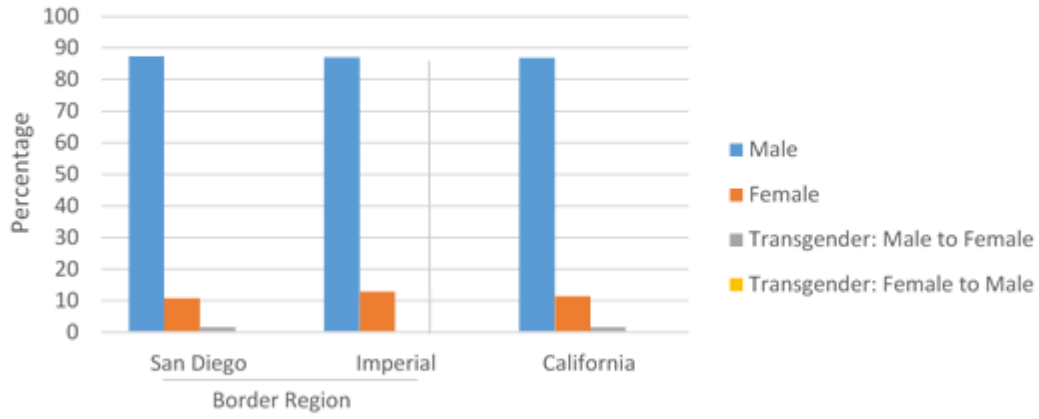
Fig. 7.4 Rate of Diagnosed Persons Living with HIV/AIDS by Race, Border Region Compared to CA, 2016-2017



Source: California Department of Public Health, Office of AIDS, Surveillance Section, 2016-2017

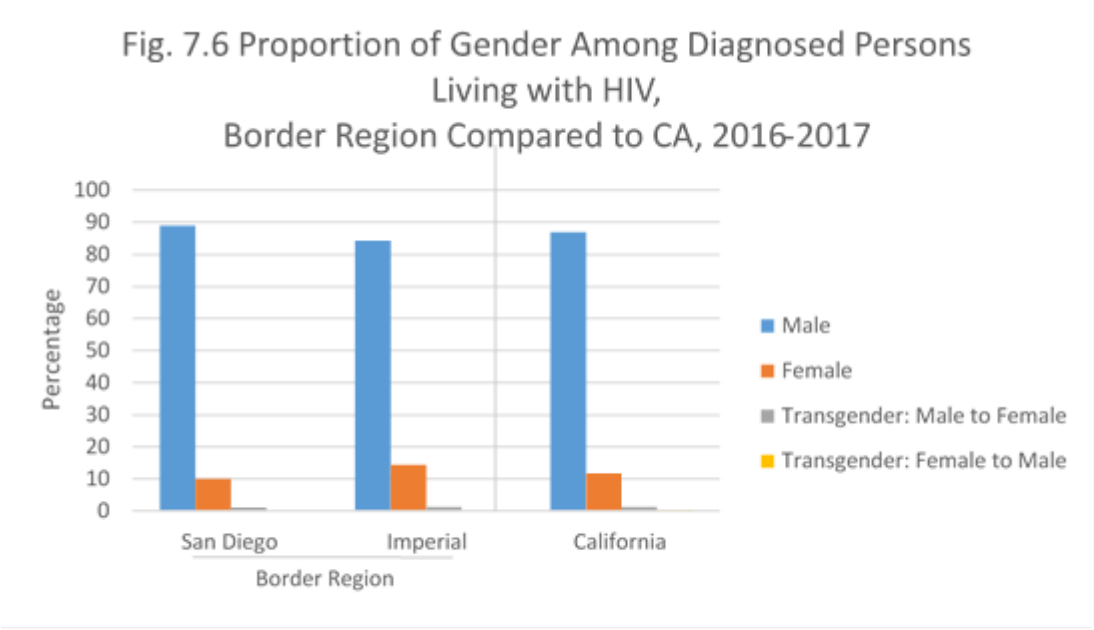
In 2016-2017, males had a greater proportion than females of new cases of HIV in the border region and California. In San Diego County, 87% of new cases were among males (810 cases). In Imperial County, 87% new cases of HIV were among males (47 cases). Compared with the findings for California, the proportion was very similar to that in the border region, where 87% of new cases were among males (8,665 cases). In the border region, there were fewer than 16 new cases of HIV among male to female transgender individuals; in California, there were 161 new cases in the male to female transgender population, both of which represented less than 2% of total cases (Fig. 7.5) (CDPH, 2019).

Fig. 7.5 Proportion of Gender Among New HIV Cases, Border Region Compared to CA, 2016-2017



Source: California Department of Public Health, Office of AIDS, Surveillance Section, 2016-2017

In 2016-2017, males had a greater proportion than females of cases living with HIV in the border region and in California. In San Diego County, 89% of cases living with HIV were male (24,539 cases). In Imperial County, 84% (526 cases) of cases living with HIV were male. As compared with the findings for California, the proportion of males living with HIV was 87% (232,961 cases). For the male to female transgender population, the proportion was less than 2% of all cases for the California border region and California (Fig. 7.6) (CDPH, 2019).



Source: California Department of Public Health, Office of AIDS, Surveillance Section, 2016-2017

Vaccine Preventable Diseases

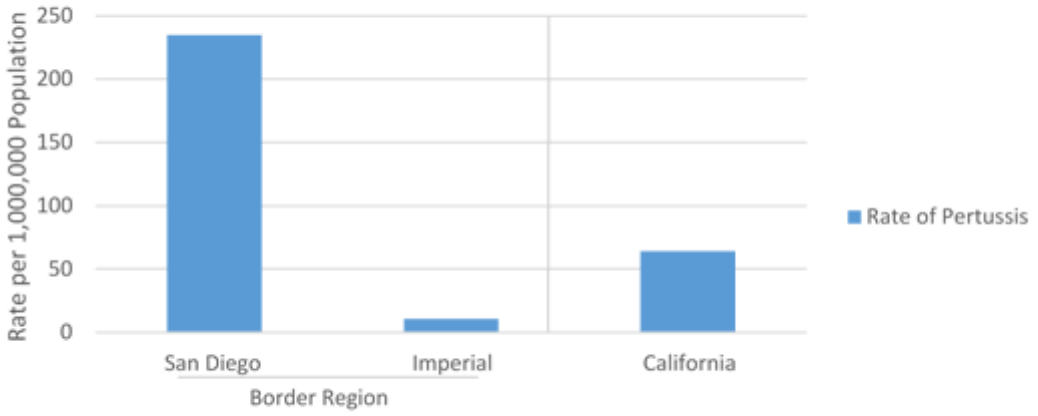
In the California border region, the rate of vaccination is consistently high. Many people cross the California border every day; therefore, maintaining high rates of vaccination is vital to provide better control of communicable diseases. Immunization is one of the best ways to prevent dangerous or even potentially lethal infectious diseases. Vaccines have prevented millions of deaths worldwide. California has experienced two major outbreaks of pertussis within the past nine years (2010 and 2014), which resulted in hospitalizations and infant deaths. In 2014, there was also a large measles outbreak in California associated with a theme park. Measles is also a highly preventable disease but continues to afflict many Americans today. These highly contagious yet preventable diseases are still prevalent in the U.S and continue to remain on the radar of health departments.

Pertussis in the California Border Region

In 2016-2017 in San Diego County, there was a pertussis rate of 235 per 1,000,000* (1,558 cases); in Imperial County, the rate was 11 per 1,000,000 (four cases), as compared with that in California, with 64 per 1,000,000 (5,095 cases) (Fig. 8.1) (CDPH, 2019).

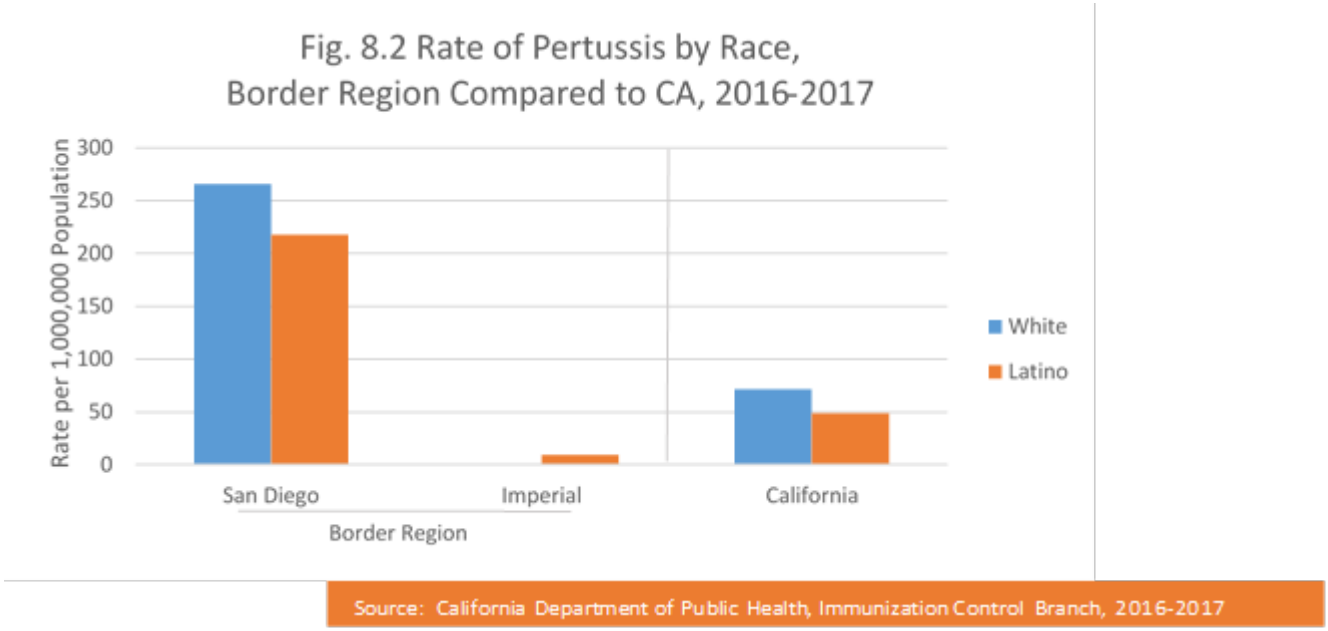
*The rate for vaccine-preventable disease was calculated per 1,000,000 population.

Fig. 8.1 Rate of Pertussis, Border Region Compared to CA, 2016-2017

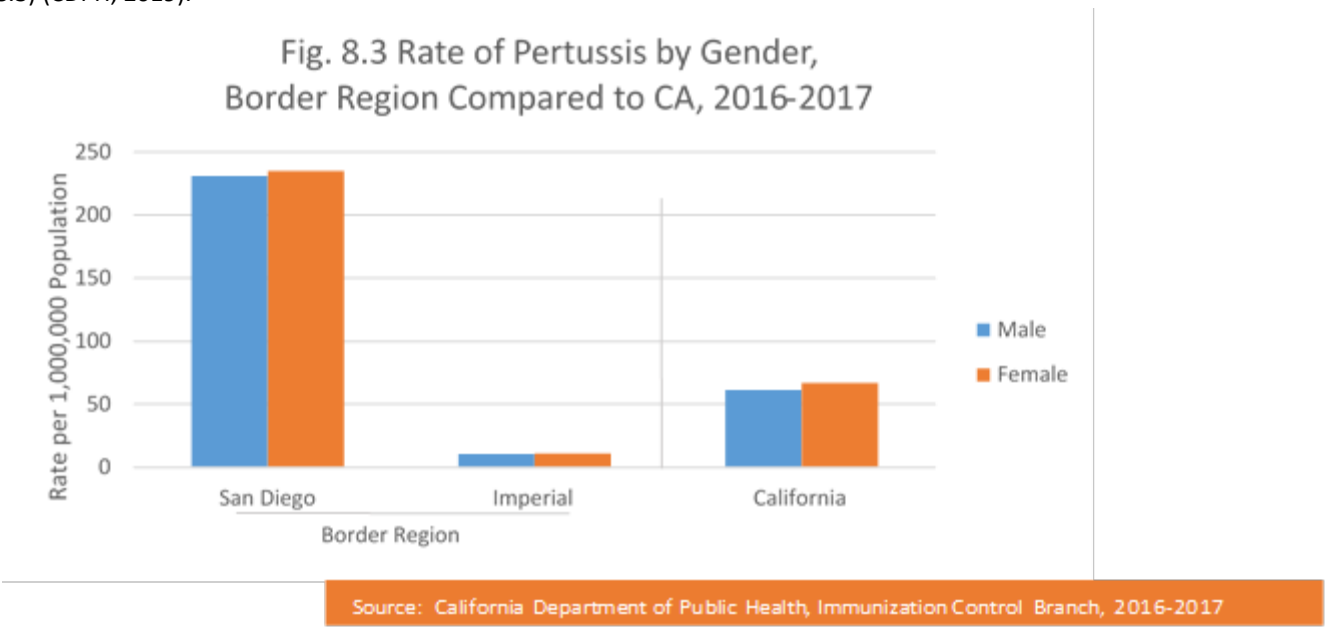


Source: California Department of Public Health, Immunization Control Branch, 2016-2017

A comparison by race/ethnicity indicated that in the border region, in San Diego County, the rate for Whites was 266 per 1,000,000 (818 cases); for Latinos, the rate was 218 per 1,000,000 (492 cases). In Imperial, the rate for Latinos was 10 per 1,000,000 (three cases), and there were no cases among Whites. In comparison with the border region, California statewide had a rate of 72 per 1,000,000 (2,180 cases) among Whites and 49 per 1,000,000 (1,519 cases) among Latinos (Fig. 8.2) (CDPH, 2019).

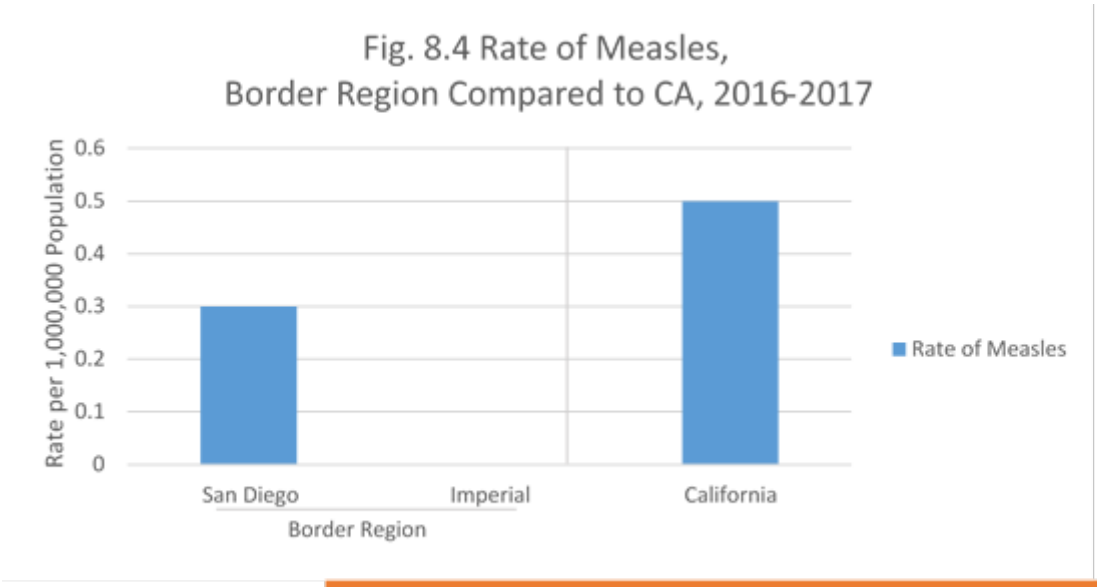


In a comparison by gender, the rates were similar for males and females; in San Diego County, males had a rate of 231 and females had a rate of 235 per 1,000,000 (772 and 776 cases, respectively); in Imperial County, the rate was 11 for males and 11 for females per 1,000,000 (two cases and two cases, respectively). In California, the rate for males was 62, and that for females was 67 per 1,000,000 (2,427 and 2,658 respectively) (Fig. 8.3) (CDPH, 2019).



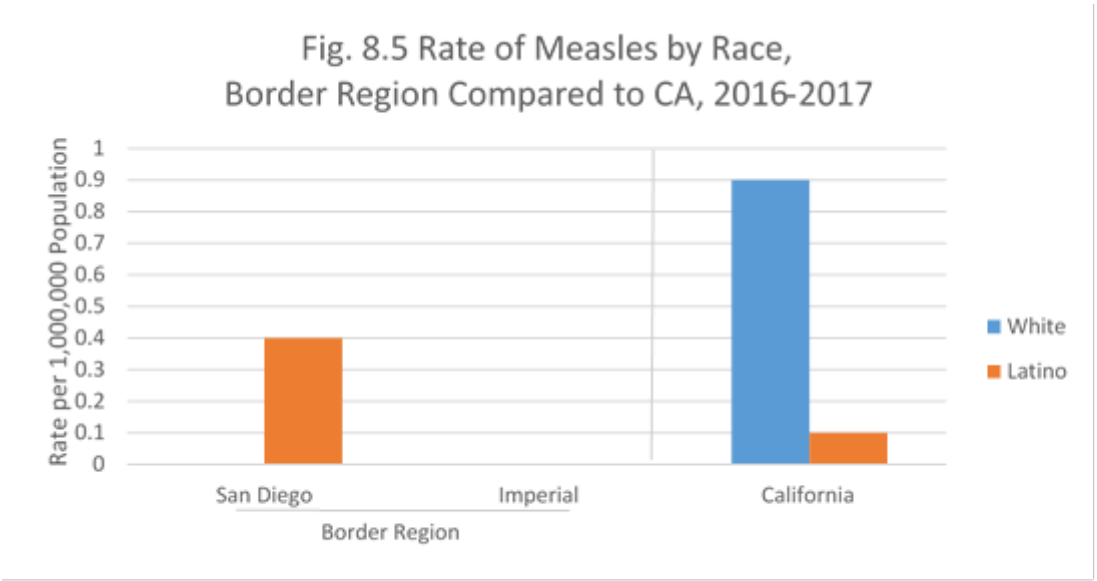
Measles in the California Border Region

During 2016-2017, the measles rate in San Diego County was 0.3 per 1,000,000 population (two cases). There were no cases of measles in Imperial County during the same period; in California, the measles rate was 0.5 per 1,000,000 population (39 cases) (Fig. 8.4) (CDPH, 2019).



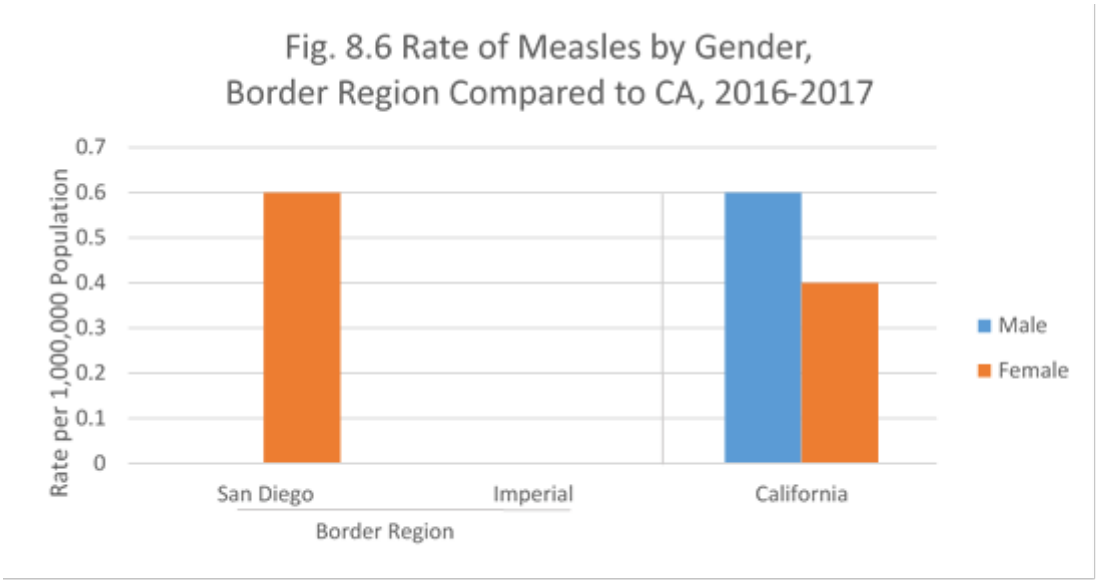
Source: California Department of Public Health, Immunization Control Branch, 2016-2017

A comparison by race/ethnicity indicated that San Diego County had one Latino case with a rate of 0.4 per 1,000,000 population, whereas California had 28 White cases and three Latino cases with rates of 0.9 and 0.1 cases per 1,000,000 populations respectively (Fig. 8.5) (CDPH, 2019).



Source: California Department of Public Health, Immunization Control Branch, 2016-2017

In a comparison by gender, all cases in San Diego County were female (two cases), as compared with California, where there were 22 male cases and 17 female cases. The rate in San Diego County for females was 0.6 cases per 1,000,000 population. The rate of measles in California was 0.4 per 1,000,000 population among females and 0.6 per 1,000,000 population for males. (Fig. 8.6) (CDPH, 2019).



Source: California Department of Public Health, Immunization Control Branch, 2016-2017

Conclusion

This report covered a wide variety of health topics that help illustrate the health status of the California border counties, San Diego and Imperial Counties. It is important to understand the unique challenges faced by these communities in combating obesity, diabetes, mental health issues, TB, STIs, HIV/AIDS and vaccine-preventable diseases.

The population of the California border counties continues to grow. In terms of race/ethnicity, in Imperial County Latinos make up the majority of the population, whereas in San Diego County, they are the largest majority. The Latino population in the California border region is less likely to have graduated from college and is more likely than the White population to live at or below 200% of the Federal Poverty Level. Furthermore, the percent of Imperial County residents living below 200% of the Federal Poverty Level rose from 61% in 2015 to 65% for 2016-2017.

Chronic diseases are important indicators of the health of communities. This report includes data on obesity, diabetes and mental health. As of 2017, 23% of adults in San Diego County and 39% of adults in Imperial County were obese. Whereas both San Diego County and the State of California as a whole met the Healthy People 2020 target for obesity, Imperial County did not meet this target and has one of the highest rates of obesity in the entire state. This finding highlights the importance of health promotion programs and the creation of policies that help create a healthy environment promoting improved health at the California border region.

Similarly, diabetes is a significant and growing challenge in the region. In 2016-2017, 9% of adults in San Diego County and 18% of adults in Imperial County were reported to be diagnosed with diabetes. In the realm of mental health issues, regarding suicide, Latinos have had significantly lower rates of suicide than Whites in the California border region.

Infectious diseases, such as TB, STIs, HIV/AIDS and vaccine-preventable diseases, continue to be a significant challenge in the California border region. In California and border counties, the rate of TB was higher among Latinos than Whites. A large proportion of TB cases in California and the border counties are of Mexican origin. Overall, the rate of tuberculosis remained constant in the State of California at 5 per 100,000 since 2016; however, the percent of cases contributed by the border counties increased from 12.6% in 2016 to 14% for 2017-2018. The border region and Southern California at large experience a higher incidence of *M. bovis* cases than the statewide incidence. CDPH is committed to preventing and controlling TB in California. Continued collaboration with international health partners, especially those in Mexico, as well as public health interventions aimed at reducing TB are essential in effectively controlling TB in California.

The California border counties had 28,242 total individuals living with HIV infection in 2016 and 2017 combined. In addition, the California border counties reported 981 new cases of HIV during the same period. Most of the population living with HIV and the individuals newly diagnosed with HIV in the border region are male. The higher rates for individuals living with HIV and new cases are in the African-American population.

STIs in California increased during recent years. The California border region had an increase in gonorrhea, syphilis and congenital syphilis. Most of the STIs cases in the California border region were among men, and a comparison by race indicated that the highest rates were among African-Americans. In 2015, the rate of gonorrhea was 139 per 100,000 in California whereas the rate for 2016-2017 was reported as 177 per 100,000; this represents a 27% increase in rate. This trend was also observed for the border counties, with a 118% increase in rate for Imperial County and a 46% increase in rate for San Diego County. The rates of congenital syphilis in California also rose by 82%, with a rate of 28 per 100,000 live births in 2015 and 51 per 100,000 in 2016-2017. During 2016-2017, San Diego County had 20 cases of congenital syphilis, and Imperial County had three cases. This disease is preventable with access to prenatal care and timely treatment.

During the period of 2016-2017, there were three cases of measles in San Diego County and no cases in Imperial County. For pertussis, there were 1,558 cases in San Diego County and four cases in Imperial County. The rate of pertussis cases for San Diego in this period was more than three times higher than that in California statewide.

Differences in health outcomes highlight the key health needs of the region and can aid in identifying necessary resources and services for the California border residents. The CDPH, OBBH develops this report to inform and educate the California Legislature on the health needs of the California border region. This information is important to enable a more focused approach to address the needs of the region. Further information about health issues that affect California's border region can be found at the Office of Binational Border Health's website at https://www.cdph.ca.gov/Programs/CID/OBBH/Pages/OBBHome.aspx.

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