2019

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, suicide, tuberculosis (TB), sexually transmitted infections (STIs), HIV/AIDS and select vaccine-preventable diseases in the California border region. This report describes the burden of each of these diseases in the California 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 2019 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). Unemployment data was obtained from the Bureau of Labor Statistics (BLS), the main fact-finding organization in labor economics and statistics of the United States (U.S) government. Race/ethnicity, income, education, obesity and diabetes data were obtained from the 2018 California Health Interview Survey (CHIS). CHIS is the nation's largest state health survey and an 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, TB Control Branch, Sexually Transmitted Diseases Control Branch, Office of AIDS, and Immunization Branch. 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, the Office of Binational Border Health (OBBH) compares 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 refers to the population of Latino/Hispanic ethnicity of any race. The term Latino will be used for race/ethnicity instead of Latino/Hispanic. Therefore, White in this report refers to the White, non-Hispanic population.

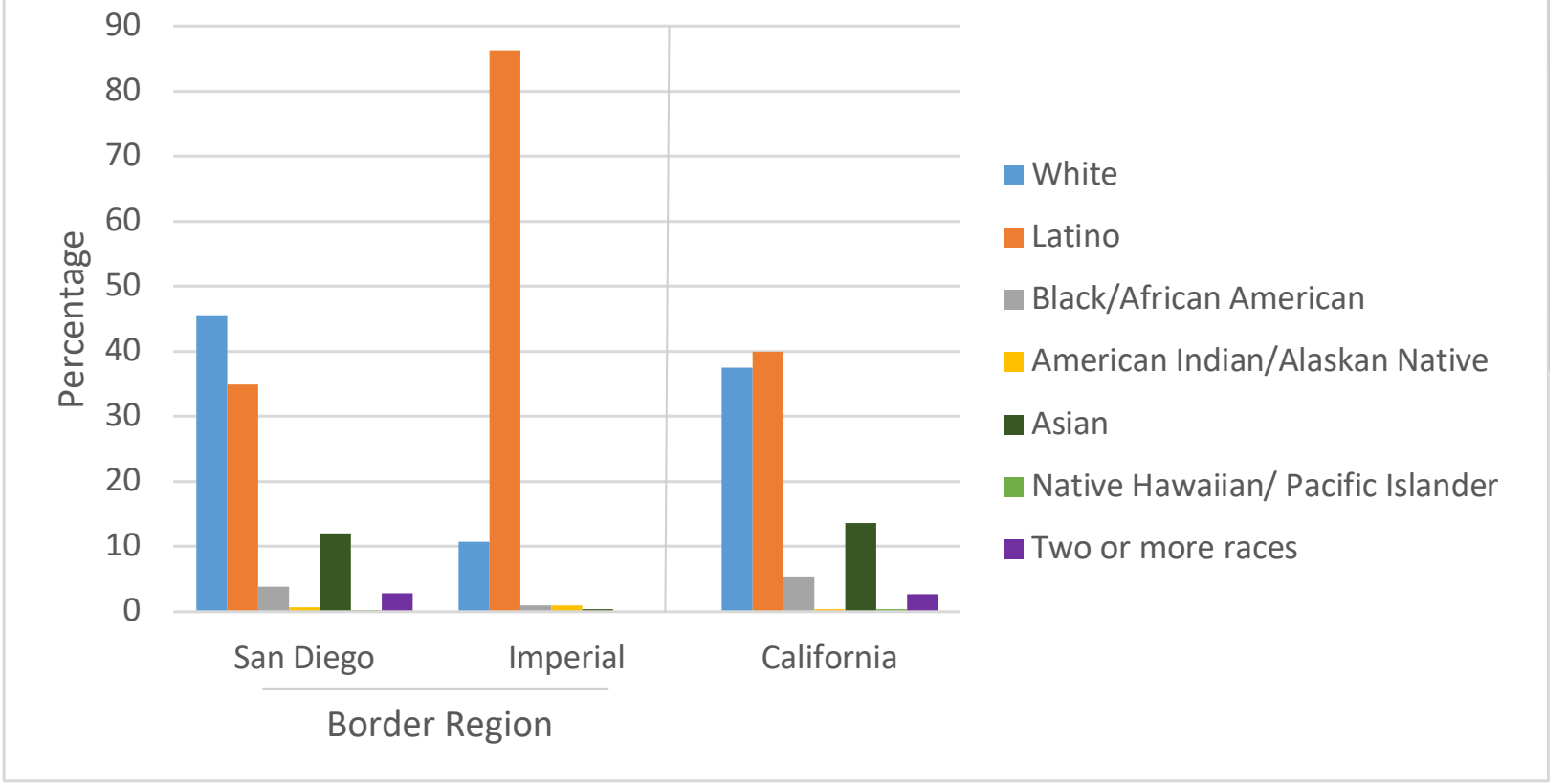
This report, "2019 Border Health Status Report to the Legislature", provides a summary of the current health status in the California border region. The report was prepared by CDPH's OBBH. This report summarizes important health indicators for border communities in California but is not a fully comprehensive 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.

Demographics

The population of the border region of California, composed of San Diego and Imperial counties, has steadily grown from 2015 to 2019. During this period, San Diego County's population increased by 2.6%, and Imperial County's population increased by 3%, both of which are higher than the statewide increase of 2.5%. In 2019, the California DOF projected that there were 3,542,052 individuals living in the border region, most of whom were living in San Diego County (n=3,351,786) and a smaller number of whom were living in Imperial County (n=190,266) (DOF, 2019).

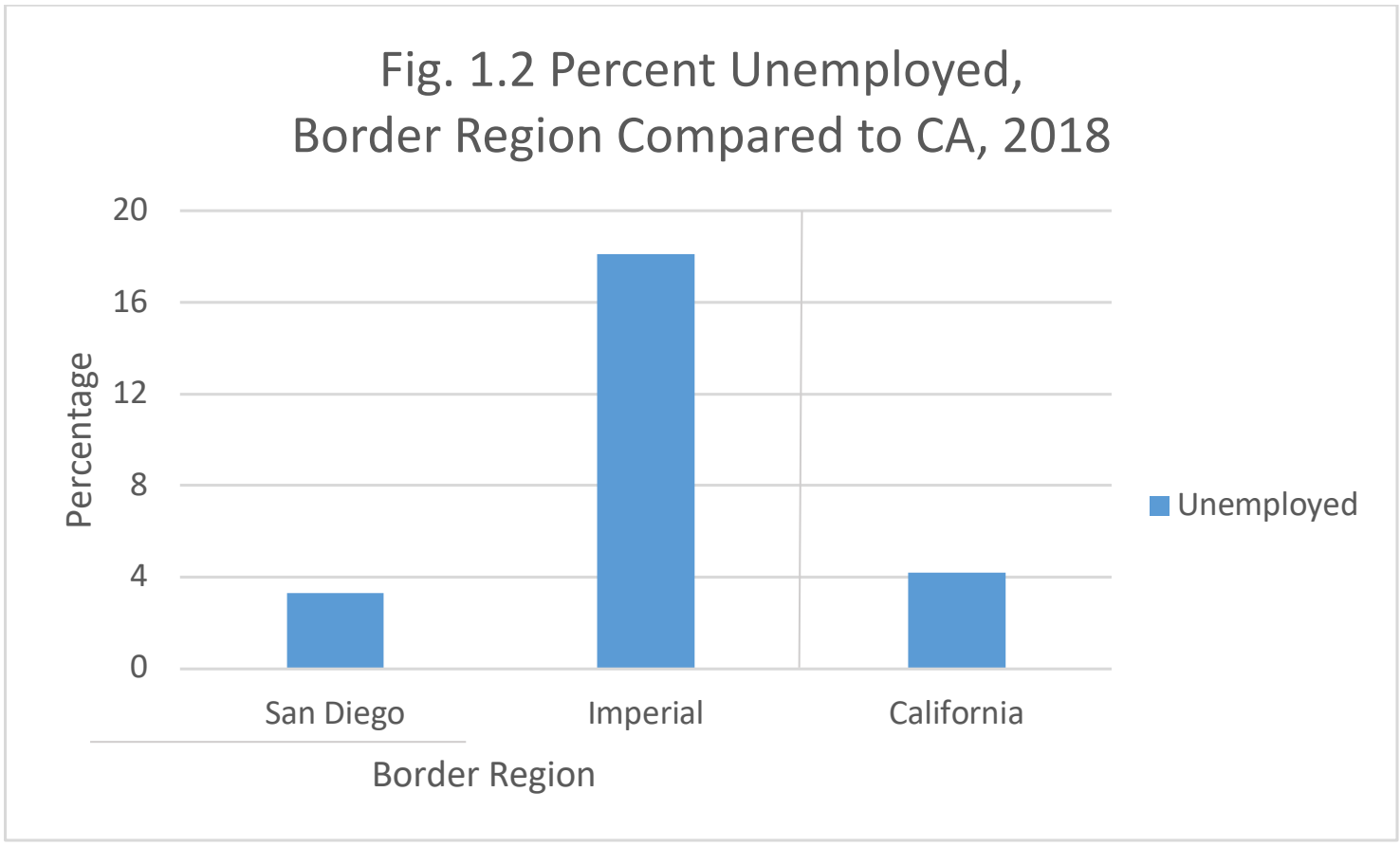
The population in California, including the border region, is racially and ethnically diverse. In data from 2018, Whites made up the majority (46%) of the population in San Diego County, whereas Latinos constituted a large minority group of 35%. In Imperial County, most of the population was Latino (86%), whereas Whites accounted for 11%. As shown in Figure 1.1, in the State of California, Whites and Latinos made up approximately the same proportion, at 38% and 40% of the total population, respectively (Fig. 1.1) (CHIS, 2018).

Fig. 1.1 Race/Ethnicity Distribution by Region, Border Region Compared to CA, 2018



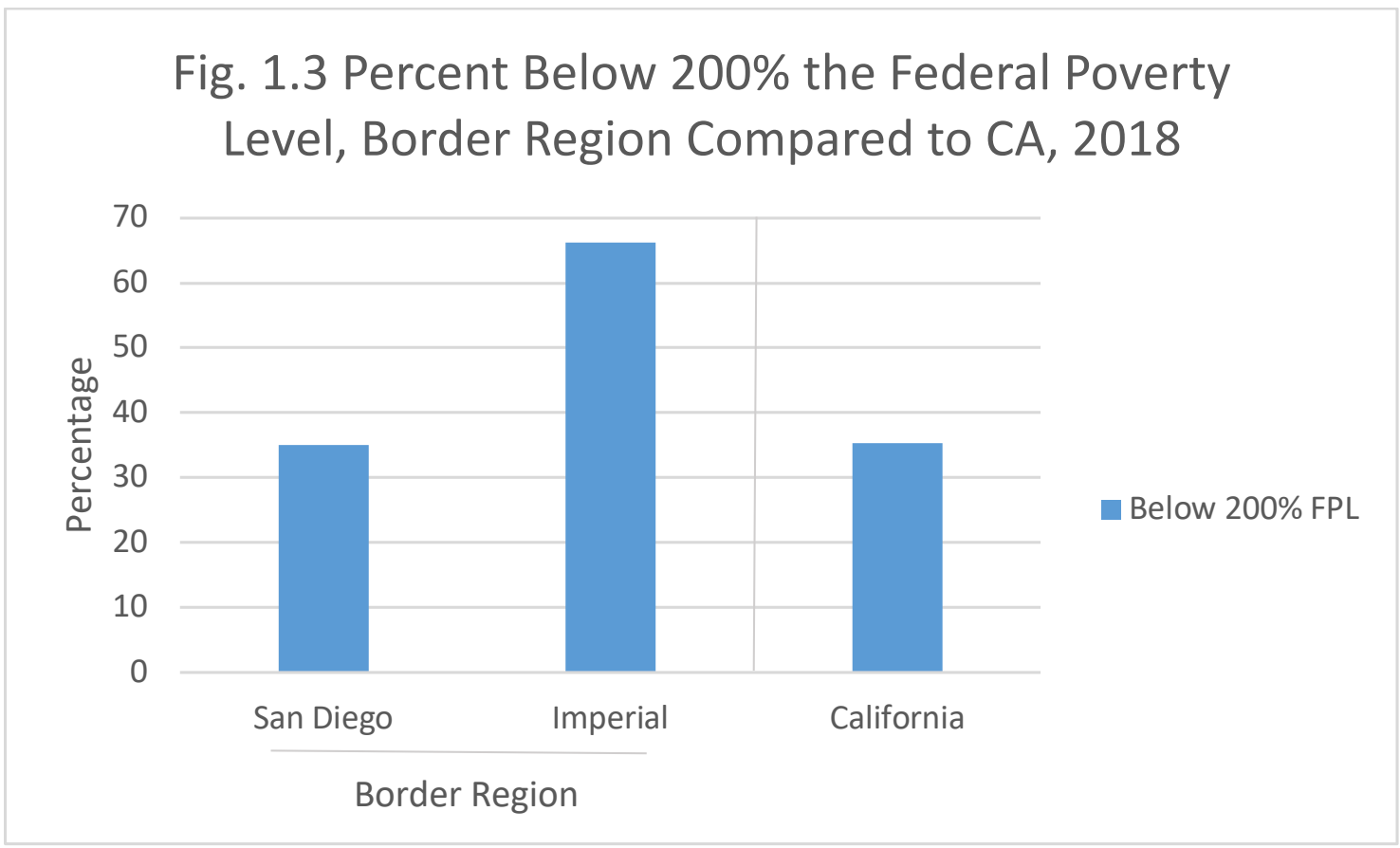
Source: California Health Interview Survey, 2018

In 2018, San Diego County reported that 3% of the labor force was unemployed (52,663 individuals), whereas Imperial County reported that approximately 18% of the labor force was unemployed (12,855 individuals) (BLS, 2018). Statewide, the unemployment rate was 4% (820,096 individuals) (Fig. 1.2) (BLS, 2018).



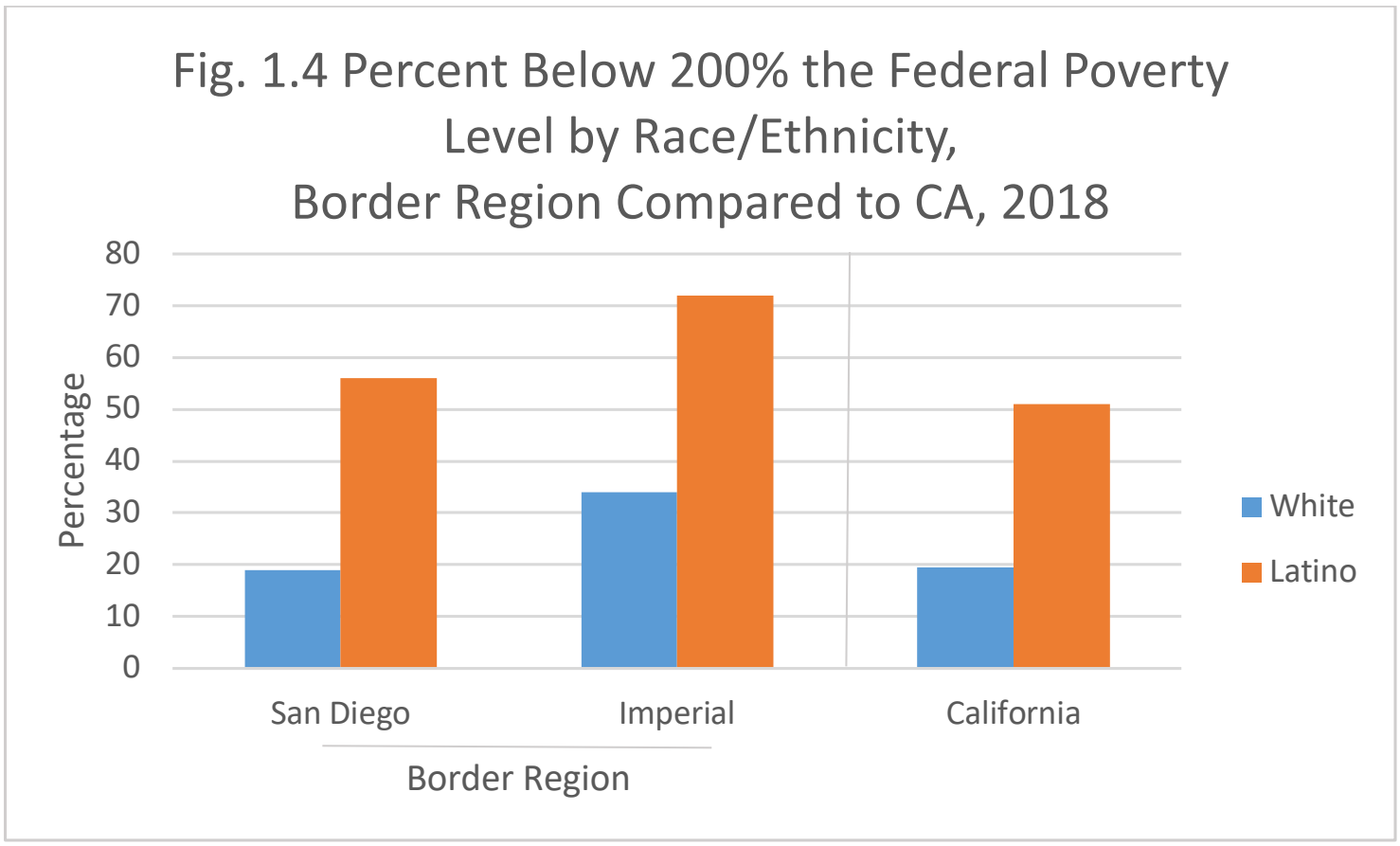
Source: Bureau of Labor Statistics, 2018

In 2018, 35% of San Diego County residents were living below 200% of the Federal Poverty Level (FPL), as compared with two-thirds (66%) of Imperial County residents and 35% of California residents (Fig. 1.3) (CHIS, 2018).



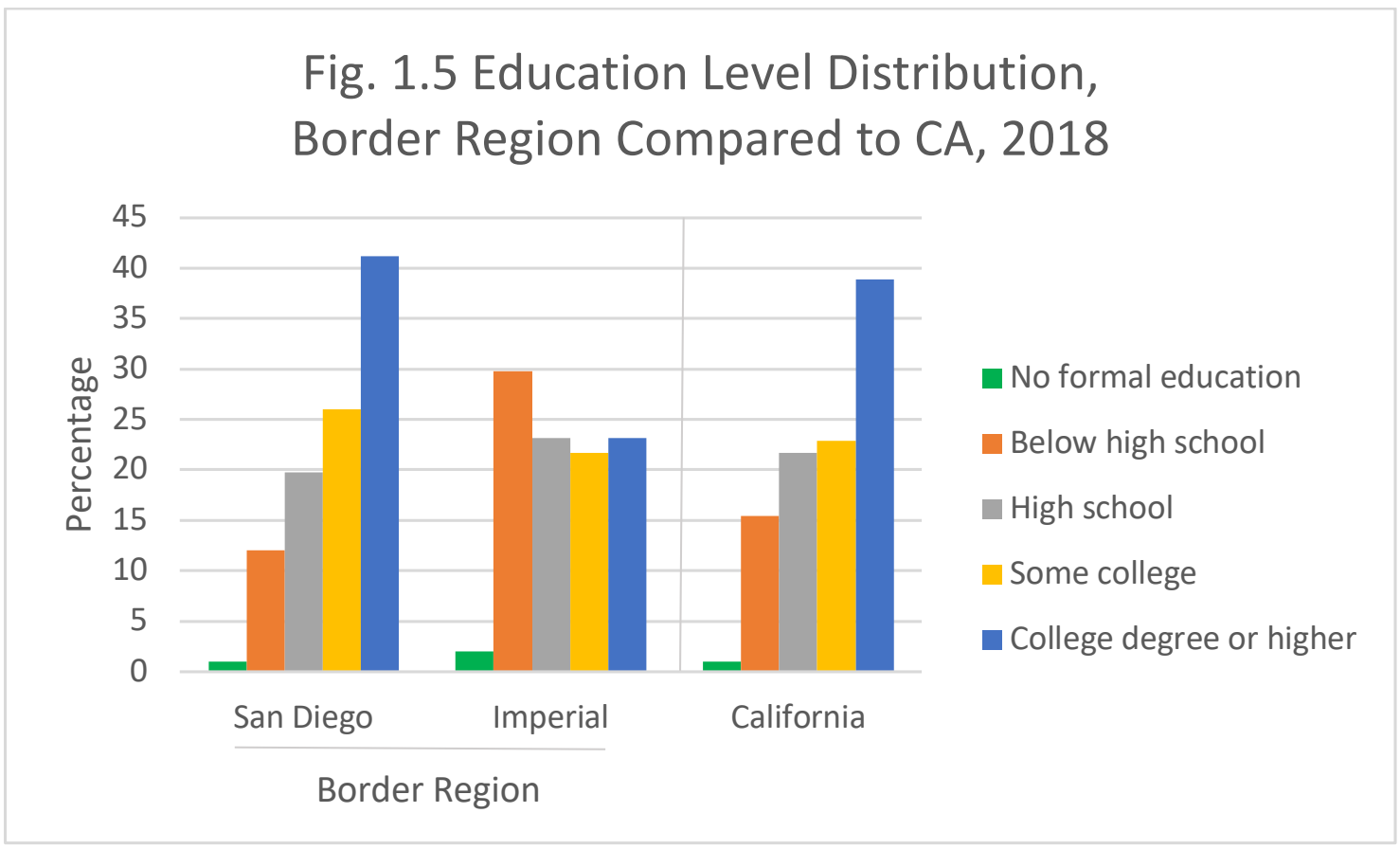
Source: California Health Interview Survey, 2018

A comparison by race/ethnicity indicated that the Latino population consistently had a higher percent of people living below 200% of the FPL in the California border region. The same result was observed in California statewide (Fig. 1.4) (CHIS, 2018).



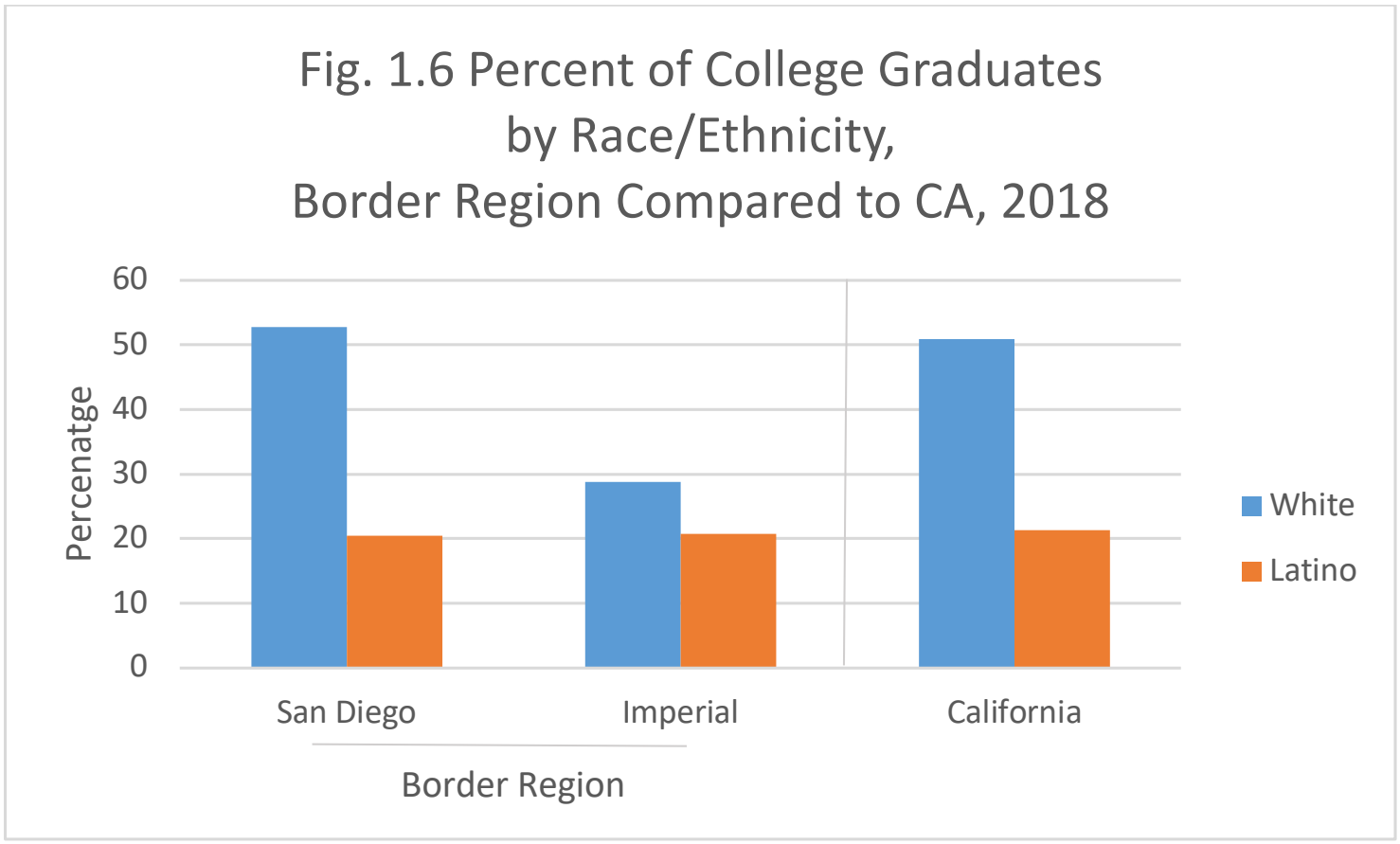
Source: California Health Interview Survey, 2018

In 2018, 41% of San Diego County residents had a college degree or higher, whereas 32% of Imperial County residents had education below a high school diploma. Statewide, 39% of Californians had a college degree or higher, and 16% (n=4,883,000) had education below a high school diploma (Fig. 1.5) (CHIS, 2018).



Source: California Health Interview Survey, 2018

When the percent of college graduates was compared by race/ethnicity, the Latino population, when 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, 2018).

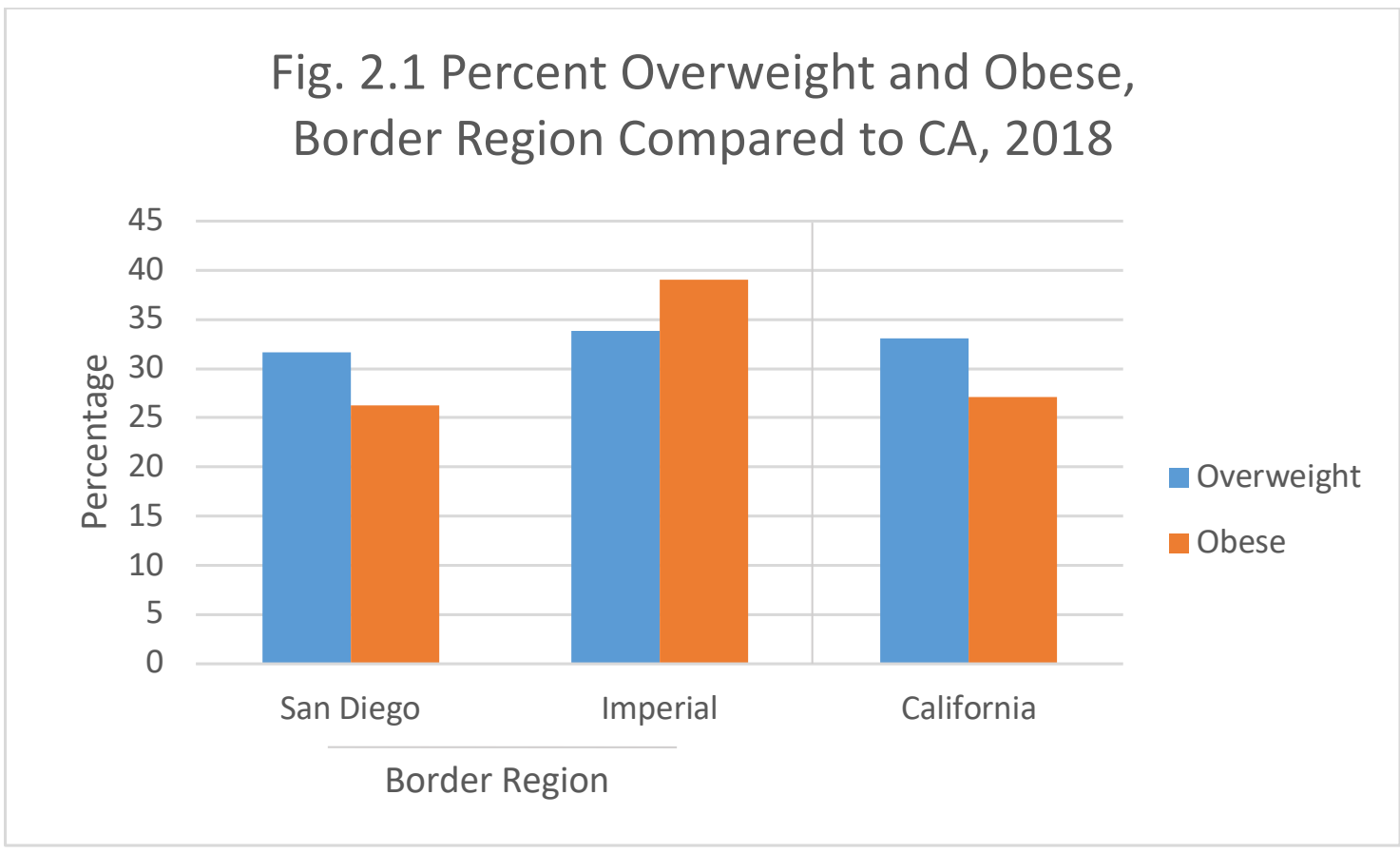


Source: California Health Interview Survey, 2018

Obesity

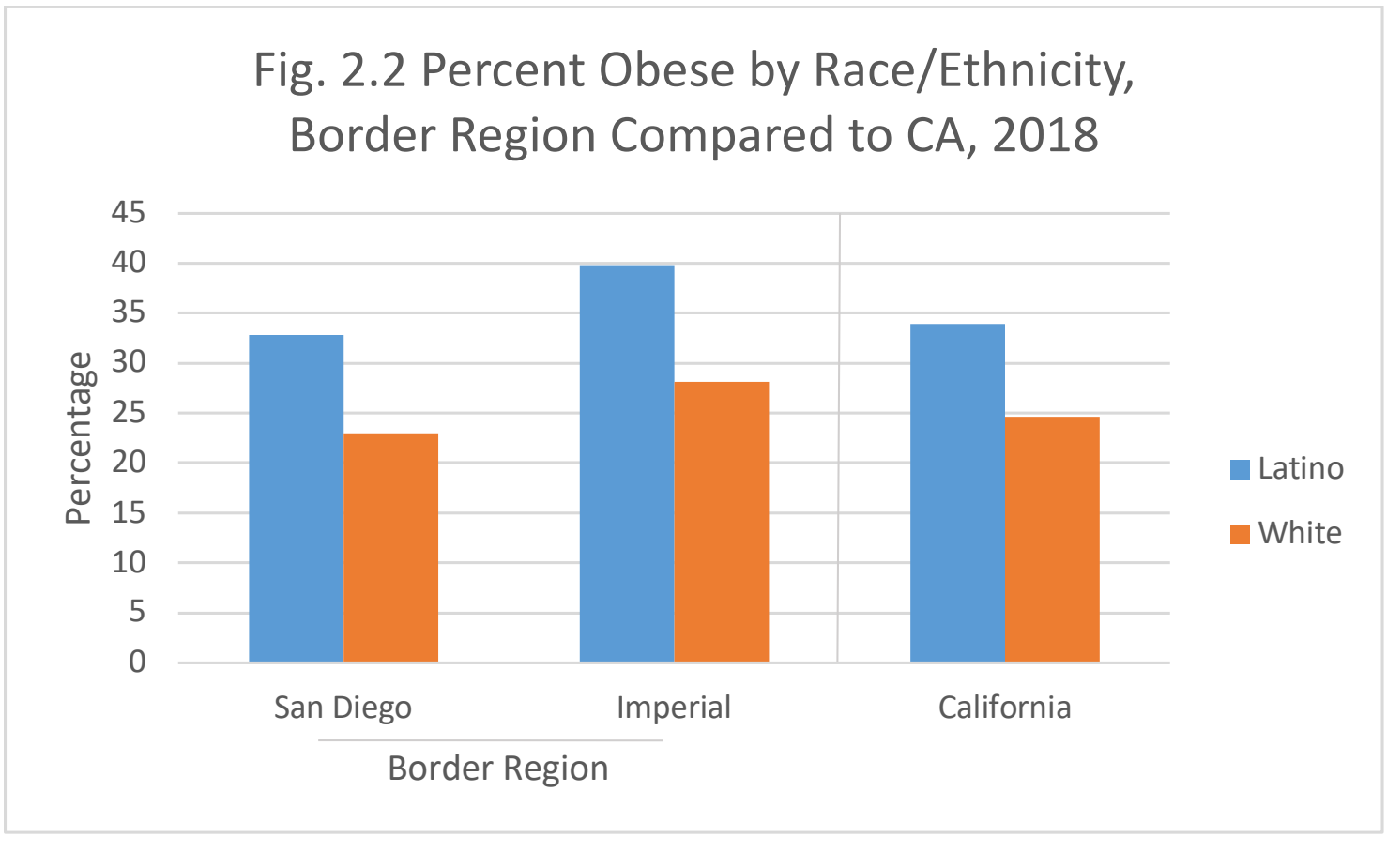
The California border region, like the rest of the state, has experienced an increase in obesity rates, particularly in the Latino population. Obesity is associated with various health risks, including some of the leading causes of death in the United States (U.S.) and worldwide, such as diabetes, heart disease, stroke and some types of cancer (NIH, 2013). Various behavioral, societal and environmental factors are associated with obesity, such as caloric intake, physical inactivity, education and genetics (Centers for Disease Control and Prevention (CDC), 2020). 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 2018 indicated the prevalence of obesity in San Diego County to be 26%, whereas the percent of obesity in Imperial County was 39%. This level highly increased when overweight and obesity were combined; the level for San Diego County increased to 58%, and for Imperial increased to 73%. 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, 2018).



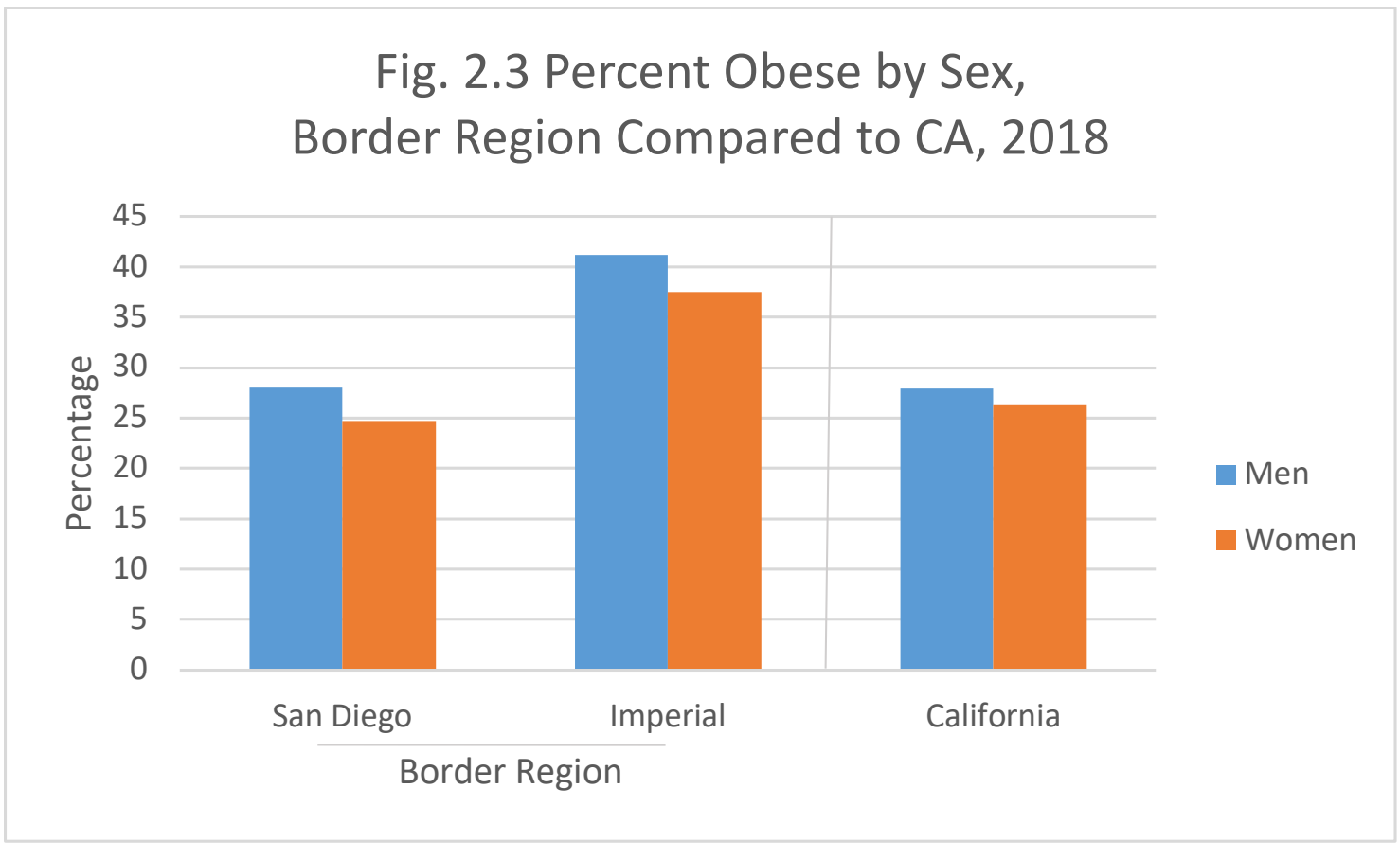
Source: California Health Interview Survey, 2018

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 23% of the White population. Meanwhile, in Imperial County, 40% of the Latino population was obese, as compared with 28% of the White population. The same findings were true for California statewide (Fig. 2.2) (CHIS, 2018).



Source: California Health Interview Survey, 2018

Compared with women, men had a greater proportion of obesity in San Diego County, Imperial County and California. This trend was more apparent in Imperial County, where 41% of men were obese, as compared with 37.5% of women. San Diego County women had a lower rate of obesity than those in Imperial County and statewide (Fig. 2.3) (CHIS, 2018).

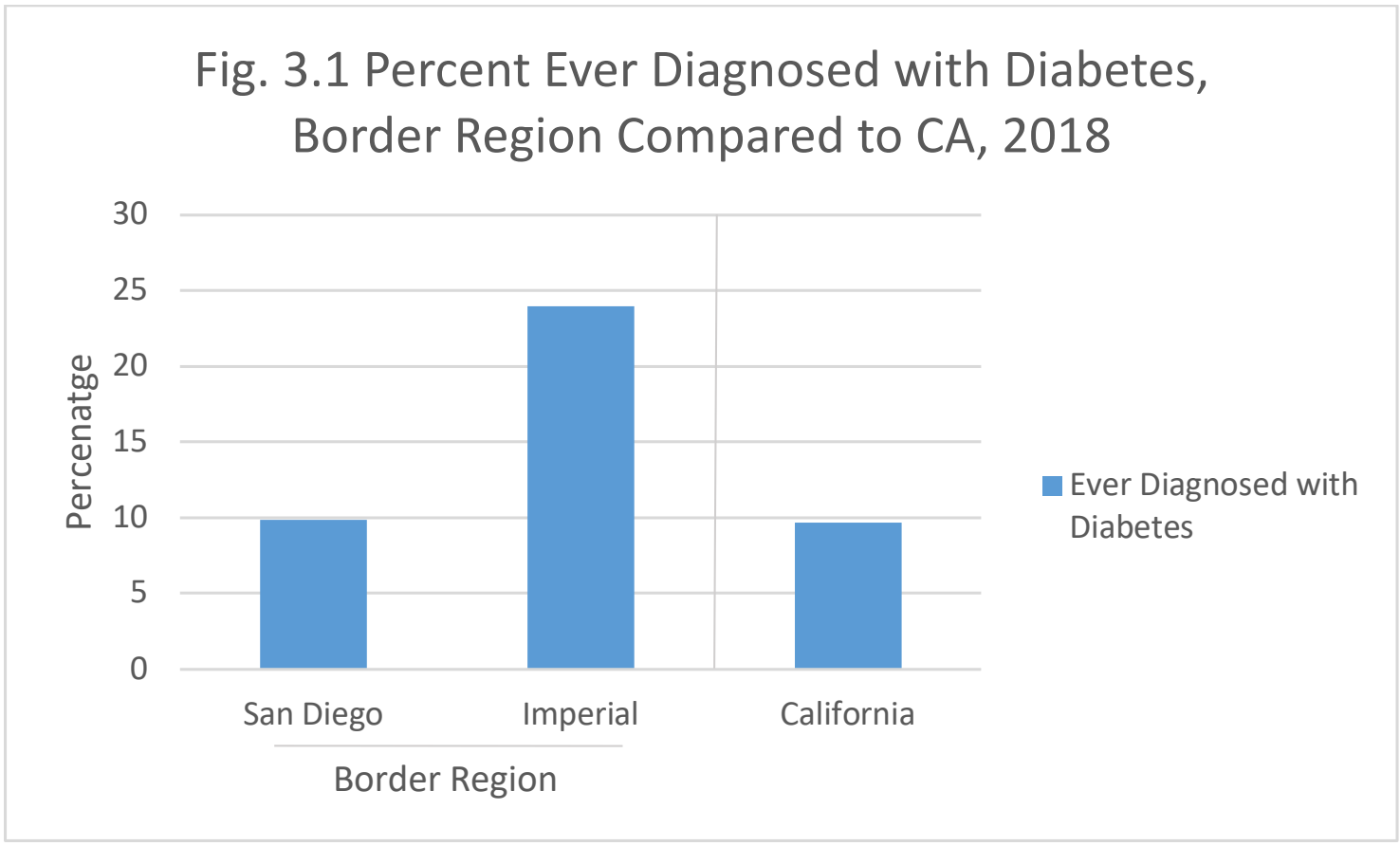


Source: California Health Interview Survey, 2018

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, Latinos, Blacks, American-Indians and Pacific Islanders have a higher risk of type 2 diabetes (CDC, 2020).

According to CHIS data from 2018, 10% of adults in San Diego County had ever been diagnosed with diabetes, as compared with 24% in Imperial County and 10% in California (CHIS, 2018) (Fig. 3.1).

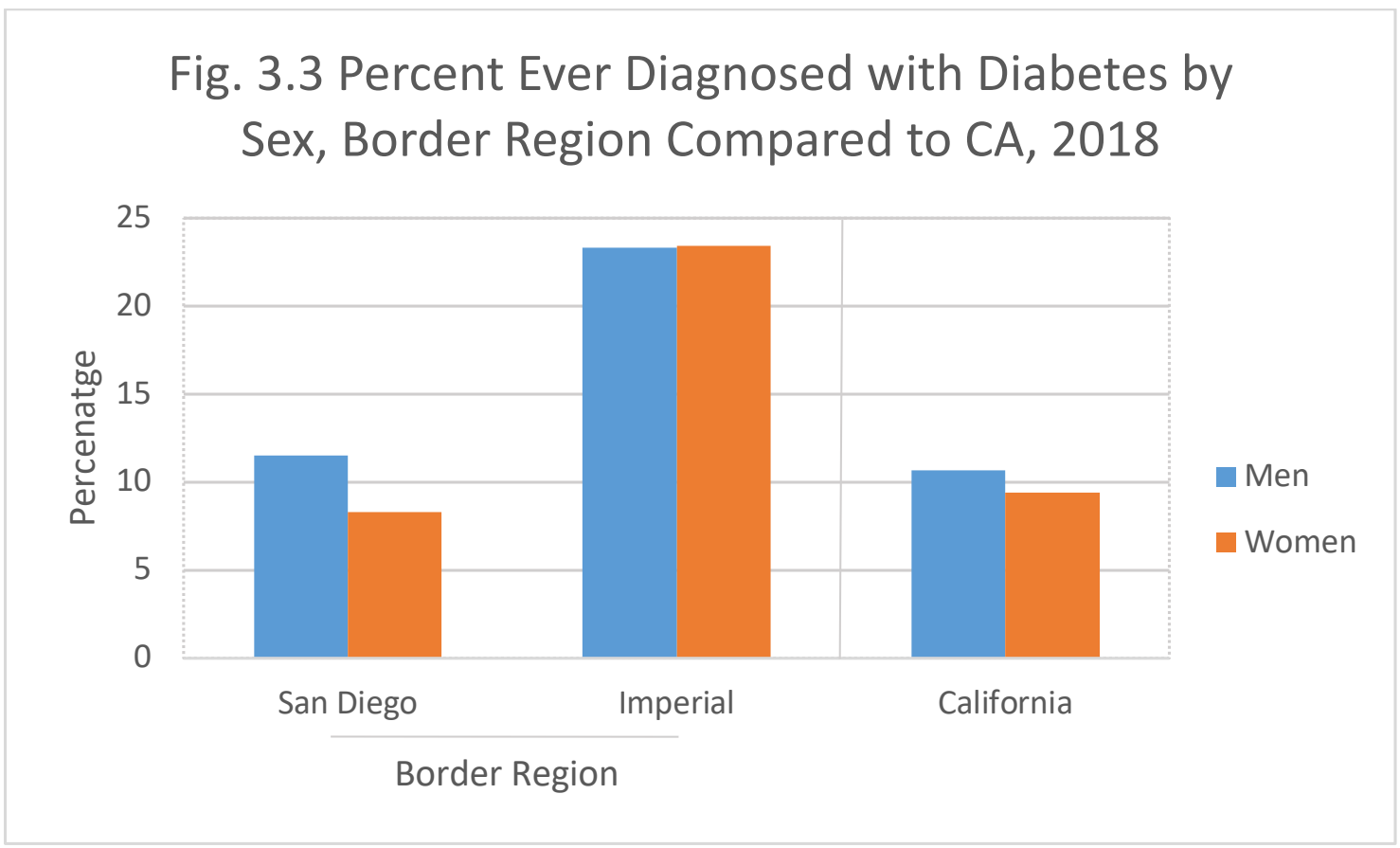


Source: California Health Interview Survey, 2018

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, 12% of Latinos and 9% of Whites had ever been diagnosed with diabetes. Meanwhile, in Imperial County, 26% of Latinos and 13.5% of Whites had ever been diagnosed with diabetes. The same was true for California, where 11% of Latinos and 8.5% of Whites had ever been diagnosed with diabetes (Fig. 3.2) (CHIS, 2018).

Source: California Health Interview Survey, 2018

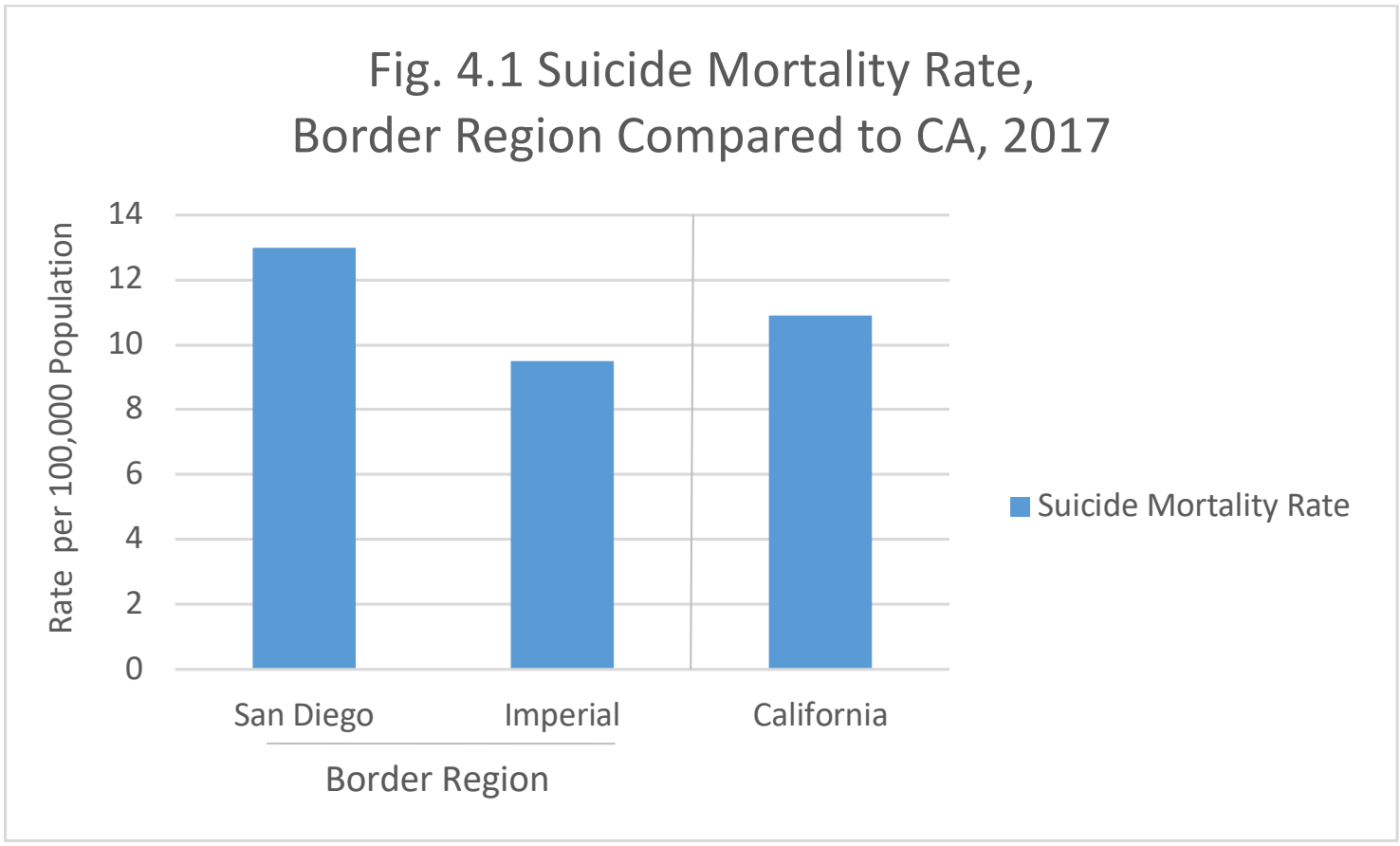
Compared to women, a higher percent of men had been diagnosed with diabetes in San Diego and in California in 2018. In San Diego County, 11.5% of men had ever been diagnosed with diabetes, as compared with 8% of women. In Imperial County, 23% of men and women had ever been diagnosed with diabetes. In California statewide, 11% of men had ever been diagnosed, as compared with 9% of women (Fig. 3.3) (CHIS, 2018).



Source: California Health Interview Survey, 2018

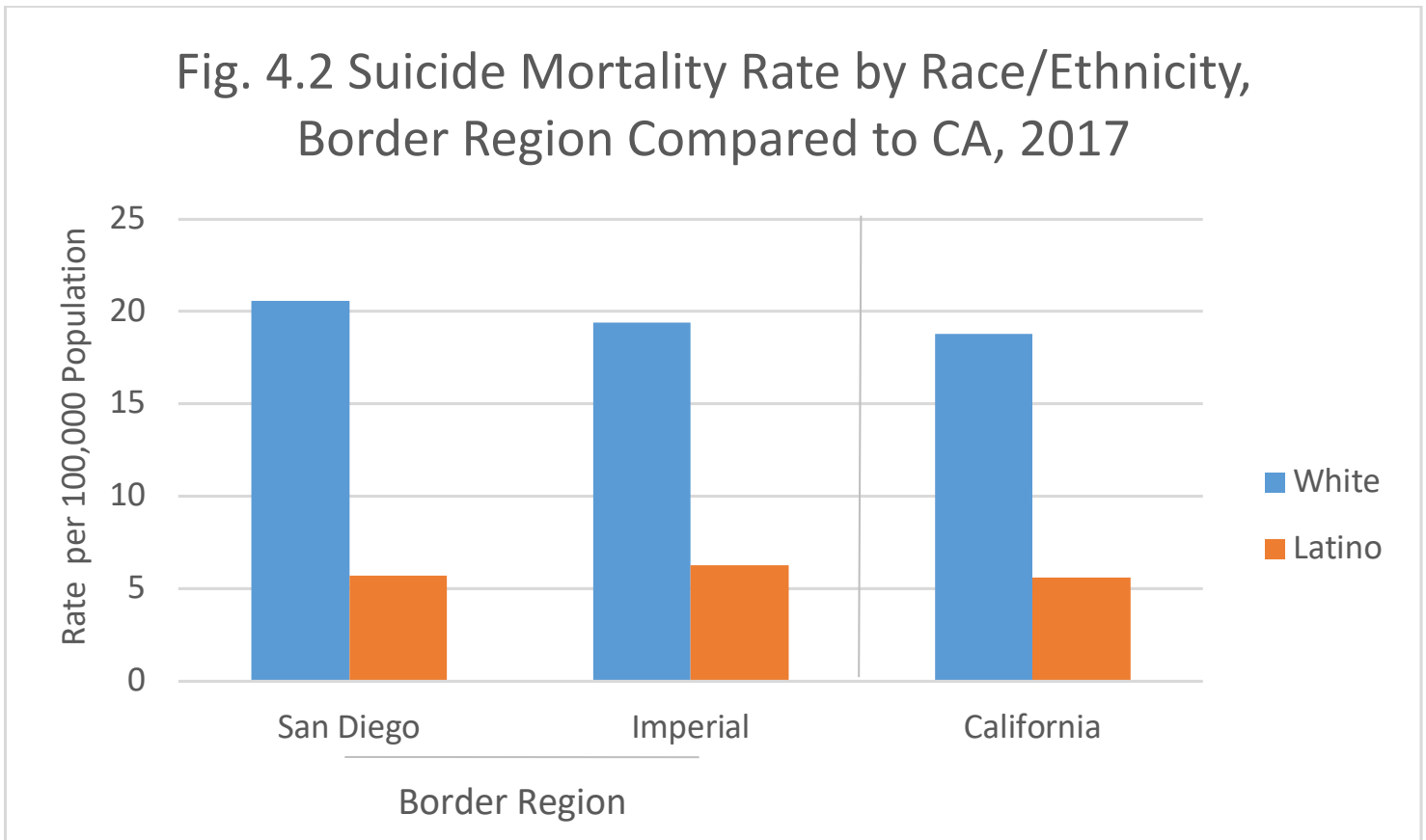
Suicide

Suicide is a serious but preventable public health problem that can have lasting harmful effects on individuals, families and communities (CDC, 2019). According to EpiCenter-California Injury Data, the rate of suicide in California was 11 suicides per 100,000 population in 2017 (4,312 cases). The suicide mortality rate in San Diego County was 13 suicides per 100,000 population (431 cases). Meanwhile, the suicide rate in Imperial County was 9.5 suicides per 100,000 population (18 cases) (Fig. 4.1) (CDPH, 2020). Imperial County has achieved the Healthy People 2020 goal of a rate below 10 suicides per 100,000 population (Healthy People 2020, 2020).



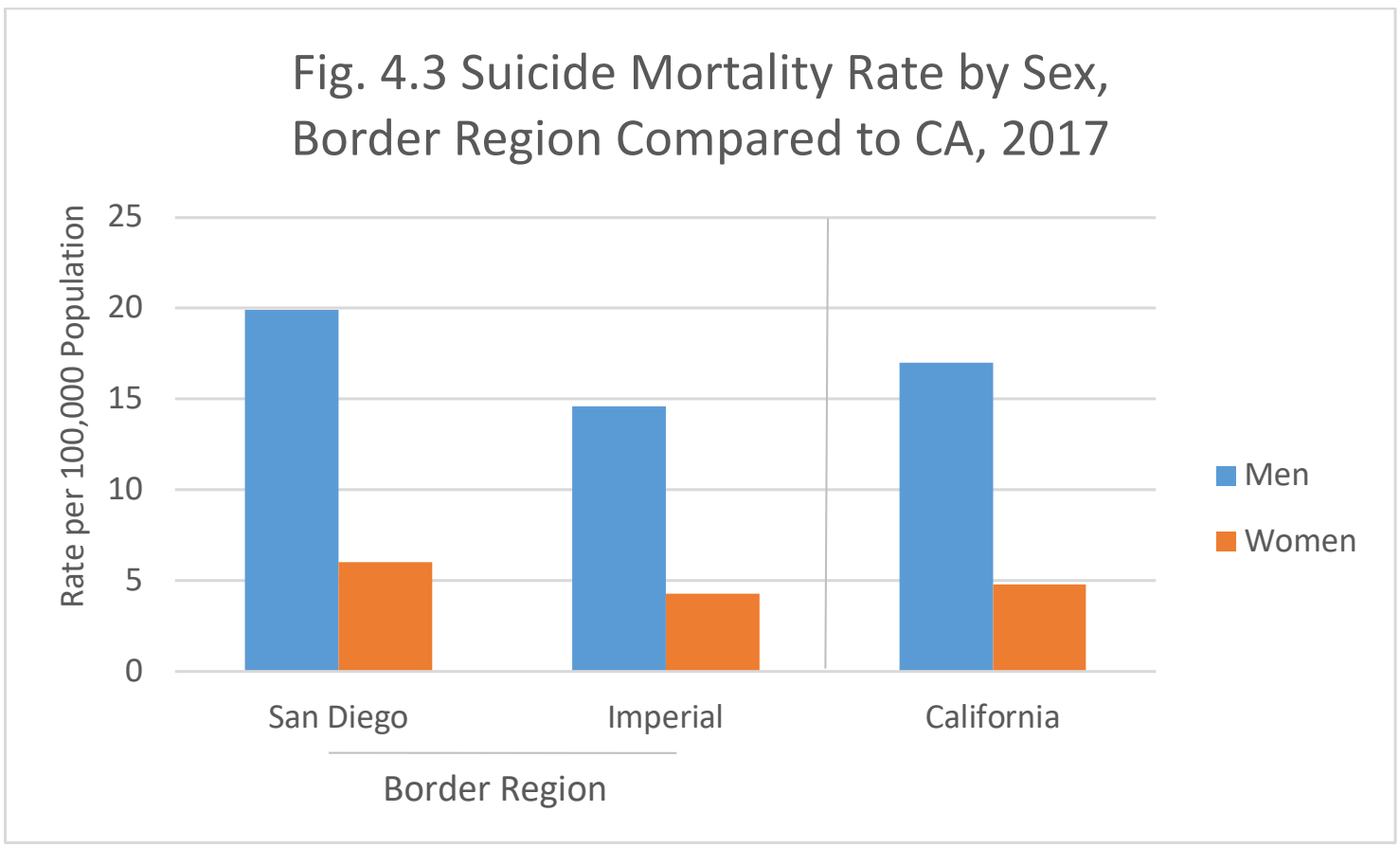
Source: EpiCenter, California Injury Data, 2017

Differences in race/ethnicity exist among adults who died by 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 6 per 100,000 (65 cases), as compared with Whites with a rate of 21 per 100,000 (315 cases). In Imperial County, the Latino population had a rate of 6 per 100,000 (10 cases), and the White population had a rate of 19 per 100,000 (4 cases). In California, Latinos had a rate of 6 per 100,000 (897 cases), and Whites had a rate of 19 per 100,000 (2,783 cases) (Fig. 4.2) (CDPH, 2020).



Source: EpiCenter, California Injury Data, 2017

Compared with women, men had a greater proportion of suicide in the border region and in California. In San Diego County, the rate of suicide in men was 20 per 100,000 (332 cases), as compared with 6 per 100,000 in women (99 cases). In Imperial County, the rate for men was 15 per 100,000 (14 cases), as compared with 4 per 100,000 in women (four cases). California had similar rates: 17 per 100,000 in men (3,353 cases), as compared with 5 per 100,000 in women (959 cases) (Fig. 4.3) (CDPH, 2020).



Source: EpiCenter, California Injury Data, 2017

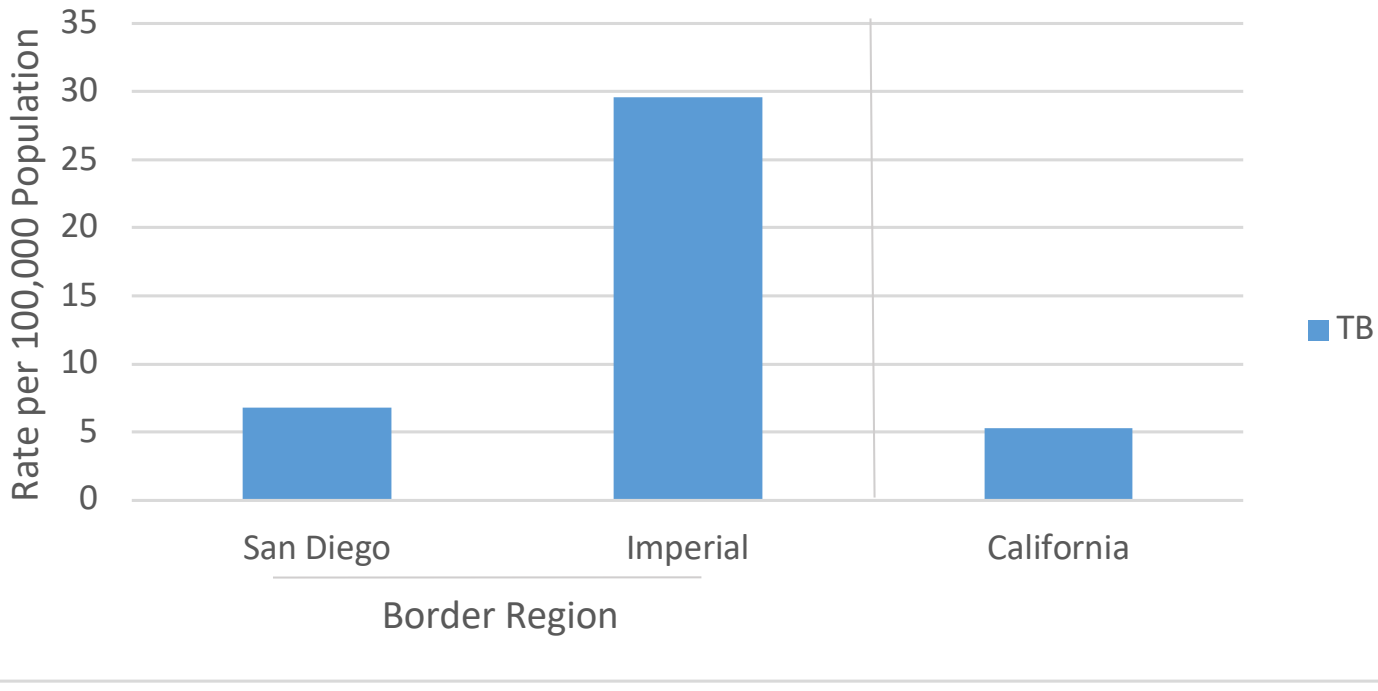
Tuberculosis

TB continues to cause illness and death in California and the California border region. In 2018, the TB case rate in California was 5.3 per 100,000 (2,097 cases). California's case rate has remained consistently higher than the national case rate (2.8 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 2014, the rates declined 4% each year; between 2014 and 2018 there was less than a 1% average decrease in cases each year. In fact, between 2017 and 2018, there was a 2% increase in TB cases. During 2015-2017, for which recent complete outcome data are available, 10% (643 cases) of individuals with TB in California died with 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.

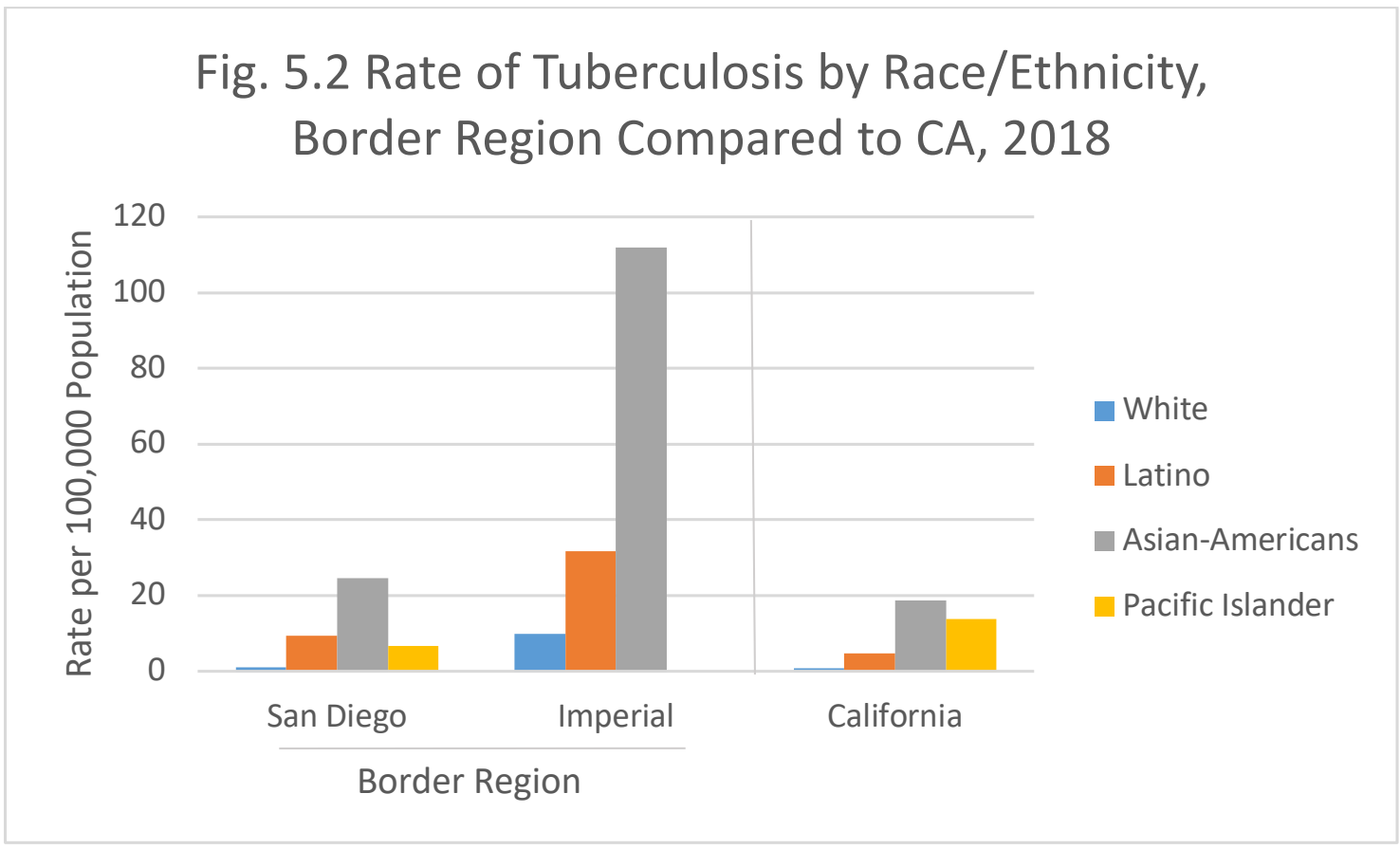
California border counties are substantial contributors to the state's TB burden, contributing 13% of the reported TB cases in 2018. During this time, Imperial County reported a case rate of 30 per 100,000 (56 cases), the highest rate among all California counties. San Diego County reported a case rate of 7 per 100,000 (226 cases). Both counties reported a higher rate than that of California (Fig. 5.1).

Fig. 5.1 Rate of Tuberculosis,
Border Region Compared to CA, 2018



Source: California Department of Public Health, TB Control Branch, 2018

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 25 per 100,000, as compared with Latinos, with a rate of 9 per 100,000, and Whites, with a rate of 1.1 per 100,000. The same pattern was mirrored in Imperial County with Asian-Americans having the highest rate, 112 per 100,000, as compared with Latino, with a rate of 32 per 100,000, and Whites, with a rate of 10 per 100,000. The race disparity persisted on the state level with Asian-Americans having the highest rate, 19 per 100,000, as compared with Latinos, with a rate of 5 per 100,000, and Whites, with a rate of 1 per 100,000 (Fig. 5.2).



Source: California Department of Public Health, TB Control Branch, 2018

Most individuals with TB in California in 2018 were born outside the U.S. (83%). The most common birth country was Mexico, which accounted for 21% (442 cases) of all California TB cases. Border counties reported a higher proportion of individuals with TB born in Mexico than the state average: 59% (33 cases) of all Imperial County TB cases and 24% (54 cases) of all San Diego County TB cases.

Mycobacterium bovis Surveillance

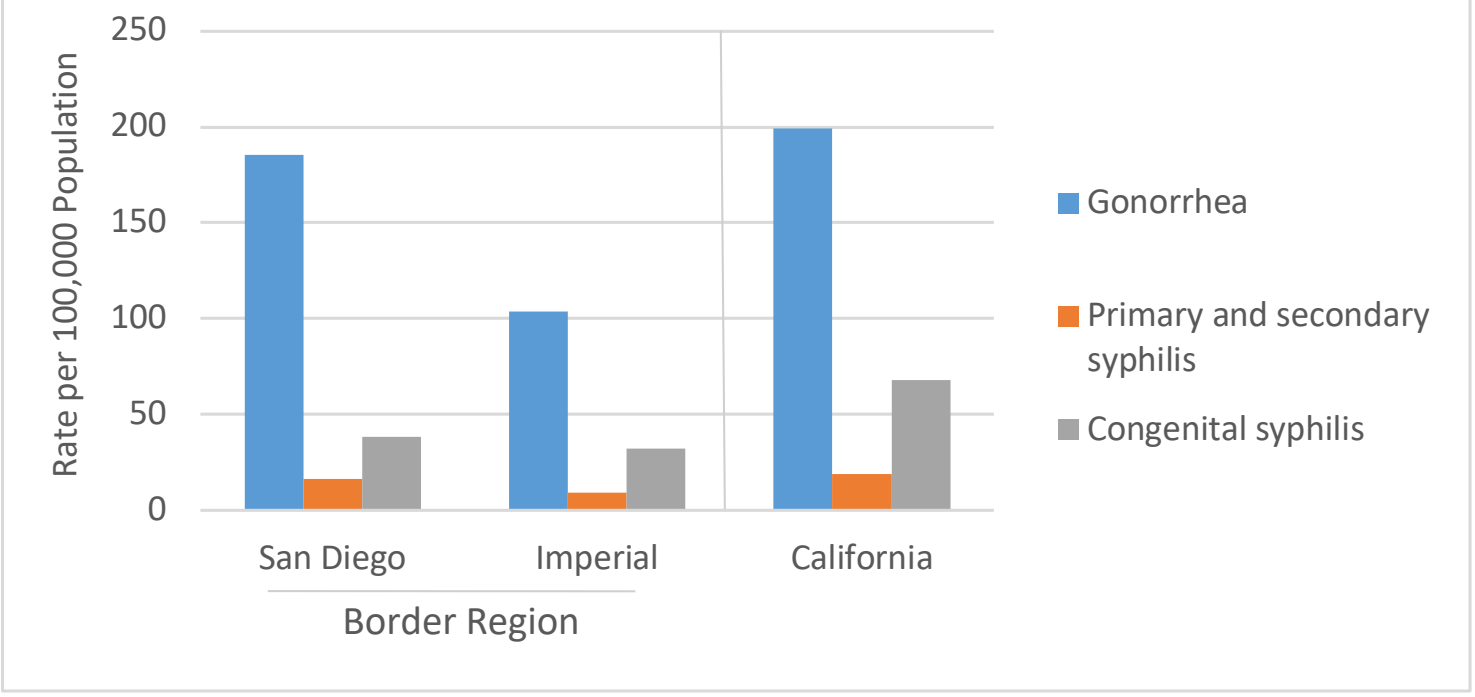
Mycobacterium bovis (*M. bovis*) is part of the *Mycobacterium tuberculosis* complex and causes TB disease in animals and humans, significantly contributing to TB morbidity in children. Transmission occurs through consumption of contaminated, unpasteurized dairy products. There were 55 cases (3% of genotyped cases) with genotyping results indicating *M. bovis* infection in California in 2018. 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 three cases. Another 27% were reported in Los Angeles County.

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 STIs 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 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.

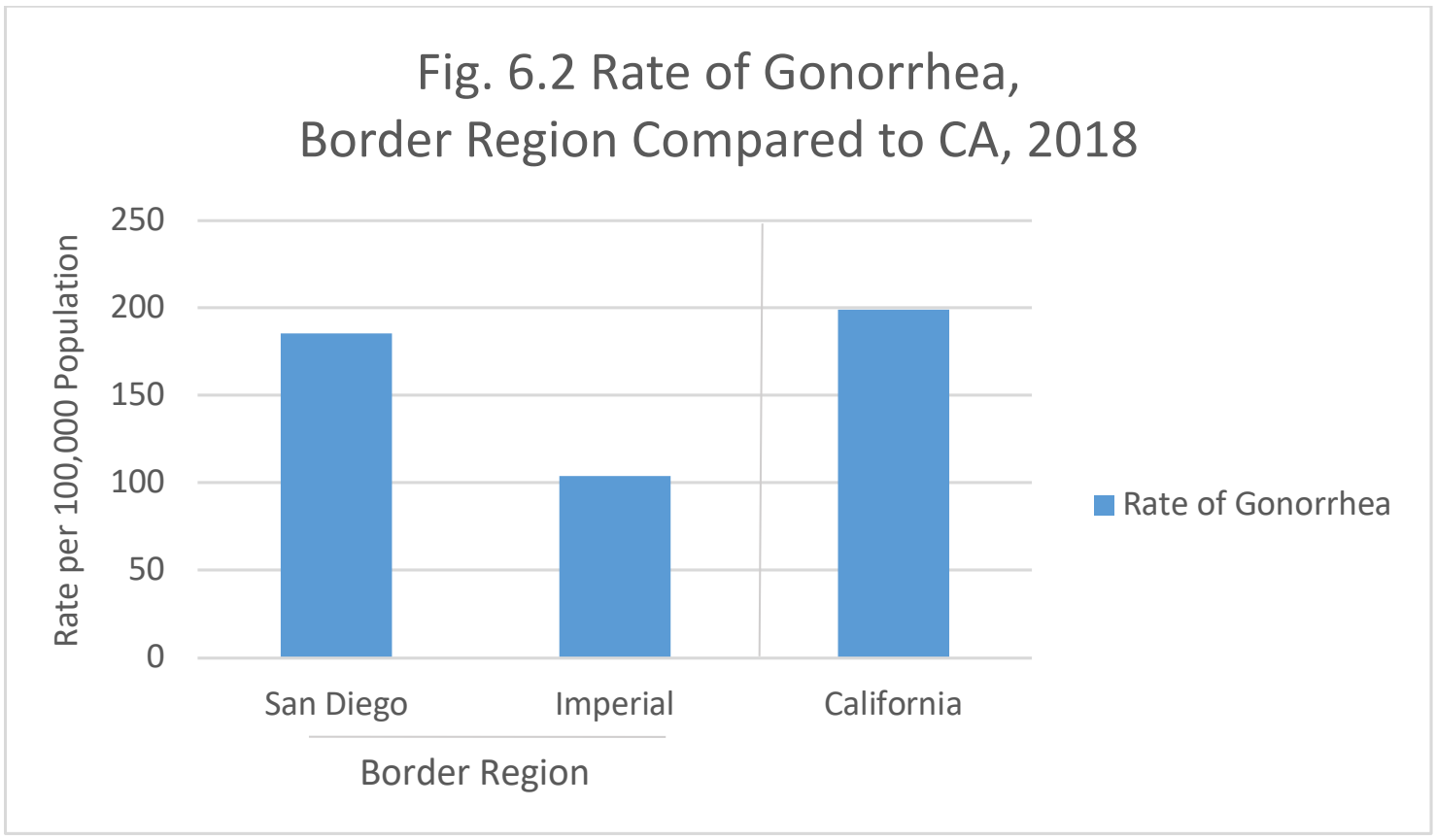
Data from 2018 are displayed below. We examine each category according to the number of cases and rates in the following graphs (Fig. 6.1) (CDPH, 2020).

Fig. 6.1 Rate of Sexually Transmitted Infections, Border Region Compared to CA, 2018



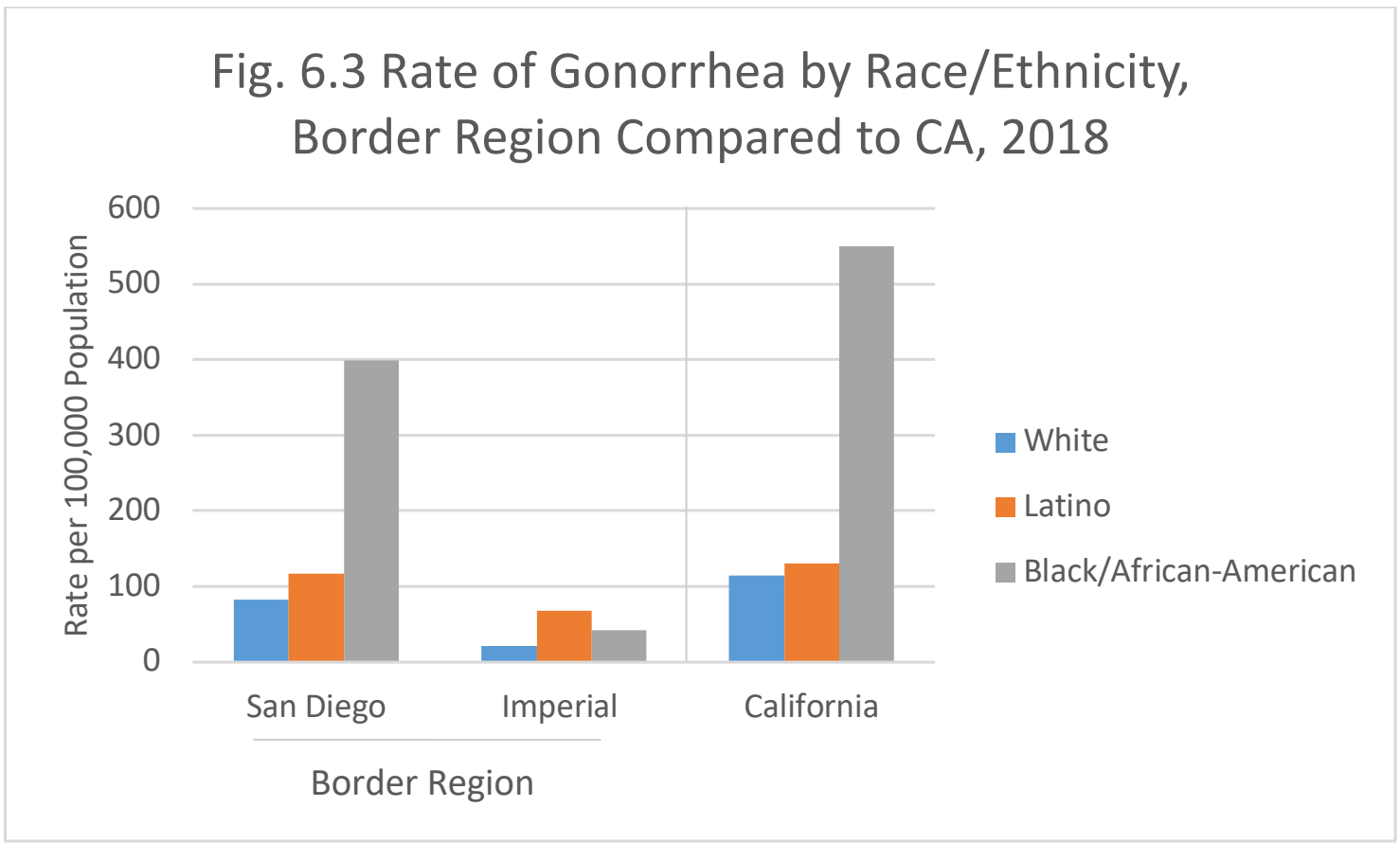
Source: California Department of Public Health, STD Control Branch, 2020

In San Diego County, the rate for gonorrhea was 186 per 100,000 (6,208 cases); meanwhile, in Imperial County, the rate was 104 per 100,000 (197 cases), as compared with California, which had a rate of 199 per 100,000 (79,397 cases) (Fig. 6.2) (CDPH, 2020).



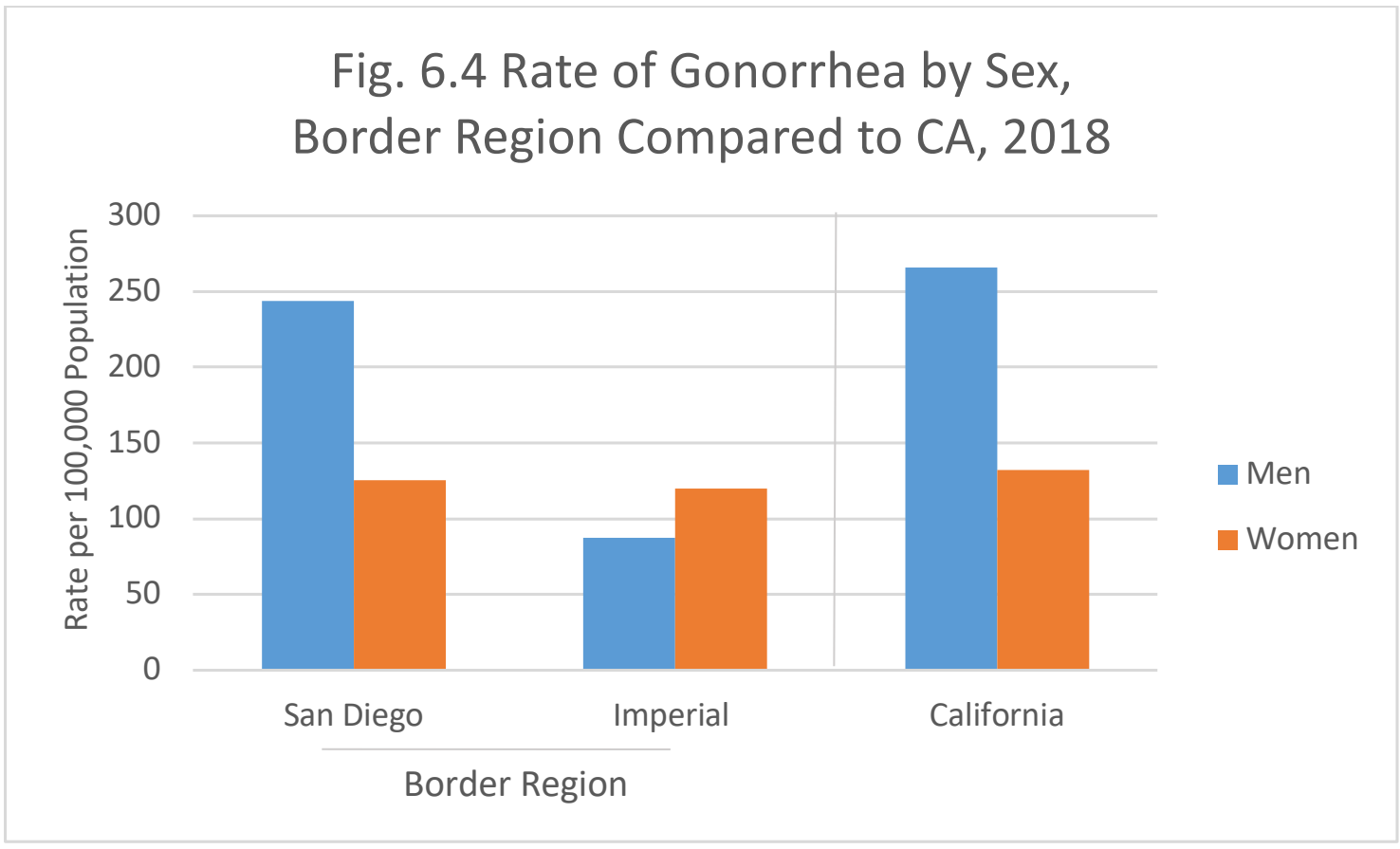
Source: California Department of Public Health, STD Control Branch, 2020

In 2018, the Black population in San Diego County and California had higher rates of gonorrhea than the White and Latino populations. The Latino population in Imperial County had higher rates of gonorrhea than the Black and White populations. In San Diego County, Blacks had a rate of 399 per 100,000 (638 cases) and in California had a rate of 550 per 100,000 (12,594 cases) (Fig. 6.3) (CDPH, 2020).



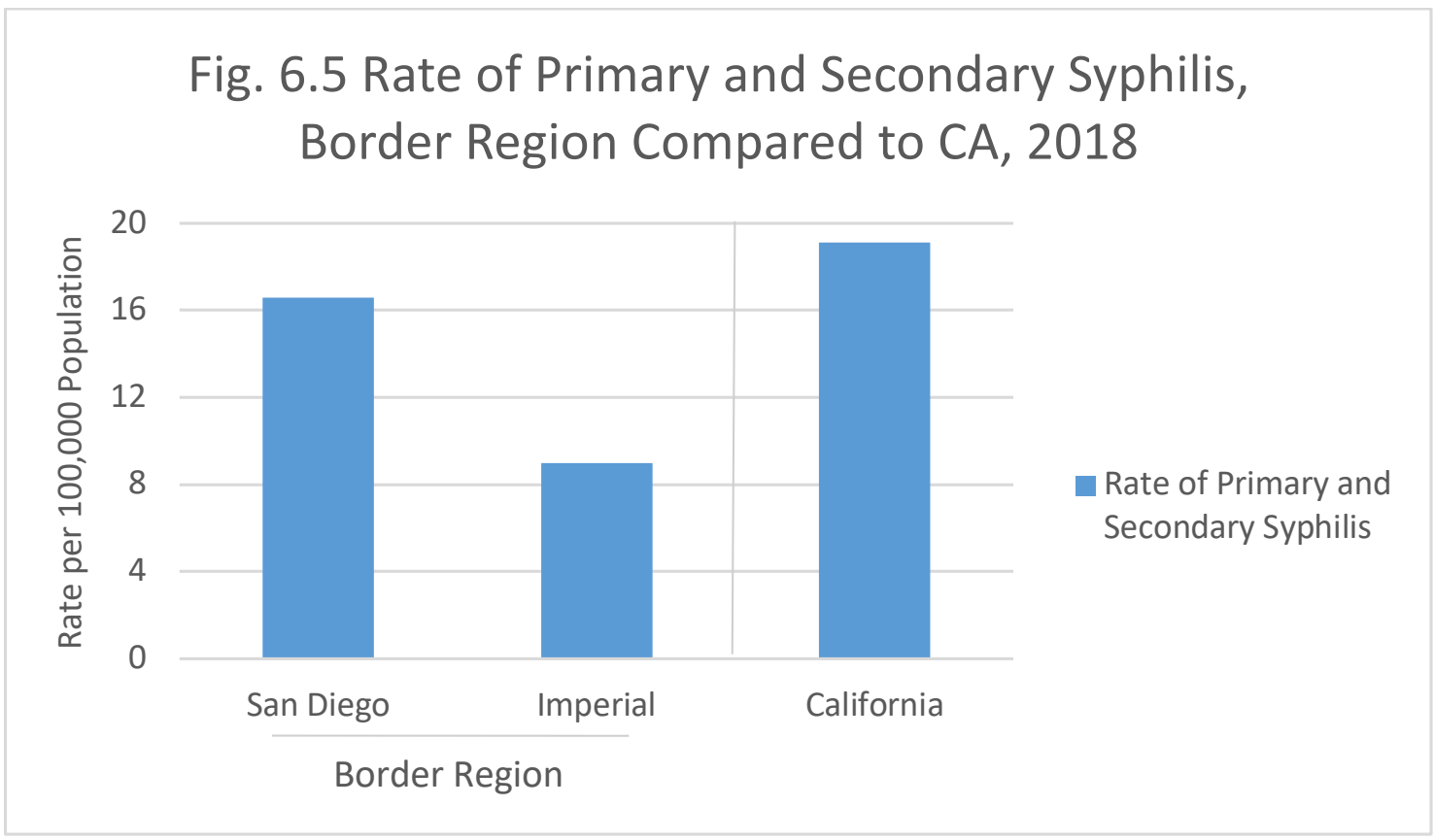
Source: California Department of Public Health, STD Control Branch, 2020

Compared with women during 2018, men had a higher rate of infection in San Diego County and California, but not in Imperial County. In San Diego County, the rate was 244 per 100,000 (4,104 cases) among men and 126 per 100,000 (2,089 cases) among women; in Imperial County, the rate was 87 per 100,000 (84 cases) among men and 120 per 100,000 (112 cases) among women. In California, the rate was 266 per 100,000 (52,758 cases) among men and 132 per 100,000 (26,426 cases) among women (Fig. 6.4) (CDPH, 2020).



Source: California Department of Public Health, STD Control Branch, 2020

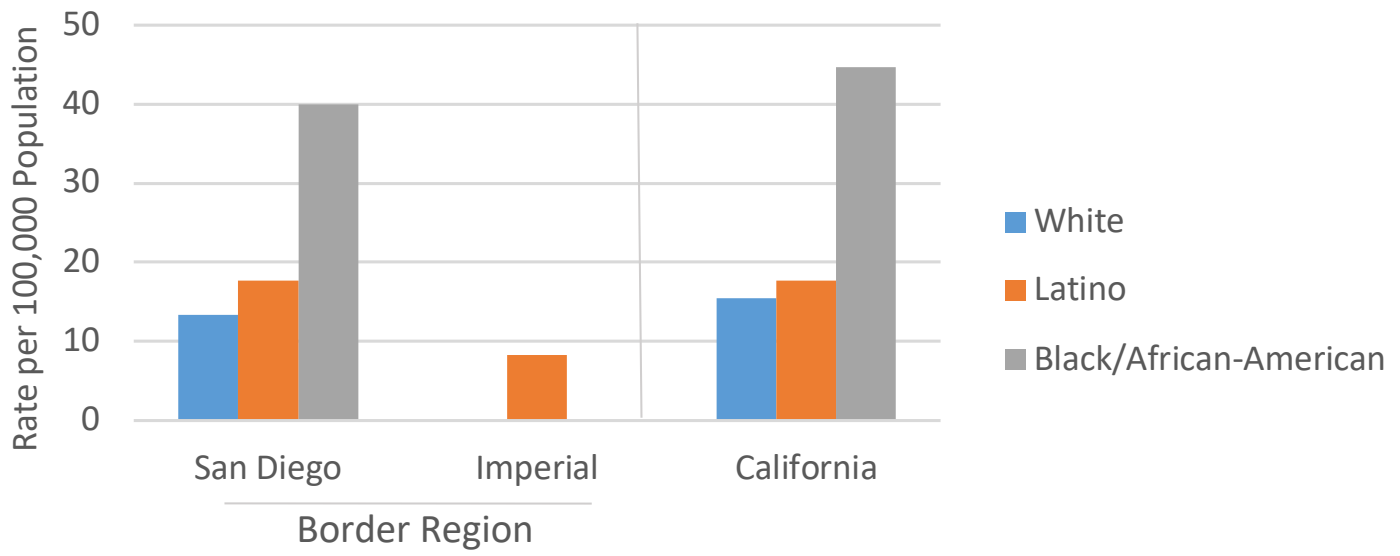
During 2018, the rate of primary and secondary syphilis in San Diego County was 17 per 100,000 (556 cases). Imperial County had a rate of 9 per 100,000 (17 cases), and California had a rate of 19 per 100,000 (7,621 cases) (Fig. 6.5) (CDPH, 2020).



Source: California Department of Public Health, STD Control Branch, 2020

Rates of primary and secondary syphilis in San Diego County and California were higher in Blacks than those among the White and Latino populations. In 2018, in San Diego County, Blacks had a rate of 40 per 100,000 (64 cases), Latinos had a rate of 18 per 100,000 (202 cases), and Whites had a rate of 13 per 100,000 (206 cases). In Imperial County, the rate for Latinos was 8 per 100,000 (13 cases). There were no cases of primary and secondary syphilis among Blacks and Whites in Imperial County. As compared with the rate in California of 45 per 100,000 (1,023 cases) among Blacks, the rate for Latinos was 18 per 100,000 (2,786 cases), and for Whites was 15.5 per 100,000 (2,354 cases) (Fig. 6.6) (CDPH, 2020).

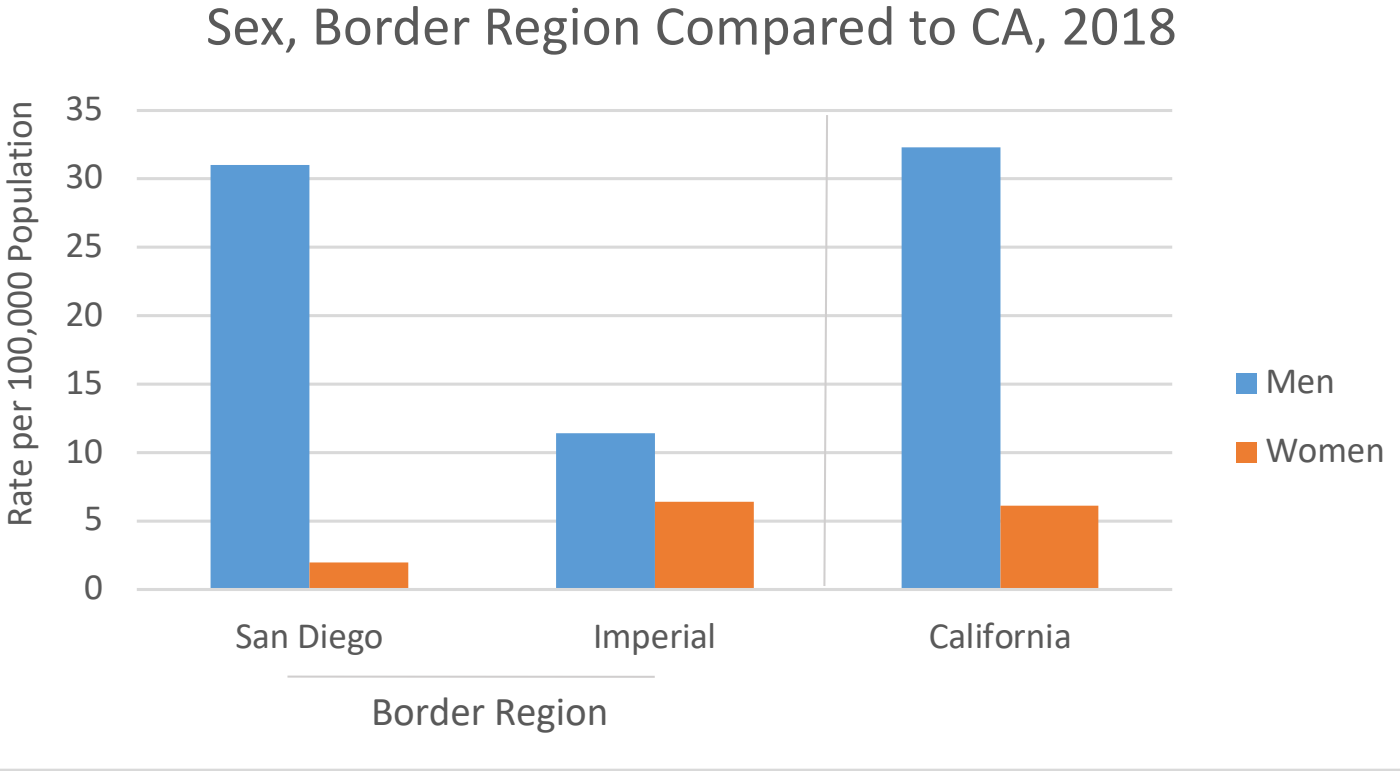
Fig. 6.6 Rate of Primary and Secondary Syphilis by Race/Ethnicity, Border Region Compared to CA, 2018



Source: California Department of Public Health, STD Control Branch, 2020

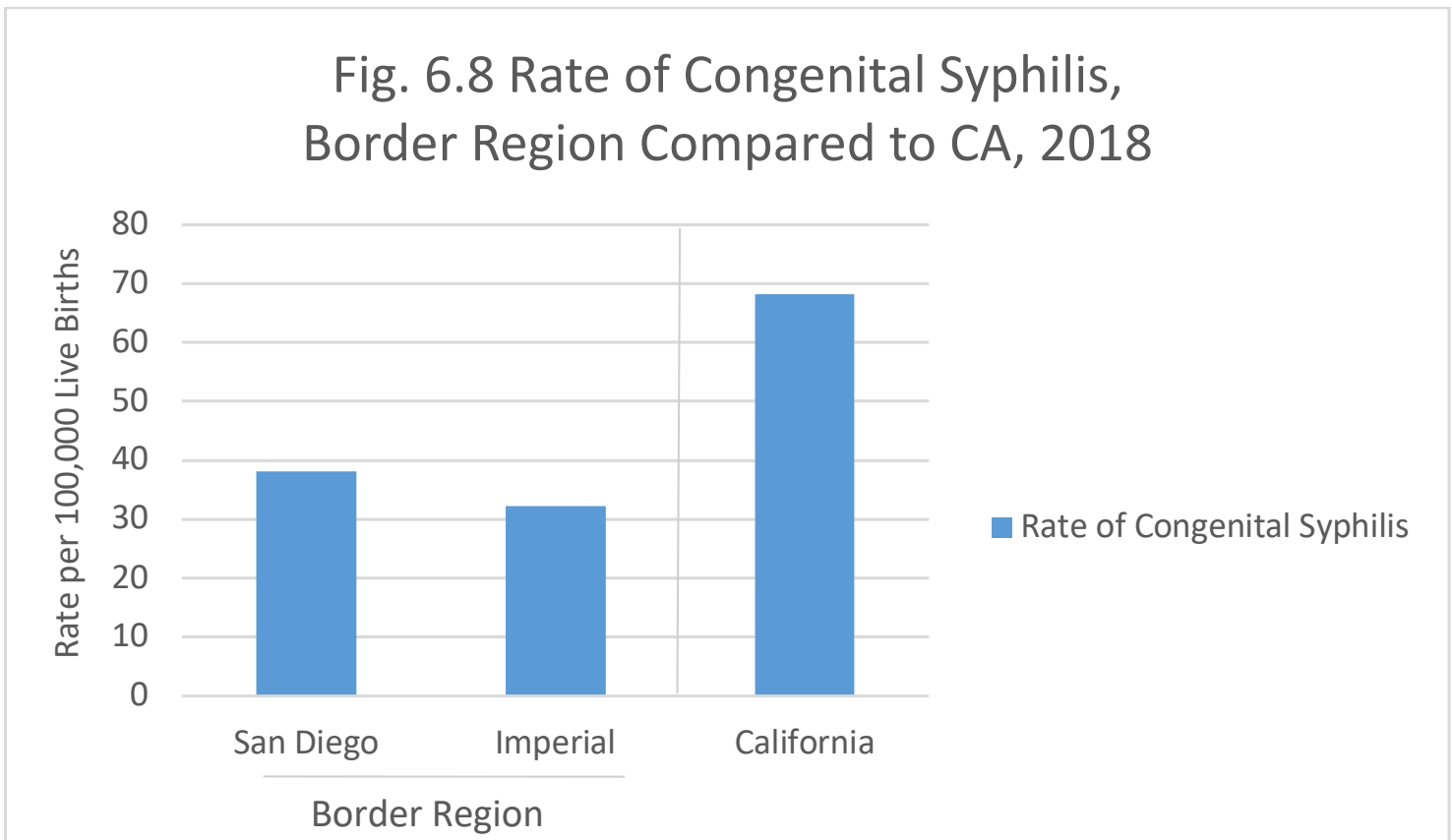
During 2018, men had a higher rate than women of primary and secondary syphilis in the border region and California. In San Diego County, the rate among men was 31 per 100,000 (522 cases), and the rate among women was 2 per 100,000 (34 cases). In Imperial County, the rate among men was 11 per 100,000 (11 cases), and that among women was 6 per 100,000 (six cases). In California, the rate among men was 32 per 100,000 (6,400 cases) and the rate among women was 6 per 100,000 (1,219 cases) (Fig. 6.7) (CDPH, 2020).

Fig. 6.7 Rate of Primary and Secondary Syphilis by Sex, Border Region Compared to CA, 2018



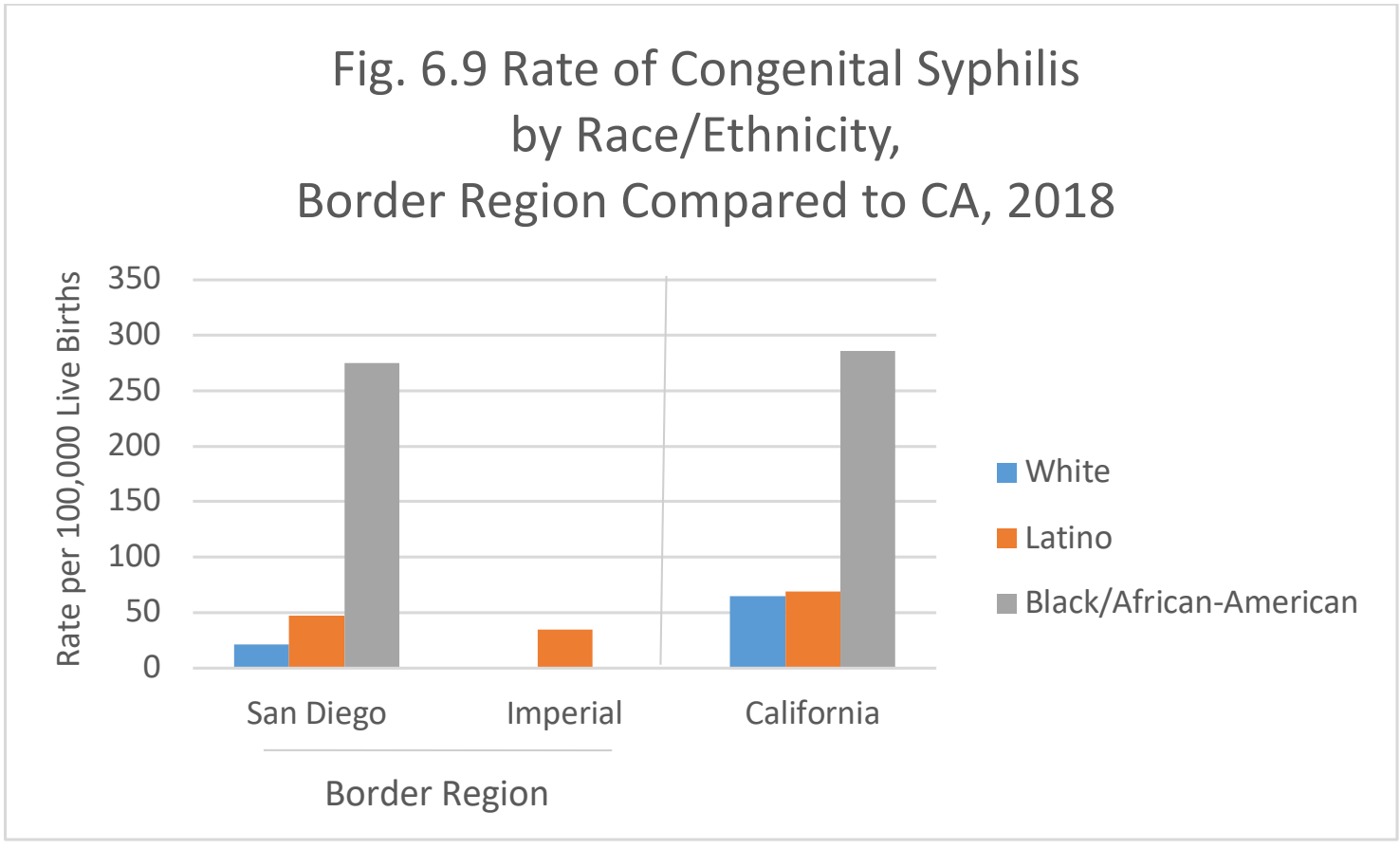
Source: California Department of Public Health, STD Control Branch, 2020

The rates for congenital syphilis in the California border region and in California have been steadily increasing in the past six years. In 2018, the rate was 38 per 100,000 live births (16 cases) in San Diego County. Imperial had a rate of 32 per 100,000 (one case). California had a rate of 68 per 100,000 (329 cases) (Fig. 6.8) (CDPH, 2020). 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, 2020).



Source: California Department of Public Health, STD Control Branch, 2020

In a comparison by race/ethnicity, the rates of congenital syphilis were higher among Blacks than Latinos and Whites in San Diego County and California. There were no cases among Blacks or Whites in Imperial County (Fig. 6.9) (CDPH, 2020).

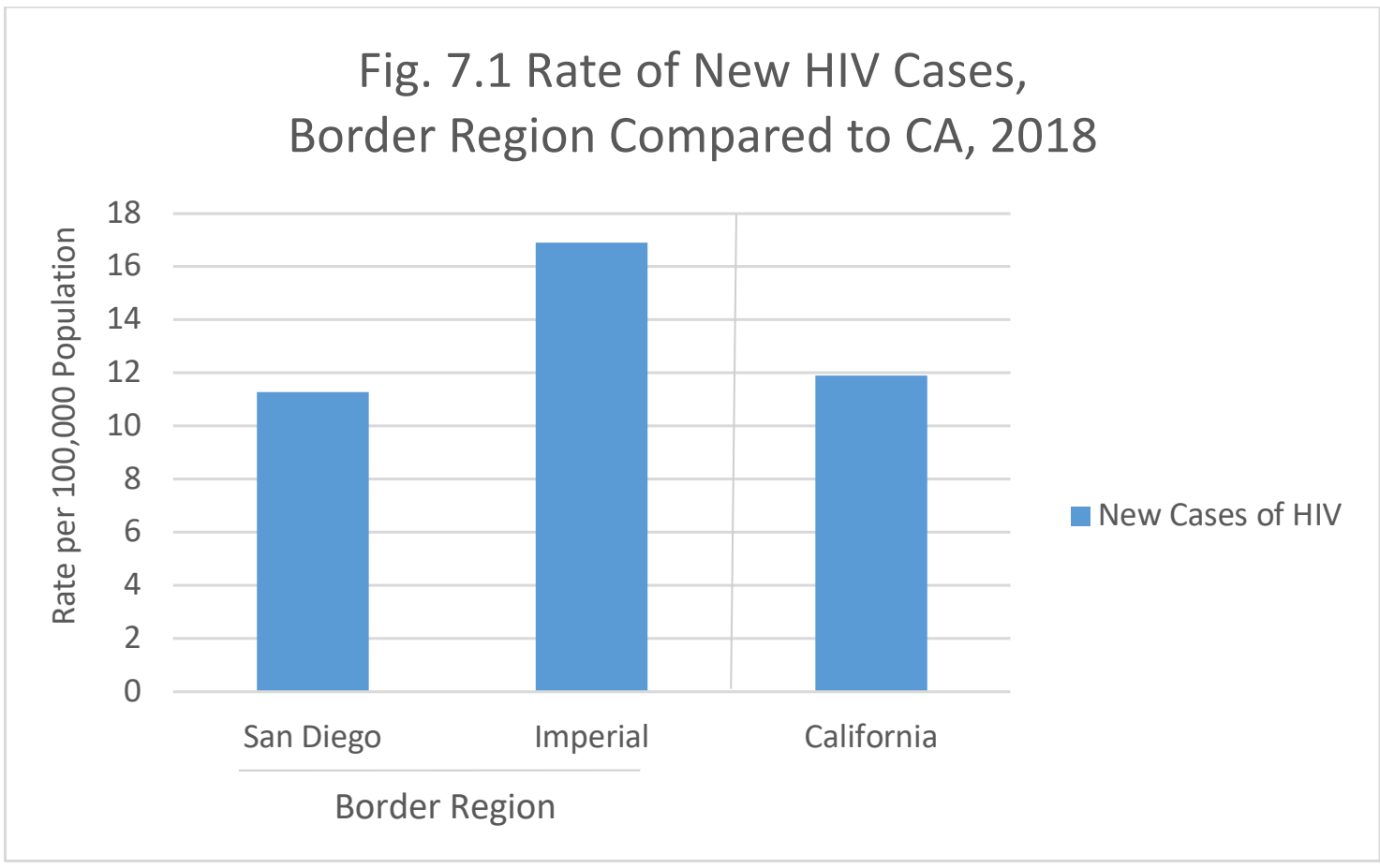


Source: California Department of Public Health, STD Control Branch, 2020

HIV/AIDS

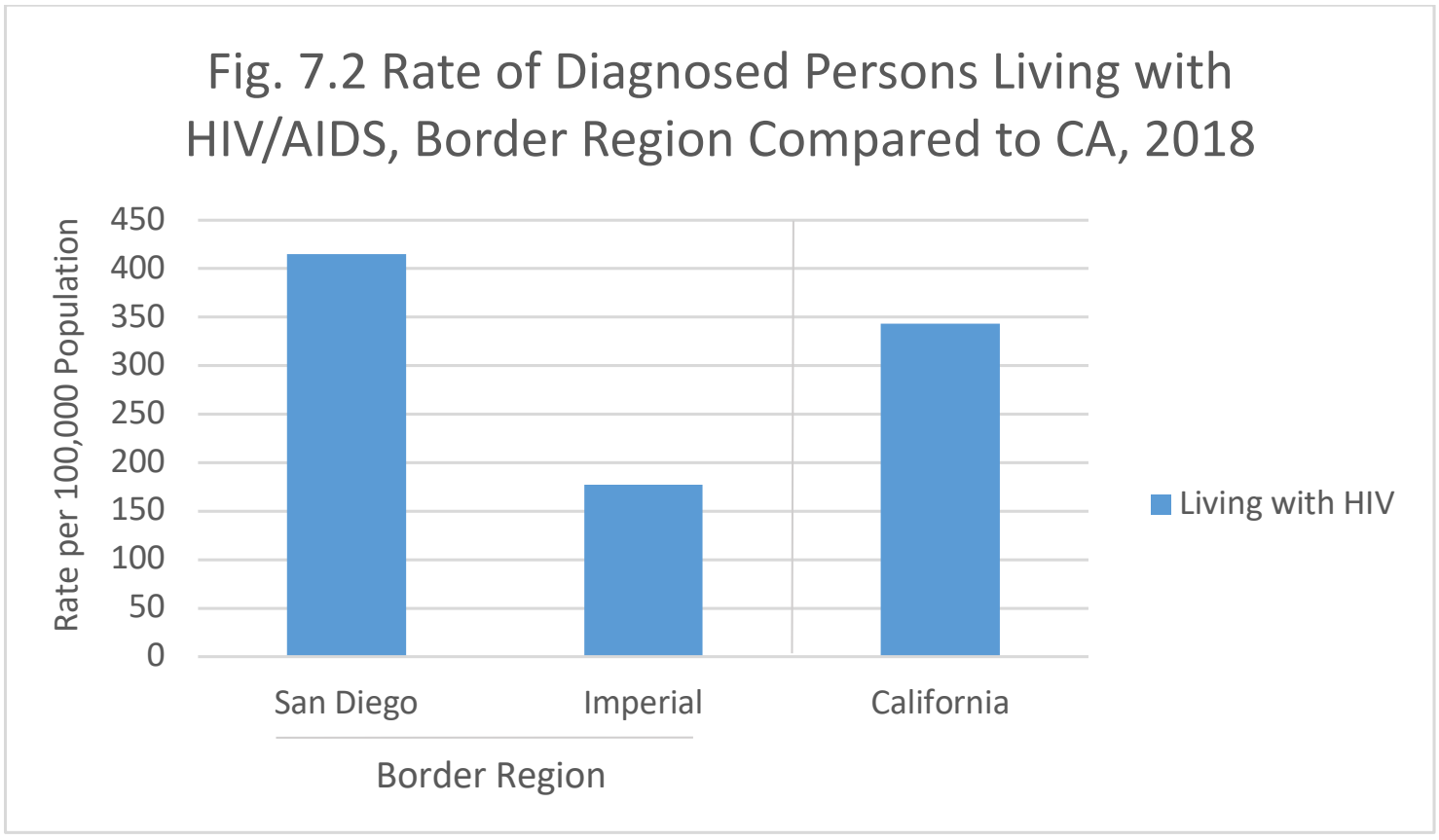
During 2018, Imperial County had a higher rate of new HIV cases than California and California had a slightly higher rate than San Diego County. Moreover, the border region had many affected individuals who crossed the border repeatedly to seek treatment or visit family or relatives on either side of the border. In this chapter, OBBH presents two types of data: new cases of HIV for 2018, and cases of all diagnosed individuals living with HIV up to the end of 2018.

Data from 2018 indicate that the rate for new cases of HIV was 11 per 100,000 (379 cases) among adults in San Diego County; meanwhile, in Imperial County, the rate was 17 per 100,000 (32 cases), as compared with the California rate of 12 per 100,000 (4,747 cases) (Fig. 7.1) (CDPH, 2020).



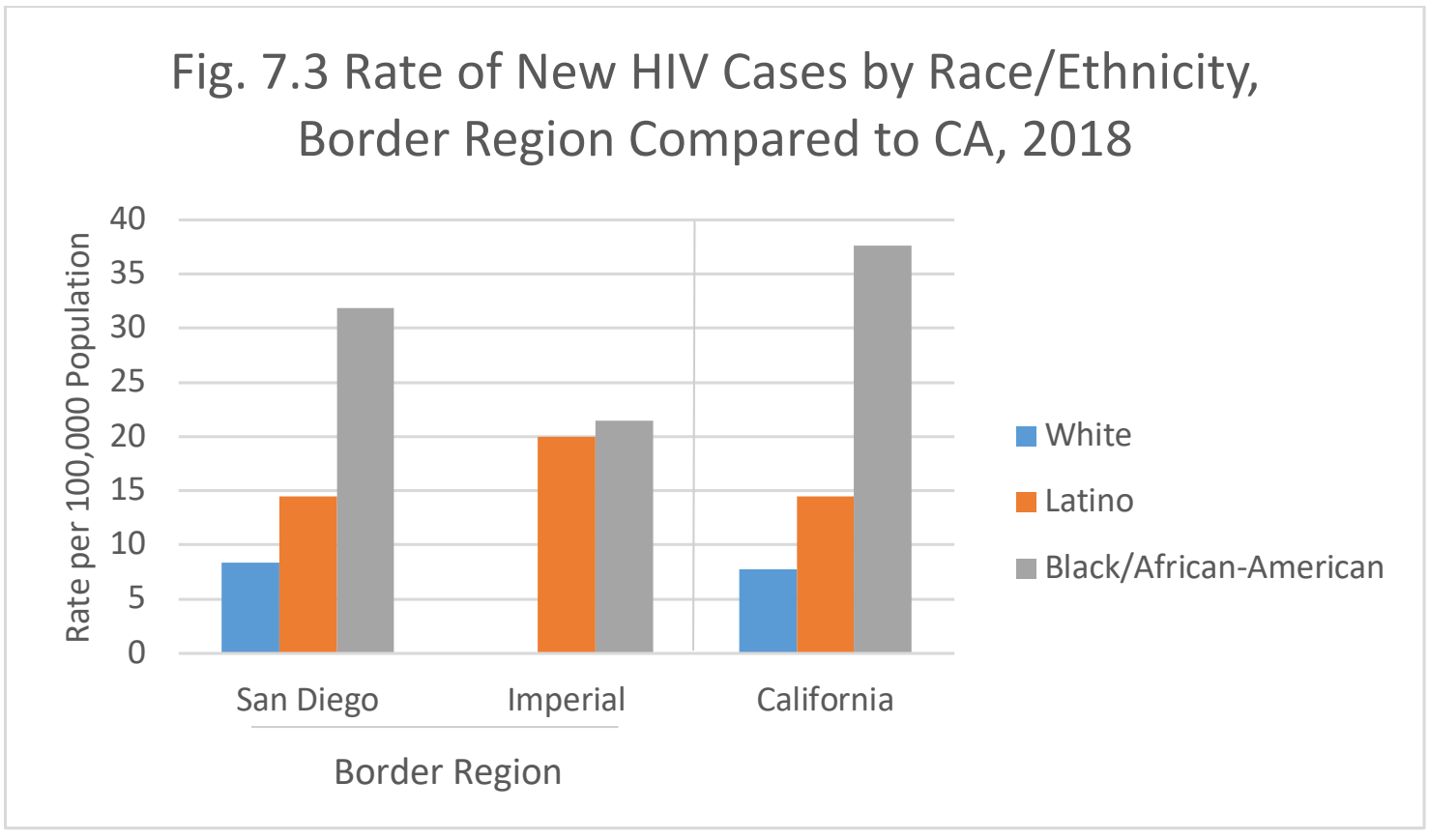
Source: California Department of Public Health, Office of AIDS, 2020

The rate of cases living with HIV in San Diego County was 415 cases per 100,000 (13,866 cases) and in Imperial County was 177 per 100,000 (335 cases). California had a rate of 343 cases per 100,000 (136,566 cases) cases living with HIV (Fig. 7.2) (CDPH, 2020).



Source: California Department of Public Health, Office of AIDS, 2020

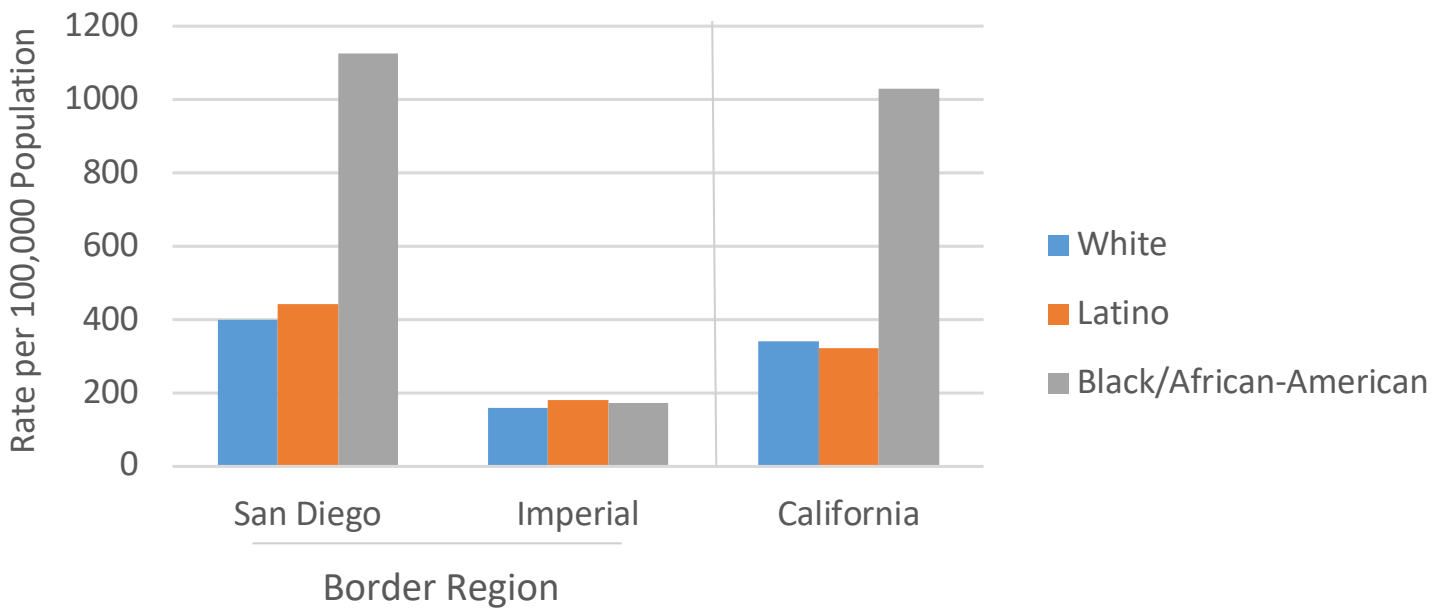
Differences in race/ethnicity existed among new cases of HIV in the California border region. In San Diego County, Blacks had a rate of 32 per 100,000 (51 cases), as compared with Latinos, with a rate of 14.5 per 100,000 (165 cases), and Whites, with a rate of 8 per 100,000 (130 cases). In Imperial County, the Black population had a rate of 21.5 per 100,000 (one case), as compared with the Latino population, which had a rate of 20 per 100,000 (31 cases); the White population did not have any cases. In California, the race/ethnicity disparity persisted: Blacks had a rate of 38 per 100,000 (857 cases), Latinos had a rate of 14.5 per 100,000 (2,272 cases), and Whites had a rate of 8 per 100,000 (1,187 cases) (Fig. 7.3) (CDPH, 2020).



Source: California Department of Public Health, Office of AIDS, 2020

Differences in race/ethnicity existed among cases living with HIV in the California border region. In San Diego County, Blacks had a rate of 1,125 per 100,000 (1,799 cases), as compared with Latinos, with a rate of 443 per 100,000 (5,036 cases), and Whites, with a rate of 399 per 100,000 (6,195 cases). In Imperial County, the Latino population had the highest rate of 182 per 100,000 (282 cases), as compared with Blacks which had a rate of 172 per 100,000 (8 cases), and Whites, with 160 per 100,000 (39 cases). In California, the Black population had the highest rate of 1,029 per 100,000 (23,413 cases), as compared with White, with 340 per 100,000 (52,086 cases), and Latinos had a rate of 323 (50,453 cases) (Fig. 7.4) (CDPH, 2020).

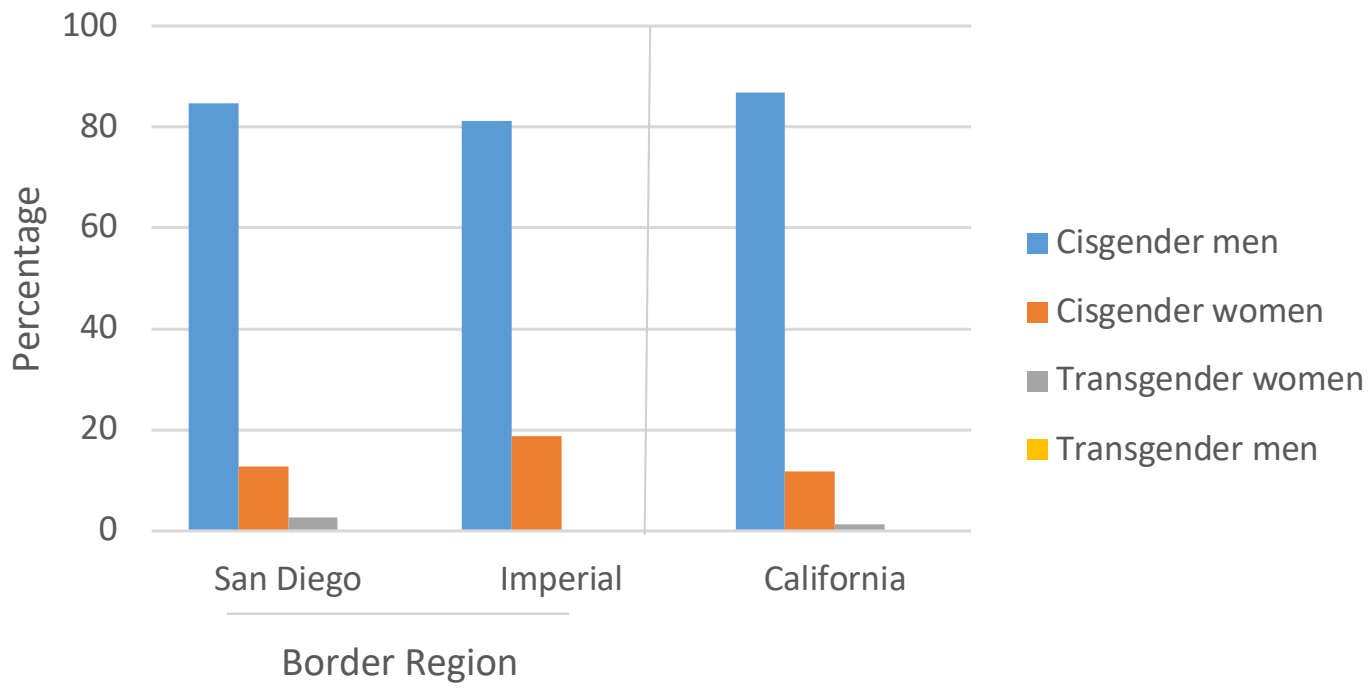
Fig. 7.4 Rate of Diagnosed Persons Living with HIV/AIDS by Race/Ethnicity, Border Region Compared to CA, 2018



Source: California Department of Public Health, Office of AIDS, 2020

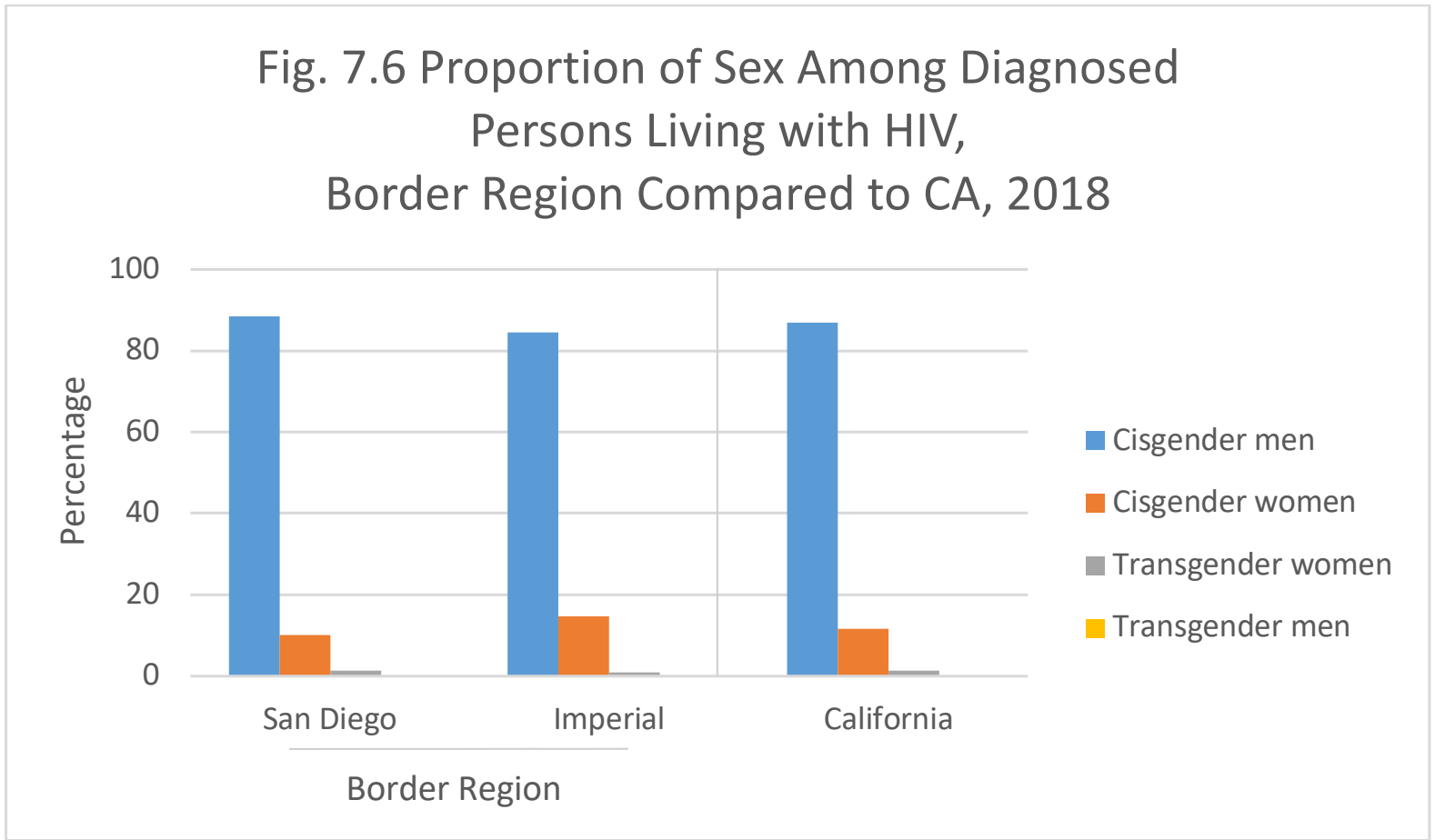
In 2018, cisgender men had a greater proportion than cisgender women of new cases of HIV in the border region and California. In San Diego County, 85% of new cases were among cisgender men (321 cases). In Imperial County, 81% new cases of HIV were among cisgender men (26 cases). Compared with the findings for California, the proportion was very similar to that in the border region, where 87% of new cases were among cisgender men (4,119 cases). In the border region, there were fewer than 10 new cases of HIV among transgender women; in California, there were 61 new cases in the transgender women population, which represented approximately 3% and 2% of the total cases, respectively (Fig. 7.5) (CDPH, 2020).

Fig. 7.5 Proportion of Sex Among New HIV Cases, Border Region Compared to CA, 2018



Source: California Department of Public Health, Office of AIDS, 2020

In 2018, men had a greater proportion than women of cases living with HIV in the border region and in California. In San Diego County, 88.5% of cases living with HIV were men (12,273 cases). In Imperial County, 84.5% (283 cases) of cases living with HIV were men. As compared with the findings for California, the proportion of men living with HIV was 87% (118,708 cases). For the transgender women population, the proportion was less than 2% of all cases for the California border region and California (Fig. 7.6) (CDPH, 2020).



Source: California Department of Public Health, Office of AIDS, 2020

Vaccine Preventable Diseases

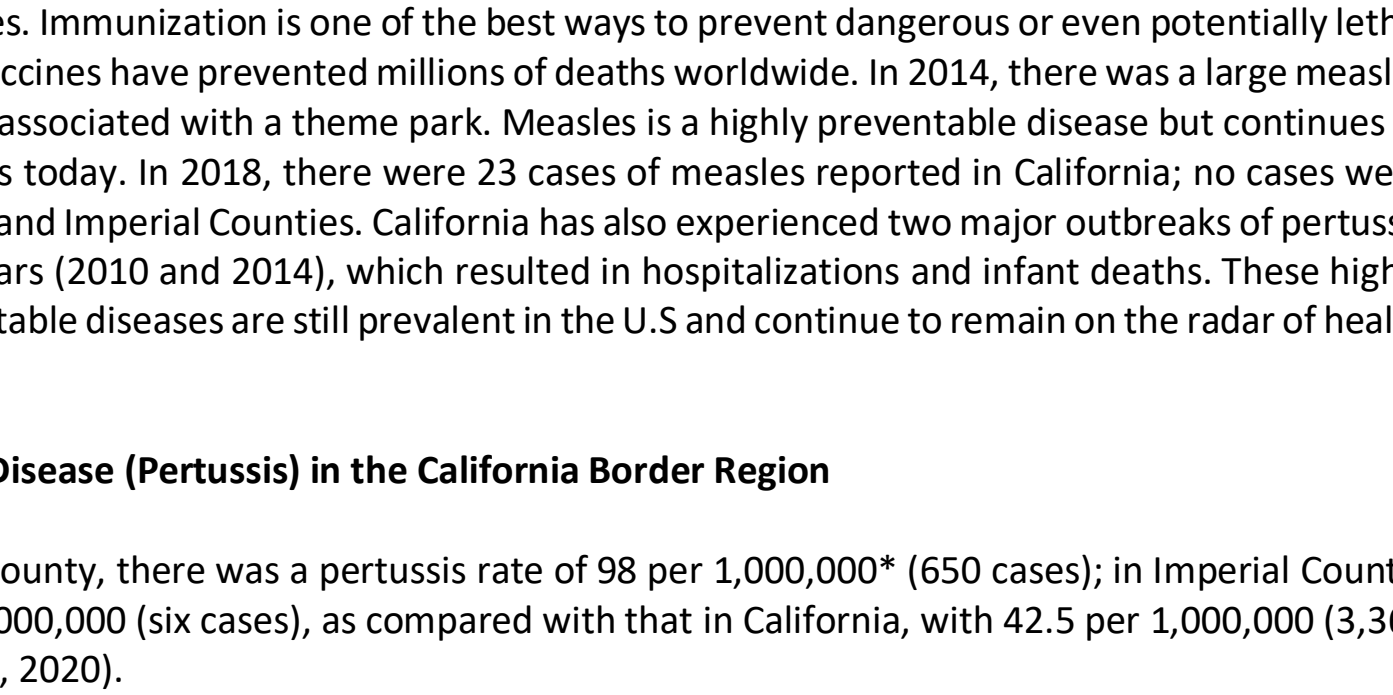
In the California border region, the rate of vaccination is consistently high. Many people cross the California border every day; therefore, maintaining high rates of vaccination is vital to provide better control of communicable diseases. Immunization is one of the best ways to prevent dangerous or even potentially lethal infectious diseases. Vaccines have prevented millions of deaths worldwide. In 2014, there was a large measles outbreak in California associated with a theme park. Measles is a highly preventable disease but continues to affect many Americans today. In 2018, there were 23 cases of measles reported in California; no cases were reported in San Diego and Imperial Counties. California has also experienced two major outbreaks of pertussis within the past ten years (2010 and 2014), which resulted in hospitalizations and infant deaths. These highly contagious yet preventable diseases are still prevalent in the U.S and continue to remain on the radar of health departments.

Vaccine Preventable Disease (Pertussis) in the California Border Region

In 2018 in San Diego County, there was a pertussis rate of 98 per 1,000,000* (650 cases); in Imperial County, the rate was 16 per 1,000,000 (six cases), as compared with that in California, with 42.5 per 1,000,000 (3,364 cases) (Fig. 8.1) (CDPH, 2020).

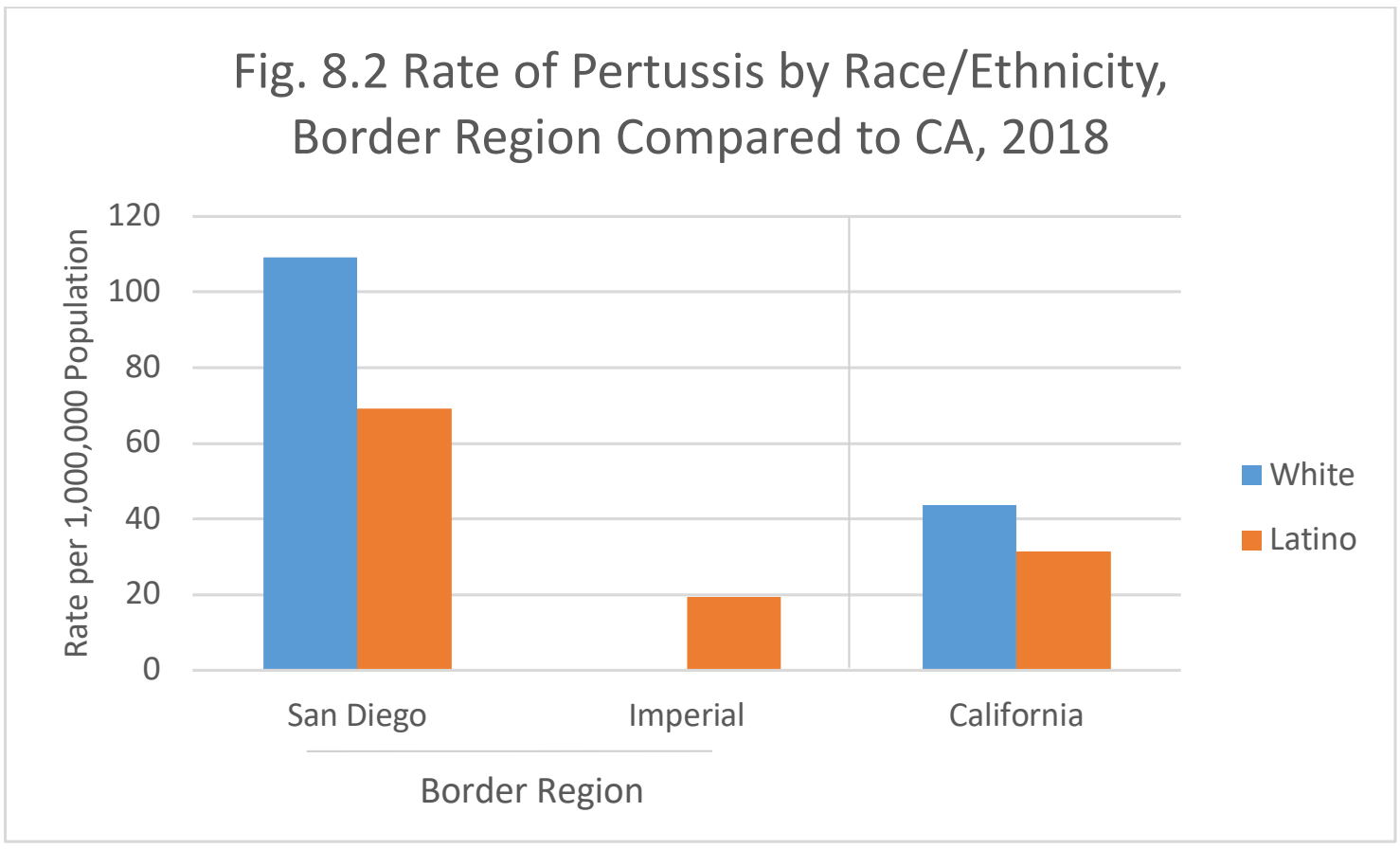
*The rate for vaccine-preventable disease was calculated per 1,000,000 population.

Fig. 8.1 Rate of Pertussis, Border Region Compared to CA, 2018



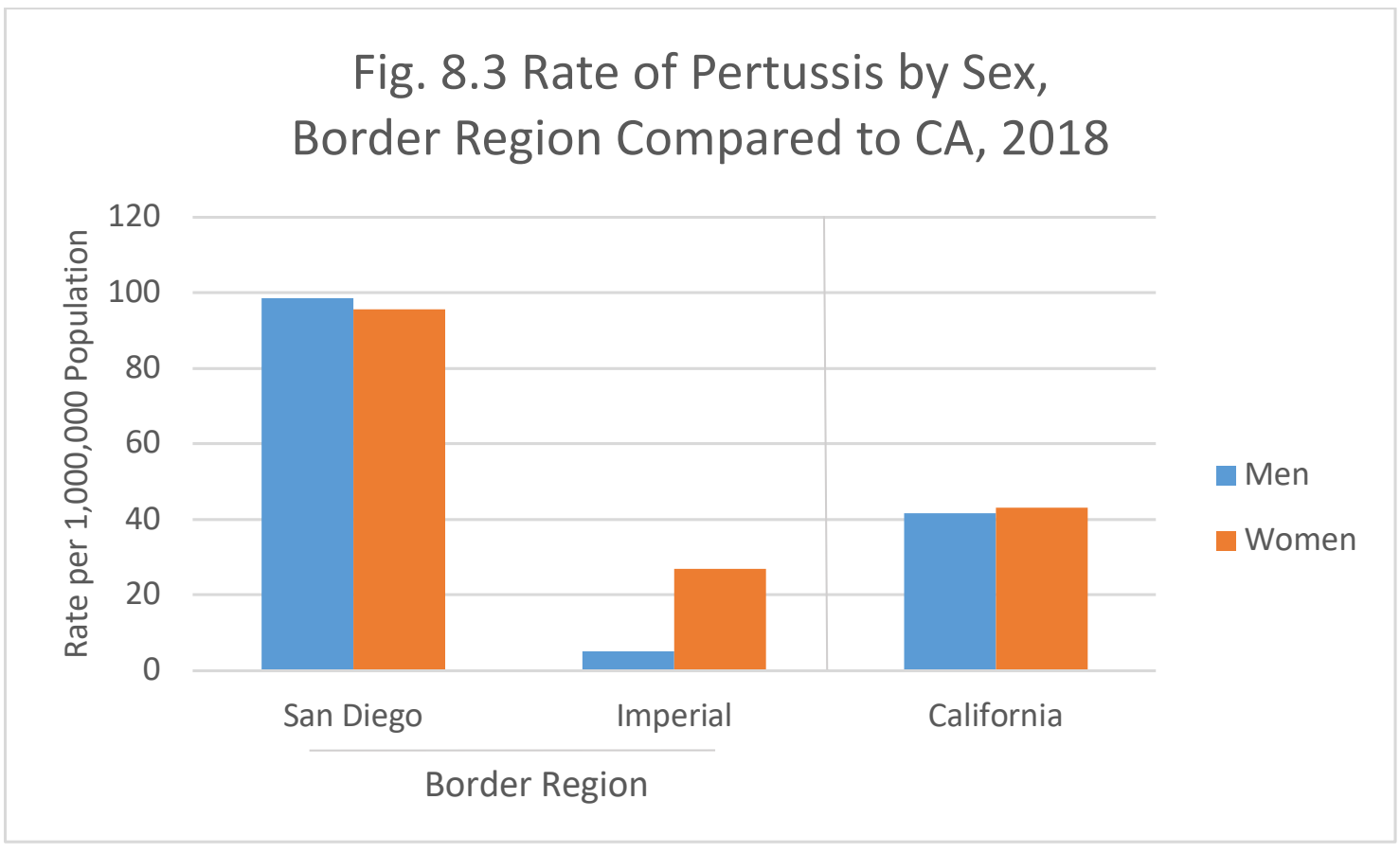
Source: California Department of Public Health, Immunization Branch, 2020

A comparison by race/ethnicity indicated that in the border region, in San Diego County, the rate for Whites was 109 per 1,000,000 (336 cases); for Latinos, the rate was 69 per 1,000,000 (156 cases). In Imperial, the rate for Latinos was 19 per 1,000,000 (six cases), and there were no cases among Whites. In comparison with the border region, California statewide had a rate of 44 per 1,000,000 (1,321 cases) among Whites and 31 per 1,000,000 (979 cases) among Latinos (Fig. 8.2) (CDPH, 2020).



Source: California Department of Public Health, Immunization Branch, 2020

In a comparison by sex, the rates were similar for men and women; in San Diego County, men had a rate of 98.5 per 1,000,000 and women had a rate of 96 per 1,000,000 (329 and 316 cases, respectively). In Imperial County, the rate was 5 per 1,000,000 for men (one case) and for women was 27 per 1,000,000 (five cases). In California, the rate for men was 42 per 1,000,000 (1,642 cases); and that for women was 43 per 1,000,000 (1,715 cases) (Fig. 8.3) (CDPH, 2020).



Source: California Department of Public Health, Immunization Branch, 2020

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. It is important to understand the unique challenges faced by these communities in combating obesity, diabetes, suicide, TB, STIs, HIV/AIDS and pertussis.

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 minority. 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 FPL. Furthermore, the percent of Imperial County residents living below 200% of the FPL rose from 61% in 2015 to 66% in 2018.

Chronic diseases are important indicators of the health of communities. This report includes data on obesity, diabetes and suicide. The Healthy People 2020 target to reduce the proportion of adults who are obese at or below 30.6% of the adult population was met by San Diego County and California statewide. However, the proportion of adults with obesity in San Diego County increased from 23% in 2017 to 26% in 2018. Imperial County, with 39% of adults who were obese in 2018, did not meet the Healthy People 2020 target and has one of the highest rates of obesity in the entire state. These findings highlight the importance of health promotion programs and the creation of policies that help create a healthy environment promoting improved health along the California border.

Similarly, diabetes is a significant and growing challenge in the region. In 2018, 10% of adults in San Diego County and 24% of adults in Imperial County were reported to be diagnosed with diabetes. Notably, the proportion of adults diagnosed with diabetes in Imperial County increased from 18% in 2017 to 24% in 2018.

In 2017, Latinos had considerably lower rates of suicide than Whites along the California border, a pattern that was also noted in OBBH's previous report. Nevertheless, the suicide rate for the Latino population in San Diego rose from 4.7 per 100,000 in 2015 to 5.7 per 100,000 in 2017. Of note, the suicide rates in Imperial County should be compared to previous years with caution, as the small number of cases (less than 20) introduces high variability in the rates reported.

Infectious diseases, such as TB, STIs, HIV/AIDS, and pertussis, continue to be a significant challenge along the California border. In California and bordering counties, the rate of TB was higher among Latinos than Whites. A large proportion of TB cases in California and the bordering counties are of Mexican origin. In 2018, Imperial County reported the highest rate of TB among all California counties; this rate was almost six times higher than the TB rate in California. Furthermore, the border region experiences a higher incidence of *M. bovis* cases than the statewide incidence; in 2018, San Diego County cases accounted for almost one-third of *M. bovis* cases in California. 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.

STIs in California increased during recent years. The California border region had an increase in gonorrhea, syphilis and congenital syphilis. Most of the STI cases in the California border region were among men, and a comparison by race/ethnicity indicated that the highest rates were among the Black population. In 2016-17, the rate of gonorrhea was 177 per 100,000 in California whereas the rate for 2018 was reported as 199 per 100,000; this represents a 12% increase in rate. This trend was also observed for the border counties, with a 20% increase in rate for Imperial County and a 13% increase in rate for San Diego County. The rates of congenital syphilis in California also rose by 33%, with a rate of 51 per 100,000 live births in 2018 and 68 per 100,000 in 2018. In 2018, San Diego County had 16 cases of congenital syphilis, and Imperial County had one case. This disease is preventable with access to prenatal care and timely treatment.

The California border counties had 14,201 total individuals living with HIV infection in 2018. In addition, the California border counties reported 411 new cases of HIV during the same year. Most of the population living with HIV and the individuals newly diagnosed with HIV in the border region are men. In San Diego County and Imperial County, the highest rates for individuals living with HIV and new HIV cases were in the Black population. In California, among the Latino population, there was a 10% increase in the rate of diagnosed persons living with HIV/AIDS since our last report.

In 2018, there were 23 cases of measles reported in California; no cases were reported in San Diego and Imperial Counties. For pertussis, there were 650 cases in San Diego County and six cases in Imperial County. The rate of pertussis cases for San Diego County decreased from 235 per 1,000,000 in 2018 to 98 per 1,000,000 in 2018. However, this rate was more than twice the rate 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 OBBH's website at https://www.cdph.ca.gov /Programs/CID/OBBH/Pages/OBBHome.aspx.

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