

TRIBAL BRIEF

Health and Well-Being Outcomes Among the American Indian/Alaska Native Population in San Diego County, 2016-2020

County of San Diego | Health and Human Services Agency Public Health Services | Community Health Statistics Unit

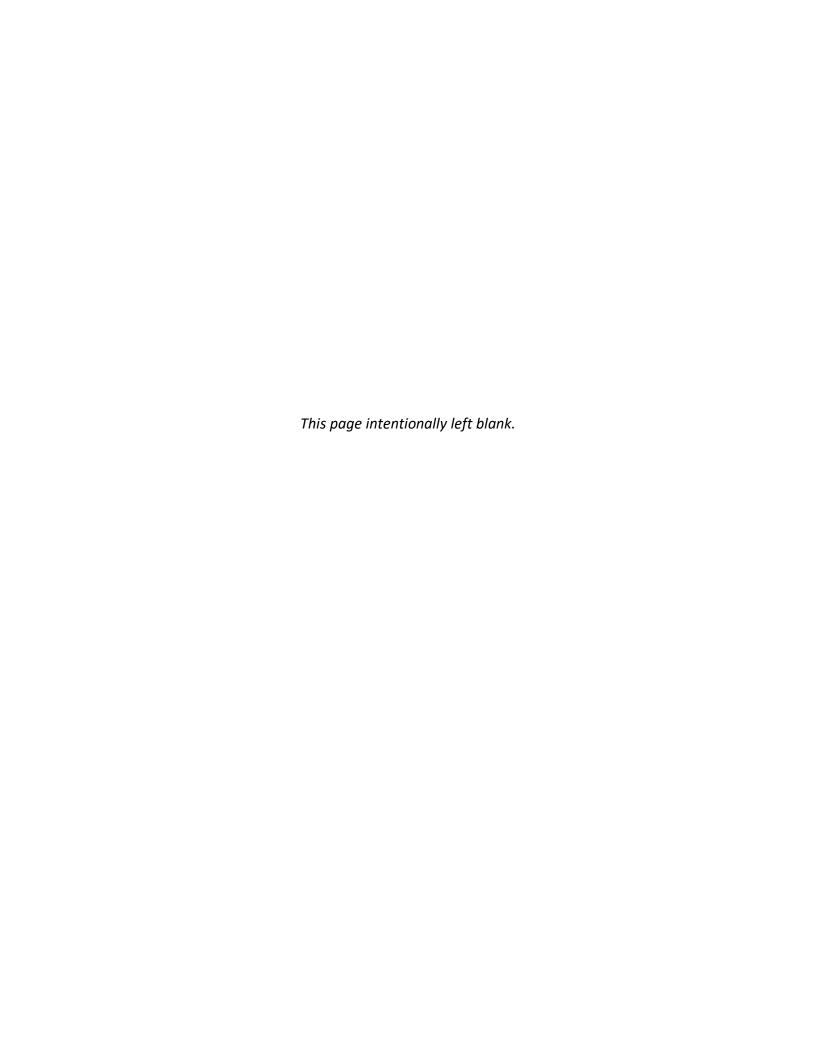
Prepared March 2023











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March 22, 2023

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Public Health Services would like to acknowledge the Indigenous Peoples of all the lands that we are on today. We would like to acknowledge the importance of the lands, which we each call home. We respectfully acknowledge that we are on the traditional territory of the Kumeyaay. We offer our gratitude to the First Nations for their care for, and teachings about, our earth and our relations. May we honor these teachings.

Inquiries regarding this document may be directed to:

Community Health Statistics Unit 5469 Kearny Villa Road, San Diego, CA 92123 (619) 692-6667

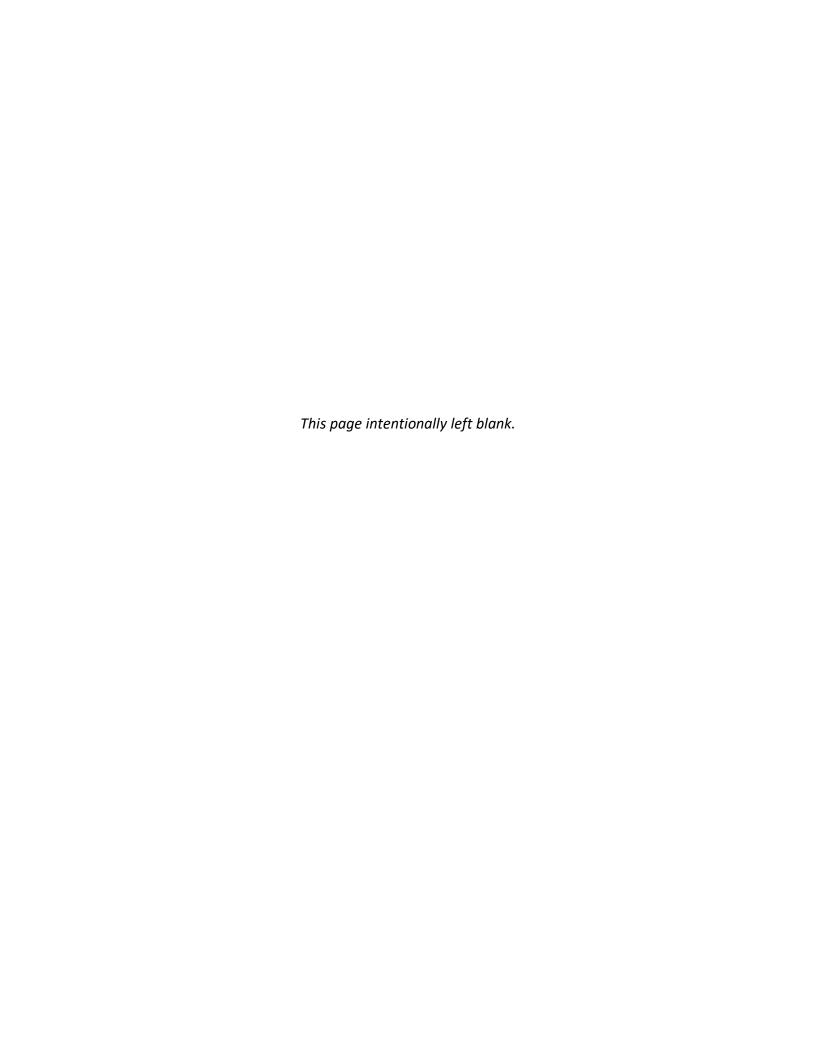
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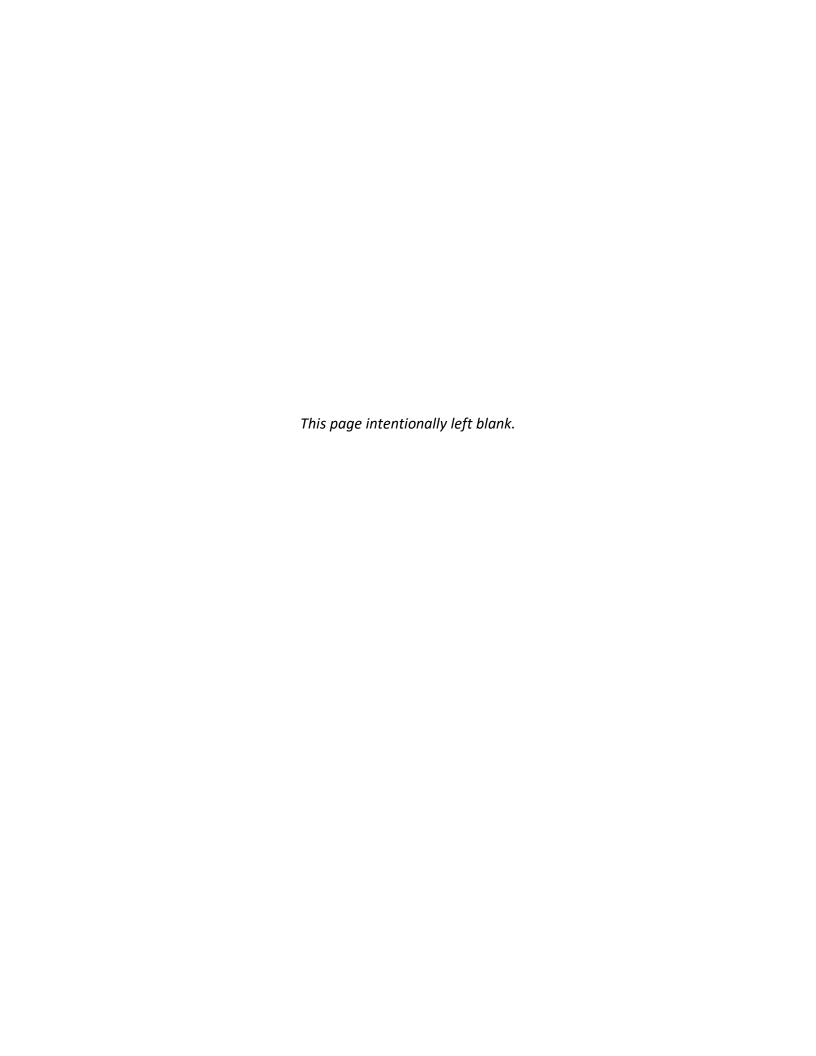




Tribal Brief: Health and Well-Being Outcomes Among the American Indian/Alaska Native Population in San Diego County, 2016-2020

CONTENTS

Introduction	1
Methodology	2
Demographics	3
Health and Well-Being	3
Healthcare Access and Utilization	5
Mortality and Morbidity	7
Behavioral Health	7
Communicable Disease	8
Non-Communicable (Chronic) Disease	9
Injury	
Maternal and Child Health	12
Conclusion	13
Sources	14



INTRODUCTION

This health and well-being brief presents information about the health and well-being of American Indian/Alaska Native (AIAN) residents of San Diego County. The information presented here include demographics, social determinants of health, health status and health behaviors, medical encounter, and death data from the California Department of Public Health. These findings can be helpful as an evidence base for community health improvement efforts and identifying high priority areas.

Although this report does not include medical care data from Indian Health Services (IHS), these findings may supplement information about AIAN residents when combined with IHS health data. There are no IHS hospitals or emergency departments within San Diego County, so the local state-licensed facilities offer aggregate data about some of the most emergent and serious healthcare needs.

There are approximately 58,000 AIAN residents living on and off 18 federally recognized reservations. There are no hospitals within San Diego County that are part of Indian Health Services. **Figure 1** shows state-licensed hospitals with emergency departments. AIAN residents living on reservation lands may need to travel far to seek emergency care and/or access in-patient care.

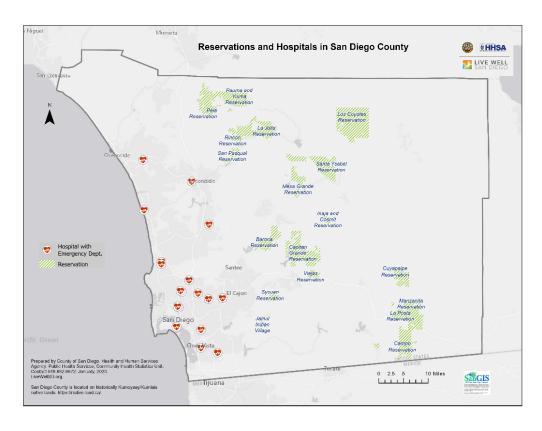


Figure 1. Map of Reservations and Hospitals in San Diego County.

This report includes a range of indicators describing the demographics, health and well-being, health care access and utilization, and mortality and morbidity experienced by AIAN residents in San Diego County from 2016 to 2020. To view this data in the Tribal Health and Well-Being dashboard, please visit: <u>Tribal Health and Well-Being Dashboard 2016-2020</u>.

METHODOLOGY

Medical encounters were selected from records where the case was listed as American Indian or Alaska Native (AIAN) alone, or in combination with any other race, regardless of Hispanic ethnicity. Whether or not AIAN race was self-identified was unknown. Medical encounters included discharge from an acute care facility (hospitalization), discharge from an in-patient chemical or psychiatric facility (in-patient treatment, or IPT), and/or discharge from an emergency department (ED). Discharges were not unduplicated patients; therefore, the same individual may have been discharged more than once and or from multiple facilities.

Medical encounter and death rates were calculated as the average rate for 2016 to 2020. Crude (not age-adjusted) rates were calculated per 100,000 residents of San Diego County treated at a state-licensed facility in San Diego County. Similarly, death rates were calculated only among AIAN residents of San Diego County, per 100,000. The population used to calculate rates was the American Community Survey (ACS) 2016-2020 5-year estimate of AIAN alone, or in combination with any other race (Table B02010).

Health indicators selected were based on the San Diego County Community Profiles which contains medical encounter and death rates for approximately 70 conditions. To protect privacy and to allow for more stable rate calculations, the 5-year aggregated rates were de-identified for fewer than 11 events (discharges, or deaths) and only at the county-level of geography to protect tribal privacy.

Data in the demographics, health and well-being, and health care access and utilization sections of this brief come from the California Health Interview Survey (CHIS), conducted by the University of California Los Angeles (UCLA) Center for Health Policy Research. Data from the 2016 through 2020, or time periods within these data years, for select questions, surveys were aggregated and only statistically stable estimates were included in this brief.

Limitations of this data:

- Most of the medical encounter and death rates among AIAN are notably lower than that of the total population, which has been reported in other reports and studies (California Tribal Epidemiology Center, 2015; Urban Indian Health Institute, 2017). There are multiple reasons that rates may be underestimated in this population other than small numbers, such as misclassification of race on death (Dankovchik et al., 2015; Dougherty et al., 2019), and other medical records (Bigback et al., 2015), and limited access to care based on location, income, lack of insurance and other social determinants affecting AIAN residents (Urban Indian Health Institute, 2017). In addition, AIAN residents receive healthcare through the IHS system directly and through traditional healing practices. Finally, the COVID-19 pandemic also affected all-cause mortality in 2020. Death rates from other conditions might be affected despite the 5-year aggregation 2016-2020.
- Medical encounter data represent discharges, or visits, and the counts and rates produced, not the number of individual patients. A person may be discharged multiple times in a year or be discharged from more than one facility.
- CHIS data are not over-sampled for AIAN in San Diego County so more detailed health and well-being data from this survey may be unstable.

For more information regarding data and methodology, visit the <u>2020 Community Profiles Data Guide and Data Dictionary Dashboards</u>, which have technical notes for users of the Community Profiles' morbidity and mortality data.

DEMOGRAPHICS

From 2016 to 2020, there were an estimated 58,175 American Indian/Alaska Natives (AIAN) in San Diego County. The AIAN population represented almost 1.8 percent of San Diego County's total population.

The AIAN population is generally younger than the overall population; 67.3 percent of the AIAN population is under age 40, compared to the 56.9 percent of the overall population. The AIAN population had a larger proportion of males (53.4 percent) than females (46.6 percent) from 2016 to 2020. The AIAN population was also primarily heterosexual (86.8 percent), and 13.2 percent of the population was lesbian, gay, bisexual, queer, or another minority sexual orientation (LGBQ). From 2016 to 2020, the percentage of AIAN residents who were high school graduates was nearly equal to the percentage in San Diego County overall (19.7 percent and 19.9 percent, respectively), however fewer had received some college education or a higher level of education than the overall population (64.6 percent and 68.8 percent, respectively).

The AIAN population had a higher rate of full-time employment (21 or more hours per week), compared to San Diego County residents overall (69.8 percent and 55.5 percent, respectively). However, 42.7 percent of AIAN residents were below 200 percent of the Federal Poverty Level (FPL), compared to 30.9 percent of the total population. From 2016 to 2020, one out of five (20.7 percent) of AIAN households had an income of \$20,000 or less per year, compared to the 14.9 percent of all households in the county. Among AIAN residents who were below 200 percent FPL, nearly half (48.4 percent) were food insecure, meaning they were not able to afford enough food.

HEALTH AND WELL-BEING

PHYSICAL HEALTH

On a scale of poor to excellent health, a higher proportion of AIAN residents reported their health as fair or poor (18.7 percent) compared to the total population (12.6 percent). AIAN residents had higher diagnoses for asthma,

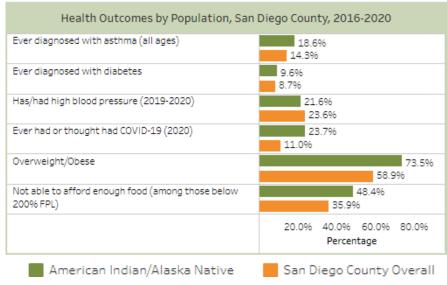


Figure 2. Physical Health Outcomes.

diabetes, and being overweight or obese, compared to the overall county population. From 2016 to 2020, 18.6 percent of AIAN residents of any age had ever been diagnosed with asthma, 9.6 percent of the AIAN population had ever been diagnosed with diabetes, and 73.5 percent of AIAN residents were classified as overweight or obese. Figure 2 shows physical health outcomes among the AIAN population and overall San Diego County population.

MENTAL HEALTH

As seen in Figure 3, the proportion of AIAN residents aged 12 and older who had serious psychological distress in the last month was over two times higher than population overall in San Diego. From 2016 to 2020, 10.4 percent of AIAN residents aged 12 and older reported recent serious psychological distress compared to percent of the population. Overall, psychological distress caused a heavier burden on AIAN residents than the total San Diego County population, shown in higher proportions of severe social life impairment, severe work impairment, severe household chore impairment, and severe

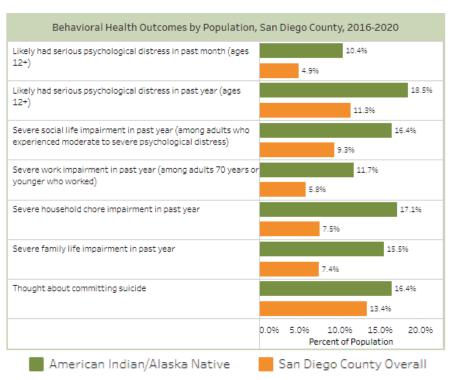


Figure 3. Mental Health Outcomes.

family life impairment within the last year. Further, thoughts of committing suicide were more common among AIAN residents than the total population, with 16.4 percent of AIAN residents having thought about committing suicide, compared to 13.4 percent of the overall population.

HEALTH BEHAVIORS

From 2016 to 2020, 26.9 percent of AIAN residents were current or former cigarette smokers, which was less than the 28.8 percent of the overall population. However, more AIAN residents self-reported current or former ecigarette use. Almost a quarter (23.1 percent) of AIAN residents were current or former e-cigarette users, compared to 18.7 percent of the total San Diego County population. From 2017 to 2020, AIAN residents ages 12 and older also had higher proportions of ever trying marijuana or hashish (59.1 percent compared to 49.8 percent) and adult AIAN use of marijuana or hashish in the last year was higher than the overall population (52.1 percent and 49.7 percent, respectively).

In terms of sexual health behaviors, almost half, or 46 percent, of the male adult AIAN population aged 18-44 who had female partners *did not use* birth control to prevent pregnancy from 2017 to 2020. In comparison, 34.5 percent of the overall male population aged 18-44 with female partners did not use birth control. A third (33.3 percent) of AIAN residents had never been tested for HIV, indicating a higher percentage of residents who had been tested, compared with the overall population (66.7 percent and 51.1 percent, respectively). Additionally, from 2019 to 2020, 12.7 percent of AIAN residents had sex without giving consent, which was a higher proportion than the 9.8 percent of the total San Diego County population who had sex without giving consent.

NEIGHBORHOOD

Almost half, or 46.5 percent, of AIAN residents in San Diego County owned their home from 2016 to 2020, which was a lower proportion than all county residents. Fewer AIAN residents agreed or strongly agreed their neighbors were helpful than did the overall population (68.9 percent and 81.7 percent, respectively). Among adults with children under age 18 in their household, a quarter (25.7 percent) of AIAN adults agreed or strongly agreed their neighbors did not get along. In terms of trustworthiness, 75.4 percent of AIAN residents agreed or strongly agreed that people in their neighborhood could be trusted, which was a lower proportion than the total population (84.2 percent). Additionally, 14.3 percent of AIAN residents felt safe some or none of the time, compared to 8.5 percent of the overall county population who felt the same.

HEALTHCARE ACCESS AND UTILIZATION

INSURANCE

From 2016 to 2020, 13.1 percent of the AIAN population was uninsured, compared to 6.5 percent of the total population. Among the 86.9 percent who were insured, 46.4 percent of AIAN residents received employment-based insurance, 30.3 percent received Medicare and Medicaid only, and 10.2 percent received some other type of healthcare insurance.

Related to dental health, from 2016 to 2020, 36.3 percent of the AIAN population did not have dental insurance, compared to 31.7 percent of the total population. Additionally, nearly a third (32.2 percent) of the AIAN population had not visited the dentist in the last year, compared to 24.9 percent of the total population. **Figure 4** shows the health and dental insurance status among the AIAN population from 2016 to 2020.

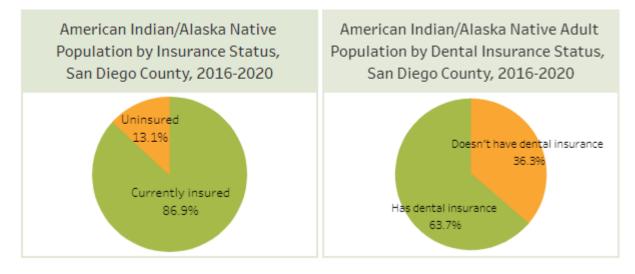


Figure 4. Insurance Status.

ACCESS AND UTILIZATION

In terms of healthcare access, from 2016 to 2020, 15.5 percent of the AIAN population did not have a usual source of care, compared to 12 percent of the overall population, and 10 percent of AIAN residents had difficulty finding primary care, which was nearly double the proportion of all county residents (5.4 percent). Lower access to health care was also exhibited by a higher percentage of AIAN residents delaying or not getting care, compared to the overall San Diego County population (15.8 percent and 12.5 percent, respectively). Over a quarter (27.2 percent) of the AIAN population had a routine checkup more than one year ago, and 19.9 percent of AIAN residents visited the emergency room in the last year. **Figure 5** shows the comparison of various healthcare access and utilization measures between the AIAN population and the overall San Diego County population.

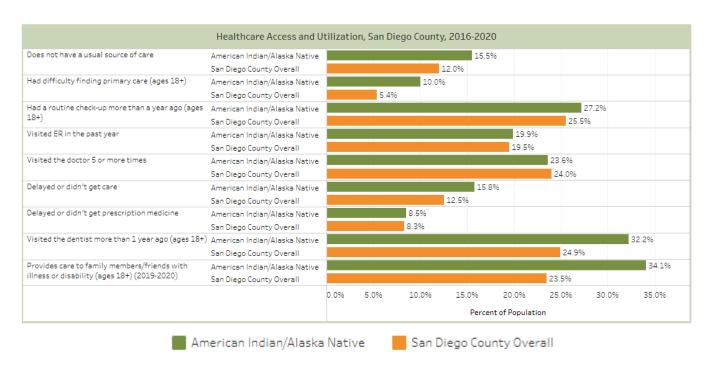


Figure 5. Healthcare Access and Utilization.

Behavioral health access and utilization data from 2016 to 2020 showed AIAN residents in San Diego County felt a higher need for help for emotional or mental health, or alcohol or drug use. An estimated 29.4 percent of AIAN residents needed help for emotional or mental health, or for alcohol or drug use, but just over half (50.8 percent) who needed help did not receive treatment. Further, 16.4 percent of AIAN residents saw any healthcare provider for emotional or mental and/or alcohol-drug issues in the past year, which was a similar rate to the overall population (17 percent). Additionally, in the past year, 16 percent of AIAN residents visited a professional for mental, drug, or alochol issues and 10.1 percent took a prescription medicine for at least two weeks for an emotional or mental health issue.

MORTALITY AND MORBIDITY

In this section, rates of mortality, or death, and morbidity, the amount of disease in a population, were collected for the AIAN population in San Diego County. The conditions experienced by this population are grouped under behavioral, communicable, non-communicable (also known as chronic), or injury. For conditions in which there was an average of at least 12 cases from 2016 to 2020, rates were calculated for death, hospitalization, emergency department discharge (ED), in-patient treatment, and incidence, where applicable. Information related to prenatal care and birth weight are available in the maternal and child health section.

Behavioral Health

Emergency department (ED) discharge and in-patient treatment rates for behavioral health conditions are shown in **Figure 6.**

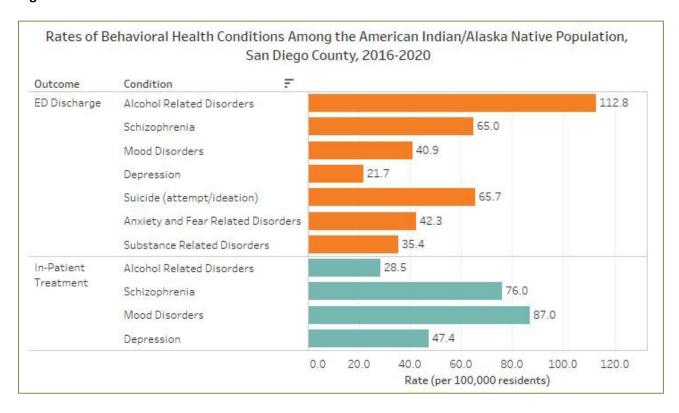


Figure 6. Rates of Behavioral Health Conditions.

ED DISCHARGE

The 2016 to 2020 ED discharge rate for alcohol-related disorders was 112.8 per 100,000 among AIAN residents of San Diego County. Suicide ideation/attempt (65.7 per 100,000) and schizophrenia (65.0 per 100,000) were the next highest rates of ED discharge for a behavioral health condition. ED discharge for anxiety and fear-related disorders (42.3 per 100,000) and mood disorders (40.9 per 100,000) were also high among AIAN between 2016 and 2020. ED discharges for all conditions were lower than that of the total population from 2016 to 2020.

IN-PATIENT TREATMENT

In-patient treatment for behavioral health or chemical rehabilitation issues were lower among AIAN residents than the total population from 2016 to 2020. However, behavioral health in-patient treatment was highest for AIAN residents with mood disorders (87.0 per 100,000), schizophrenia (76.0 per 100,000), depression (47.4 per 100,000) and alcohol-related disorders (28.5 per 100,000) between 2016 and 2020.

Communicable Disease

Incidence, hospitalization, and emergency department (ED) discharge rates for communicable diseases are shown in **Figure 7.**

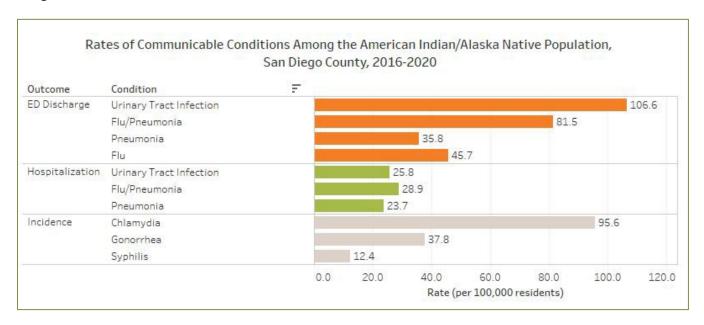


Figure 7. Rates of Communicable Conditions.

INCIDENCE

The incidence rate for syphilis in AIAN residents from 2016 to 2020 was 12.4 per 100,000, lower than the total San Diego County population (30.1 per 100,000). The incidence rate of gonorrhea in AIAN residents was 37.8 per 100,000, lower than in the total San Diego County population (178.0 per 100,000). Among AIAN residents, the chlamydia incidence rate was 95.6 per 100,000, over six times lower than the total rate of 619.5 per 100,000.

HOSPITALIZATION

Between 2016 and 2020, the hospitalization rate for influenza (flu) or pneumonia among AIAN residents in San Diego County was 28.9 per 100,000, lower than that of the total population (143.7 per 100,000).

ED DISCHARGE

Between 2016 and 2020, the emergency department (ED) discharge rate for influenza (flu) among AIAN residents in San Diego County was 45.7 per 100,000, lower than that of the total population (248.8 per 100,000). Similarly, the ED discharge rate for pneumonia among AIAN was lower than that of the total population (35.8 per 100,000 and 198.5 per 100,000 respectively).

Non-Communicable (Chronic) Disease

Death, hospitalization, and emergency department (ED) discharge rates for non-communicable conditions are shown in **Figure 8.**

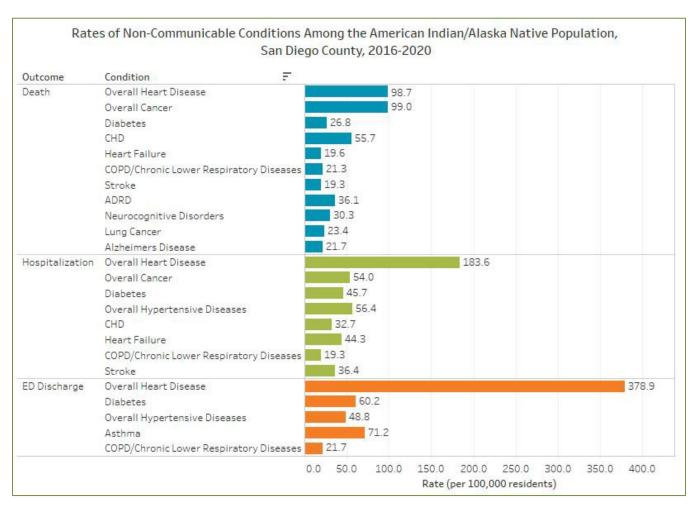


Figure 8. Rates of Non-Communicable Conditions.

DEATH

The highest rates of death from chronic diseases among AIAN residents in San Diego County from 2016 to 2020, were due to cancers, heart diseases, and coronary heart disease (CHD) (99.0 per 100,000, 98.7 per 100,000, and

55.7 per 100,000, respectively). Lung cancer accounted for the highest rate of deaths (23.4 per 100,000) among AIAN residents from any cancer. The highest death rates from selected heart diseases included CHD (55.7 per 100,000), followed by heart failure and stroke (19.6 per 100,000 and 19.3 per 100,000, respectively). Alzheimer's Disease (21.7 per 100,000) accounted for 60 percent of the ADRD deaths.

The AIAN death rate from diabetes was 26.8 per 100,000. Deaths from COPD and chronic lower respiratory diseases (21.3 per 100,000), and stroke (19.3 per 100,000), were also high in AIAN residents. Chronic disease death rates among AIAN were lower than the total population, except for diabetes, which was 14 percent higher than that of the total population (23.6 per 100,000).

Except for diabetes, death rates for 2016 to 2020 from chronic diseases were lower in AIAN residents than in the total population in San Diego County.

HOSPITALIZATION

Heart diseases accounted for the highest rates of hospitalizations among San Diego County AIAN residents (183.6 per 100,000). High rates of hospitalizations with circulatory diseases included hypertensive diseases (56.4 per 100,000), heart failure (44.3 per 100,000), stroke (36.4 per 100,000) and CHD (32.7 per 100,000). Rates of hospitalization for chronic diseases for 2016 to 2020 were lower in AIAN residents than in the total population in San Diego County.

ED DISCHARGE

The highest rates of ED discharge among AIAN residents of San Diego County for 2016 to 2020 were for heart diseases (378.9 per 100,000), asthma (71.2 per 100,000), diabetes (60.2 per 100,000), and hypertensive diseases (48.8 per 100,000). ED discharge rates for 2016 to 2020 from chronic diseases were lower in AIAN residents than in the total population in San Diego County.

Injury

Death, hospitalization, and emergency department (ED) discharge rates for injuries are shown in Figure 9.

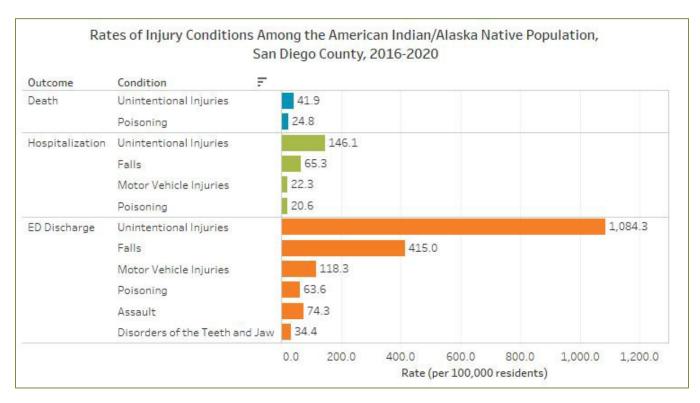


Figure 9. Rates of Injury Conditions.

DEATH

From 2016 to 2020, AIAN residents in San Diego County had higher rates of deaths from unintentional injuries and poisonings than did the total population. The AIAN unintentional injury death rate was 41.9 per 100,000, 11 percent higher than the total population rate of 37.9 per 100,000. The AIAN death rate from poisoning was 24.8 per 100,000, which was 67 percent higher than the total population death rate of 14.8 per 100,000.

Other than unintentional injuries and poisonings, no other injury rates were higher among the AIAN population than the total population in San Diego County, from 2016 to 2020.

HOSPITALIZATION

In San Diego County, for 2016 to 2020, the highest injury hospitalization rates were for unintentional injuries (146.1 per 100,000) among AIAN residents. The main external causes of injury (regardless of intent) among AIAN residents, were falls (65.3 per 100,000), motor vehicle collisions (22.3 per 100,000), and poisoning (20.6 per 100,000). Rates of hospitalization for injuries for 2016 to 2020 were lower in AIAN residents than in the total population in San Diego County.

ED DISCHARGE

The most common cause of emergency department (ED) discharge among AIAN residents in San Diego County, between 2016 and 2020, was unintentional injuries (1,084.3 per 100,000). Falls (415.0 per 100,000) and motor vehicle collisions (118.3 per 100,000) were the second and third most frequent causes of ED discharge for injuries to AIAN residents between 2016 and 2020 in San Diego County. The ED discharge rate for assault was 74.3 per 100,000.

Rates of ED discharge for injuries for 2016 to 2020 were lower in AIAN residents than in the total population in San Diego County.

Maternal and Child Health

Among the live births for which early prenatal care information was known, 80.8 percent of AIAN mothers received early prenatal care from 2016 to 2020. This was a slightly lower proportion than for all mothers in San Diego County, in which 86.5 percent received early prenatal care. **Figure 10** shows the comparison of early prenatal care, low birth weight, and preterm birth among the AIAN population and the overall San Diego County population.

From 2016 to 2020, AIAN residents had higher proportions of preterm births and low birth weight births, compared to all births overall in San Diego County. In this time period, 9.6 percent of live births to AIAN residents were born preterm, compared to 8.6 percent of the overall San Diego County births. Among births for which birth weight was known, 7.8 percent of live births to AIAN residents were of low birth weight, whereas 6.7 percent of all births in San Diego County overall were of low birth weight.

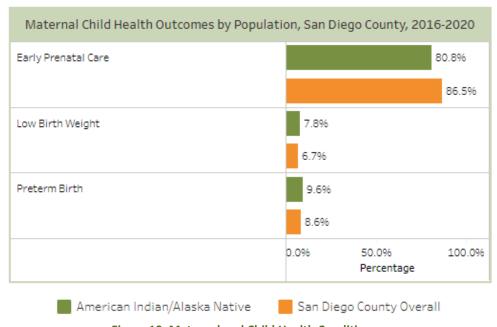


Figure 10. Maternal and Child Health Conditions.

CONCLUSION

San Diego County is home to an estimated 58,000 American Indian/Alaska Native (AIAN) residents living on and off 18 federally recognized reservations. AIAN populations across the United States experience disproportionate burdens of mortality and poor health and well-being outcomes resulting from historical marginalization and disruption of cultural and familial systems (CDPH, 2018). These outcomes may vary by community; therefore, it is important to examine health and well-being outcomes among local AIAN residents. The results in this brief reflect the continued impact of health disparities experienced by AIAN residents of San Diego County. Most of the medical encounter and death rates among AIAN are notably lower than that of the total population, which has been reported elsewhere (California Tribal Epidemiology Center, 2015; Urban Indian Health Institute, 2017). There are multiple reasons that rates may be underestimated in this population other than small numbers, such as misclassification of race on death (Dankovchik et al., 2015; Dougherty et al., 2019) and other medical records (Bigback et al., 2015), and limited access to care based on location, income, lack of insurance and other social determinants affecting AIAN residents (Urban Indian Health Institute, 2017). The data presented in this brief provide insight into the demographics and health experiences of American Indian/Alaska Native (AIAN) residents in San Diego County during the five-year period from 2016 to 2020.

KEY FINDINGS FROM THIS BRIEF INCLUDE:

Heart disease is a leading cause of death and medical encounters among the AIAN population, yet a smaller proportion of this population have been diagnosed with high blood pressure, compared to the overall San Diego County population. This information indicates more preventive screenings could benefit this population.

Similarly, the rate of death due to diabetes was higher among AIAN residents than the total rate in San Diego County, which also indicates a need for preventive screening. As the AIAN population is generally younger than the overall population, screenings for conditions like high blood pressure, diabetes, and cancers may be more beneficial at younger ages.

The rates of death due to poisoning and unintentional injuries were higher among AIAN residents than the overall population. These rates may reflect the disparities seen in overdose deaths among the AIAN population in the United States. AIAN residents experienced the highest overdose death rate in 2020 and were among the groups with the largest increase in overdose death rates over the previous year (Friedman & Hansen, 2022). The AIAN population may benefit from targeted harm reduction efforts.

Overall, AIAN residents reported higher rates of poor mental health, including experiencing serious psychological distress, severe impairment in social life, work, household chores, and family life, and suicidal thoughts.

However, less than half of the AIAN population that needed mental health help received treatment. These survey findings suggest that although the AIAN population may experience similar or higher rates of poor mental health, they may also be less likely to seek mental health care. Targeted outreach and culturally informed behavioral health services may help to increase behavioral health access.

Efforts to improve the health and well-being among the AIAN population should incorporate strengths found in AIAN communities, including cultural practices, Native language, strong social networks, and a connection to land and place (CDPH, 2018). This cultural connectedness is a known protective factor and promotes healthy behaviors.

SOURCES

DATA SOURCES

American Community Survey (ACS): 5-Year Estimates Detailed Table B02010: People who are American Indian or Alaska Native alone or in combination with one or more other races. Accessed November 2022. https://data.census.gov/cedsci/table?q=AIAN&g=0500000US06073&tid=ACSDT5Y2020.B02010.

California Health Interview Survey (CHIS): UCLA Center for Health Policy Research, Los Angeles, CA. AskCHIS 2016-2020. Available at https://ask.chis.ucla.edu. Exported January 2023.

Death Data: California Department of Public Health, Center for Health Statistics, Office of Health Information and Research, Vital Records Business Intelligence System (VRBIS).

Maternal and Child Health: State of California, Department of Public Health, Center for Health Statistics and Informatics, Birth Statistical Master Files and California Comprehensive Birth Files, 2016-2020. Prepared by County of San Diego, Health and Human Services Agency, Public Health Services, Maternal, Child, and Family Health Services (www.sdmcfhs.org).

Morbidity Data: California Department of Health Care Access and Information (HCAI), Emergency Department Database and Patient Discharge Database.

Sexually Transmitted Disease (STD) Surveillance Data: California Reportable Disease Information Exchange (CalREDIE) data system.

REFERENCES

Bigback, K. M., Hoopes, M., Dankovchik, J., Knaster, E., Warren-Mears, V., Joshi, S., & Weiser, T. (2015). Using Record Linkage to Improve Race Data Quality for American Indians and Alaska Natives in Two Pacific Northwest State Hospital Discharge Databases. *Health services research*, *50 Suppl 1*(Suppl 1), 1390–1402. https://doi.org/10.1111/1475-6773.12331

California Department of Public Health (CDPH). Maternal, Child and Adolescent Health Division. (2018). California American Indian/Alaska Native Maternal and Infant Health Status Report. Sacramento, CA.

California Tribal Epidemiology Center. (2015). California Tribal Behavioral Risk Factor Community Survey (CTBRFCS) Summary Report. California Rural Indian Health Board, Inc. Roseville, CA. https://crihb.org/wpcontent/uploads/2016/01/CTBRFCSSummaryReport.pdf

Dankovchik, J., Hoopes, M. J., Warren-Mears, V., & Knaster, E. (2015). Disparities in life expectancy of pacific northwest American Indians and Alaska natives: analysis of linkage-corrected life tables. *Public health reports* (Washington, D.C.: 1974), 130(1), 71–80. https://doi.org/10.1177/003335491513000109

Dougherty, T. M., Janitz, A. E., Williams, M. B., Martinez, S. A., Peercy, M. T., Wharton, D. F., Erb-Alvarez, J., & Campbell, J. E. (2019). Racial Misclassification in Mortality Records Among American Indians/Alaska Natives in Oklahoma From 1991 to 2015. *Journal of public health management and practice: JPHMP*, 25 Suppl 5, Tribal

Epidemiology Centers: Advancing Public Health in Indian Country for Over 20 Years, S36–S43. https://doi.org/10.1097/PHH.00000000001019

Friedman J.R. & Hansen H. (2022). Evaluation of Increases in Drug Overdose Mortality Rates in the US by Race and Ethnicity Before and During the COVID-19 Pandemic. JAMA Psychiatry; 79(4):379–381. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2789697

Urban Indian Health Institute, Seattle Indian Health Board. (2017). Community Health Profile: Individual Site Report, San Diego Urban Indian Health Program Service Area. Seattle, WA: Urban Indian Health Institute. https://www.uihi.org/resources/2017-community-health-profile-san-diego-uihp-service-area/

ADDITIONAL RESOURCES

Tribal Epidemiology Centers Health Reports https://tribalepicenters.org/tec-publications/

Urban Indian Health Institute https://www.uihi.org/

