

# 2024

Health Profile of American Indian and Alaska Native Population in Arizona

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#### **ACKNOWLEDGEMENTS**

The Arizona Department of Health Services (ADHS) acknowledges the twenty-two Tribal Nations that have inhabited this land for centuries. ADHS is located in the Salt River Valley on ancestral territories of Indigenous peoples, including the Akimel O'odham (Pima) and Pee Posh (Maricopa) Indian Communities, whose care and keeper of these lands allows us to be here today.

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#### LETTER FROM TRIBAL LIAISON

Dear all,

We are pleased to present the Health Profile of American Indian and Alaska Natives in Arizona Report, which provides an update of health trends among American Indians and Alaska Natives (AI/AN. The goal of this report is to inform Tribal leaders and organizations on health disparities impacting AI/AN, describe health challenges, and serve as a guide to develop programs and interventions that promote health among Tribal Nations in Arizona. Our goal is to publish a supplemental report next year that will focus on the strength and resilience of Tribal Nations as they work to address their public health priorities.

This report is one step in our journey at the Arizona Department of Health Services (ADHS) as we understand the importance of making strong connections and building trust with Tribal Nations. As many Tribal leaders have shared with us during our in-person visits, the importance of good data and access to data in order to make informed decisions to improve the health and wellbeing of Tribal members is foundational. These discussions did not go unheard. We have established an internal team to focus on Tribal data sharing, data reporting, and understanding more fully what Tribal data sovereignty means from a legal and data governance perspective. This internal team has three primary priorities: co-creating an Indigenous Data Sovereignty policy with Tribes in Arizona, building our team to include a Tribal Health Epidemiologist, and centering Tribal sovereignty when framing Data Sharing Agreements with Tribal Nations.

I would like to recognize and sincerely thank each of the Tribal Nations in Arizona for providing honest feedback and input to help guide efforts at ADHS. I would also like to thank the team at ADHS for their time and commitment and for participating in our data efforts.

Sincerely,

Gerilene Haskon, MPH
Tribal Liaison
Arizona Department of Health Services

#### **DISCLAIMER**

**Previous ADHS Suicide Surveillance Reports:** Compared to previous reports, the findings in the current report include additional analyses to expand understanding of the burden of chronic diseases among American Indian/Alaska Native (AI/AN) population is Arizona. Therefore, all data cannot be accurately compared across reports.

Race/Ethnicity Referencing: The variables for race and ethnicity are mutually exclusive and based on specifications established by the Federal Office of Management and Budget (OMB) and the Arizona State Demographer with specifications developed by the ADHS Vital Statistics. Consistent with the OMB methodology, the web-based reporting system allows for multiple race categorizations consistent with the U.S. Census enumerations.

Due to spacing issues, figures and all text accompanying the figures throughout the report will primarily refer to the American Indian (AI/AN) race/ethnicity group, along with Asian, Black, Hispanic, and White. However, please note that text for American Indians include Alaska Natives, Asians include Pacific Islanders, Blacks include African Americans, and Hispanics include Latinos.

**Data Suppression:** To maintain anonymity of individuals this report, non-zero counts of less than six are suppressed, and percentages and rates are not calculated/presented.

**Tribal land:** For this report, tribal land refers to "tribal reservation", which is defined as specific geographic area of land designated for a Native American tribe to live on. Starting in 2010, the identification of events occurring on or off tribal lands was based solely on whether or not the individual's residence address was within the boundaries of a tribal reservation. This method provides a stricter definition of whether a specific vital event occurred to a Native American living within the boundaries of a reservation, and is also more reliable and reproducible than the previous method of incorporating both residence address and tribal affiliation to identify on-reservation events. Future editions of the report will also use residence as the sole identifier of on-reservation vital events.

#### **METHODS**

For this report the Arizona Department of Health Services has compiled data from death records, and the Behavioral Risk Factor Surveillance Survey (BRFSS). The descriptive statistics in this report summarize the information about AI/AN deaths by cause, stratified by age, sex, race/ethnicity, and residential location. BRFSS data was used to examine the prevalence of chronic diseases, and associated risk factors among AI/AN adults in Arizona. Frequency percentages, rates, and cross-tabulation tables are shown throughout the report. Rate is a measure that compares the frequency of some event in relation to a unit of population during a

specified time period such as a year; events in the numerator of the year occur to individuals in the denominator. Rates express the likelihood (or risk) of the event in the specified population during a particular time and are generally expressed as units of population in the denominator (per 1,000, per 100,000, and so forth).

#### **DATA SOURCES**

**Death Certificates:** Information on deaths is compiled from the original documents filed with the Arizona Department of Health Services Bureau of Vital Records and from transcripts of original death certificates filed in other states but affecting Arizona residents. These data are compiled in the Database Application for Vital Events (D.A.V.E.).

**Behavioral Risk Factor Surveillance Survey (BRFSS):** BRFSS is a health-related telephone surveys that collect state data about U.S. residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services. Established in 1984 with 15 states, BRFSS now collects data in all 50 states as well as the District of Columbia and three U.S. territories.

**U.S. Census Bureau:** This survey collects and provides data on the demographics, economy, housing and social characteristics of the U.S. population at national, state, and local levels (counties, cities and tribes). It serves as a critical resource for understanding trends in population growth, economic conditions, housing, and social determinants of health (SDOH).

#### **EXECUTIVE SUMMARY**

This health profile is a biannual update of mortality and health trends and patterns among American Indians and Alaska Natives (AI/AN) in Arizona. The purpose of this report is to inform Tribal leaders and public health organizations on health disparities impacting AI/AN, describe health challenges, and serve as a guide to develop programs and interventions that promote health among Tribal nations in Arizona.

Throughout this report, we identify disparities among the AI/AN population and the state of Arizona. We want to emphasize that data should always be viewed within its larger context. Any disparities in health outcomes or behaviors identified in this report should be viewed as a result of systematic and structural disadvantages and, not as inherent vulnerabilities of the AI/AN people. Additionally, we would like to caution that these data should never be a substitute for meaningful community engagement. The AI/AN population used throughout this report includes those who identify as AI/AN alone and reported being non-Hispanic.

# **KEY FINDINGS**

In 2022, 4.5 % of Arizonans identified as AI/AN.

Compared to other race/ethnic groups, Arizona's AI/AN population had the greatest decline in mortality rates from 2021 to 2022.

Premature deaths among Arizona AI/AN adolescents (15-19 years) in 2022 were lower compared to Arizona adolescents.

In 2022, the five major causes of death among AI/AN in Arizona were:

- Unintentional Injuries/accidents (206.5 per 100,000 people), leading cause among AI/AN men
- Heart Disease (156.1 per 100,000 people)
- Cancer (139.3 per 100,000 people), leading cause among AI/AN women
- COVID-19 (116.7 per 100,000 people)
- Chronic Liver Disease and Cirrhosis (106.0 per 100,000)

A greater proportion of AI/AN deaths were among those who resided on tribal land compared to those who lived off tribal land.

AI/AN men who resided on Tribal land had lower percentages of deaths from COVID-19 & cancer compared to women on Tribal lands and men & women off Tribal land.

COVID-19 Mortality rates among AI/AN decreased 70% between 2021 and 2022 and 65% for the state of Arizona.

Alcohol-induced, accidental poisoning and drug-induced death rates account for majority of unintentional injuries deaths among Al/AN in 2022.

Rates for gestational diabetes and hypertension among AI/AN women are nearly double the rates for Arizona women.

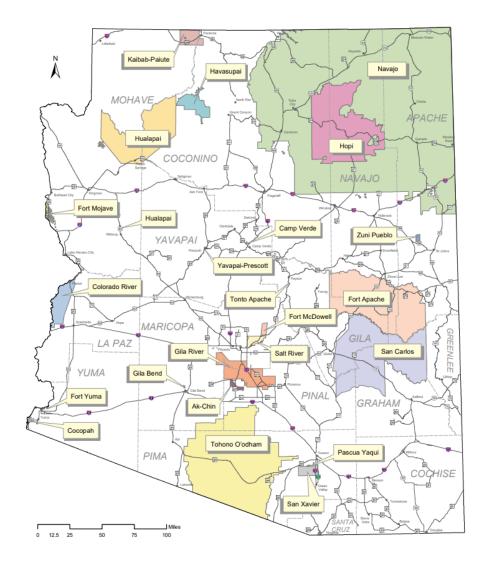
Chronic diseases are the leading causes of death and disability in the United States, and lifestyle risk factors play a role in the development of chronic diseases. Compared to other racial/ethnic groups, AI/AN individuals had higher prevalence of:

- Diabetes, pre-diabetes, and high cholesterol.
- Sexually transmitted disease infections (early syphilis, gonorrhea, chlamydia, HIV)
- Poor neonatal/infant health outcomes & utilization of prenatal care services
- Obesity and physical inactivity

#### **BACKGROUND**

#### **Arizona Tribal Lands and Tribal lands**

The state of Arizona is home to 22 sovereign American Indian Tribes. The Tribal nations in Arizona vary in location, population size, language, and cultural beliefs. Approximately 319,512 AI/AN live in Arizona, representing 5.2% of the population<sup>1</sup>. While all of Arizona was once Tribal land, it now serves as home to four of the five largest American Indian Tribal lands. Tribal lands comprise 28% of Arizona's land base<sup>2</sup>. The map below illustrates current Tribal lands across the state.



<sup>&</sup>lt;sup>1</sup> <u>United States Census Bureau Quick Facts, 2023</u>

<sup>&</sup>lt;sup>2</sup> https://www.azdhs.gov/documents/director/Tribal-liaison/AZ\_IndianTribal landssMap.pdf

# **Arizona Counties**

Fifteen counties in the state of Arizona vary greatly by population size, environment, and demographic makeup. Of the fifteen counties, three do not have Tribal lands: Cochise, Greenlee, and Santa Cruz counties. Arizona's counties are large in geographical size with Coconino County being the largest at 18,618 square miles and Santa Cruz County being the smallest at 1,236 square miles<sup>3</sup>. The map below illustrates all fifteen counties.



<sup>&</sup>lt;sup>3</sup> United States Census Bureau Geography Division, 2017

# **SOCIODEMOGRAPHIC CHARACTERISTICS**

- In 2023, American Indians/Alaska Natives (AI/AN) represented 1.3% of the U.S. and 5.2% of Arizona's population (Table 1).
- The Arizona AI/AN population faces disparities in education, employment, income, and poverty compared to the overall Arizona and U.S. populations (Table 2).
  - The Arizona AI/AN (American Indian/Alaska Native) population (294,583) is younger on average than the general Arizona and U.S. populations.
  - AI/AN individuals in Arizona have lower educational attainment than the general population.
  - Unemployment is nearly double among AI/AN individuals compared to Arizona and the U.S. (5.0% vs. 2.6% in Arizona and 2.7% in the U.S.).
  - The median household income for AI/AN individuals in Arizona is much lower (\$47,592) compared to the state average (\$77,315) and the U.S. (\$77,719).
  - o AI/AN communities have more reliance on government assistance.

Table 1. Arizona Race/Ethnicity Population, 2023<sup>4</sup>

	Arizona	United States	
Population Estimate, Jul 1, 2023 (V2023)	7,431,344	334,914,895	
Non-Hispanic White	53.4%	58.4%	
Hispanic	31.6%	19.5%	
Black	5.7%	13.7%	
American Indian	5.2%	1.3%	
Asian Alone	4.1%	6.4%	
Native Hawaiian and Other Pacific Islander	0.3%	0.3%	

<sup>&</sup>lt;sup>4</sup> Arizona Quick Facts, United States Census Bureau, 2023 <a href="https://www.census.gov/quickfacts/fact/table/AZ,US/PST045223">https://www.census.gov/quickfacts/fact/table/AZ,US/PST045223</a>

Table 2. Arizona American Indian Population Profile, 2023<sup>5</sup>

Characteristics	2023 Arizona		Arizona AI/AN alone		United States	
	Percent (%)	N	Percent (%)	N	Percent (%)	N
<b>Total Population</b>		7,431,344		294,583		334,914,896
Male	49.9		47.9		49.5	
Female	50.1		52.1		50.5	
Age		7,431,344		294,583		334,914,896
Under 18 years	21.3	1580079	25.7	75805	21.7	72648436
18-34 years	23.3	1727999	27.6	81205	22.6	75787105
35-64 years	36.1	2685535	35.8	105386	38.0	127172299
65+ years	19.3	1437731	10.9	32187	17.7	59307056
Education (25+ years)		5,150,254		186,944		231,791,117
<high school<="" td=""><td>10.6</td><td></td><td>18.9</td><td></td><td>10.2</td><td></td></high>	10.6		18.9		10.2	
High School Graduate	23.4		33.0		25.9	
Some College	32.5		34.3		27.7	
College Graduate	20.4		8.6		21.8	
Graduate/Professional Degree	13.1		5.1		14.3	
Employment Status (16+ years)		3,046,429		227,403		138,069,531
In Labor Force	60.7		55.8		63.8	
Employed	57.8		50.8		60.6	
Unemployed	2.6		5.0		2.7	
Armed Forces	0.4		0.1		0.5	
Not in Labor Force	39.3		44.2		36.2	
Household Income		2,907,014		94,914		131,332,360
Median household (dollars)		77,315		47,592		77,719
Income Type						
Earnings	74.9		72.7		77.7	
Social Security	33.7		23.9		31.3	
Supplemental Security	4.2		11.6		5.0	
Cash Public Assistance	1.7		4.2		2.4	
Retirement	26.2		17.6		24.2	
Food Stamps/SNAP Benefits	10.1		28.2		12.2	
Poverty	12.4		26.6		12.5	

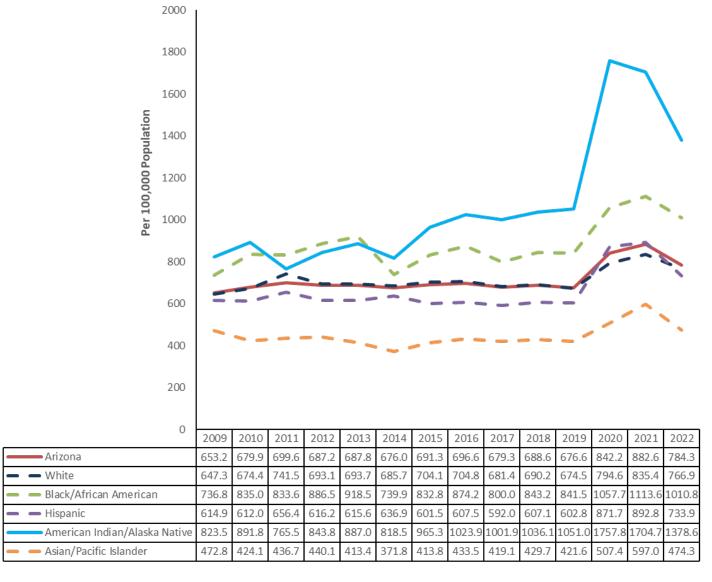
<sup>&</sup>lt;sup>5</sup> U.S. Census Bureau, U.S. Department of Commerce. "Selected Population Profile in the United States." *American Community Survey, ACS 1-Year Estimates Selected Population Profiles, Table S0201*, 2023,

https://data.census.gov/table/ACSSPP1Y2023.S0201?t=006:01A:Education:Employment:Income and Poverty&g=040XX00US04&y=2023. Accessed on February 12, 2025.

#### **MORTALITY AND LIFE EXPECTANCY**

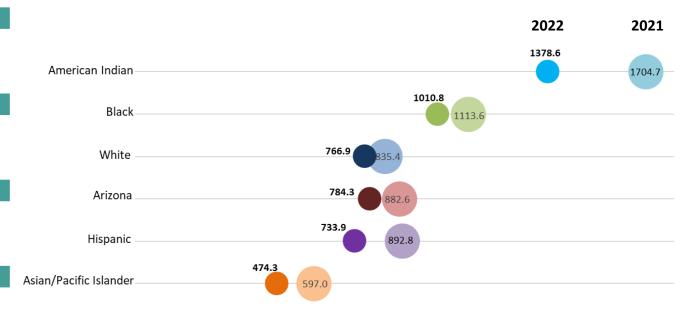
- AI/AN population has the highest mortality rate per 100,000 population compared to other racial/ethnic groups, with a sharp increase in 2020 and 2021, peaking at over 1,800 per 100,000 (Figure 1), which is likely a result of AI/AN population being disproportionately affected by the COVID-19 pandemic, compared to other race/ethnic groups (Figure 9).
- Mortality rates declined among all racial/ethnic groups from 2021 to 2022, of which the greatest decline occurred among the AI/AN from 1704.7 per 100,000 in 2021 to 1378.6 per 100,000 in 2022 (Figure 2).
- In 2022, the five leading causes of death among Arizona AI/AN residents were (Figure 3):
  - 1. Unintentional injuries
  - 2. Heart disease
  - 3. Cancer
  - 4. COVID-19
  - 5. Chronic liver disease
- American Indians experience the highest mortality rates for Accidents, COVID-19, and Chronic Liver Disease compared to other racial and ethnic groups in Arizona (Figure 3).
- Compared to women, men have higher mortality risks across all five leading causes of death among the AI/AN population (Figure 4).
  - The largest gender disparity is seen in Unintentional Injuries, where male mortality is over three times higher than female mortality.
  - Heart Disease and Cancer also show substantial differences, with males facing higher mortality risks.
  - COVID-19 and Chronic Liver Disease have smaller gender gaps compared to other causes.
- AI/AN face a lower life expectancy compared to Arizona's general population. While Arizona's median age remains relatively stable, the gap between the two groups ranges from 16 to 19 years (Figure 5).
- AI/AN children and adolescents experience lower mortality rates compared to the general population of Arizona children and youth (Figure 6).
- AI/AN who reside on Tribal land have higher mortality risks compared to those who live off Tribal land (Figure 7). However, majority of deaths among AI/AN adolescents lived off Tribal land (54%) (Figure 8).

Figure 1. Mortality Trends in Arizona by Race/Ethnicity (2009–2022)<sup>6</sup>.



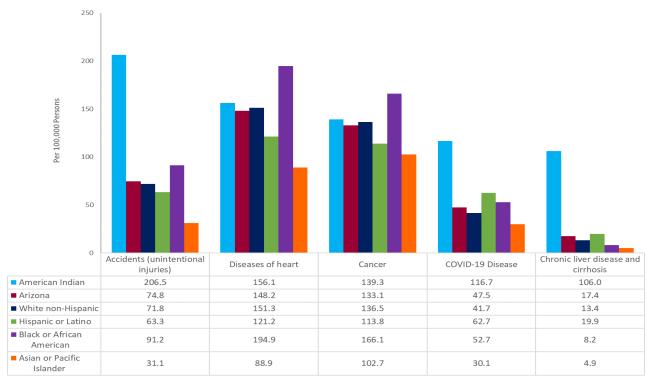
<sup>&</sup>lt;sup>6</sup>Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 2. Comparison of Mortality Rates by Race/Ethnicity in Arizona: 2021 vs. 2022<sup>5</sup>



<sup>\*</sup> Rates per 100,000 population

Figure 3. Leading Causes of Death by Race/Ethnicity in Arizona, 2022



<sup>\*</sup> Rates per 100,000 population,

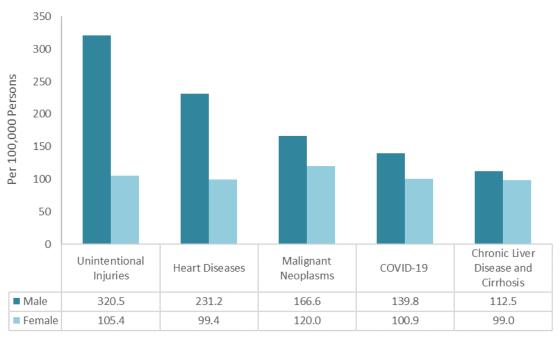
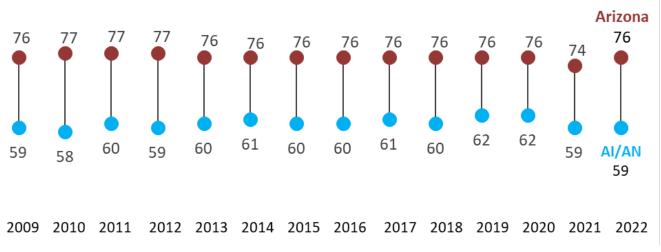


Figure 4. Leading Causes of Death Among AI/AN by Sex in Arizona, 2022<sup>7</sup>

**Figure 5.** Median Age\* of Death: Arizona vs. American Indian/Alaska Native Populations (2009-2022)<sup>7</sup>



<sup>&</sup>lt;sup>a</sup> sum of median ages (2009-2022)/number of years (N=14)

<sup>\*</sup> Median age in years

<sup>&</sup>lt;sup>7</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 6. Mortality Rates\* in Arizona and Among Al/AN Population Groups, 20228



<sup>\*</sup> Rates per 100,000 population

Figure 7. Percent of Deaths by Tribal Land Residence Among AI/AN Populations, 20228



<sup>&</sup>lt;sup>8</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

Figure 8. Percent of Death Among AI/AN Populations by Tribal Land Residence, 20229.

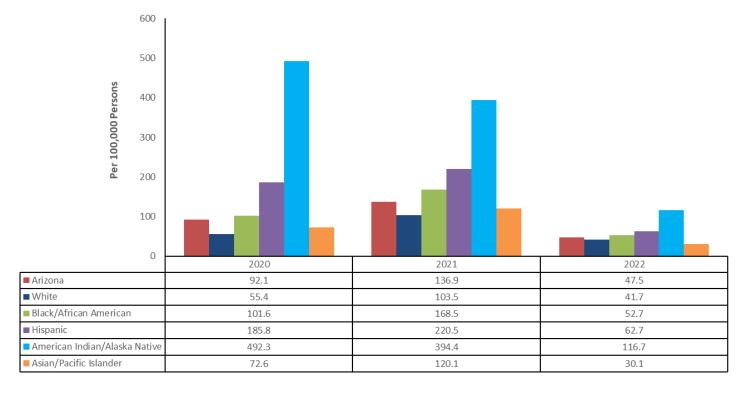


 $<sup>^9 \</sup> Source: 2022 \ Arizona \ Health \ Status \ Report\underline{\ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf}$ 

# COVID-19

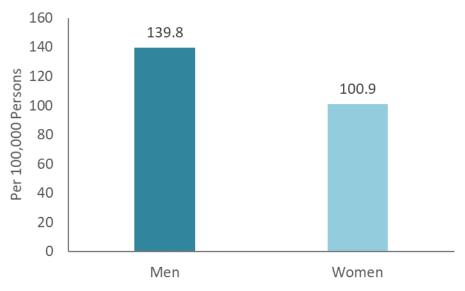
- During the COVID-19 pandemic, AI/AN populations in Arizona experienced the highest death rates (Figure 9), which likely contributed to the sharp increase in overall mortality rates between 2021 and 2022 (Figure 1).
- AI/AN men had 39% higher mortality from COVID-19 than AI/AN women (139.8 and 100.9 per 100,000, respectively) (Figure 10).
- In 2022, majority (57%) of COVID-19 deaths occurred among AI/AN individuals who resided on Tribal land (Figure 11), but COVID-19 only accounted for 6.7% of deaths among AI/AN men who resided on Tribal land (Figure 12).

Figure 9. COVID-19 Mortality in Arizona by Race/Ethnicity (2020-2022)<sup>10</sup>



<sup>&</sup>lt;sup>10</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 10. COVID-19 Mortality Among Al/AN by Sex in Arizona, 2022<sup>11</sup>



**Figure 11.** Percent of COVID-19 Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>11</sup>



<sup>&</sup>lt;sup>11</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

**Figure 12.** Proportion of Deaths Caused by COVID-19 Among AI/AN by Tribal Land Residence and Sex, 2022, 12



<sup>\*</sup> Percent of among men and women who resided on and off Tribal lands.

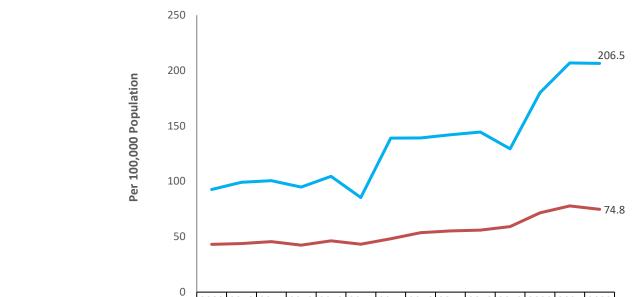
all cause deaths

 $<sup>^{12} \</sup> Source: 2022 \ Arizona \ Health \ Status \ Report\underline{\ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf}$ 

#### **INJURY**

- Death from unintentional injuries is disproportionately higher among AI/AN's compared to other race/ethnic groups, with mortality rates among AI/AN being 2.8 times higher than the overall population in 2022 (Figure 13).
- In 2022, deaths from unintentional injuries among AI/AN men was 3 times higher than rates for AI/AN women (320.5 and 105.4 per 100,000, respectively) (Figure 14).
- In 2022, majority (61%) of deaths from unintentional injuries occurred among AI/AN individuals who resided on Tribal land (Figure 15). However, there were no geographic differences (on Tribal land vs. off Tribal land) in the proportion of AI/AN men and women that die from unintentional injuries (Figure 16).
- AI/AN individual's experience higher death rates across all top seven causes of injury deaths compared to the overall population<sup>13</sup>. Compared to the overall population, the following causes of injury deaths are substantially greater among AI/AN group (Figure 17):
  - 1. Alcohol-induced (142.5 per 100,000 people) was 7 times greater
  - 2. Accidental poisoning (101.1 per 100,000 people) was 2.8 times greater
  - 3. Drug-induced deaths (83.7 per 100,000 people) was 2.2 times greater
  - 4. Motor vehicle accidents (59.7 per 100,000 people) was 3.4 times greater
  - 5. Injury by firearm (36.1 per 100,000 people) was 80% greater
  - 6. Falls (34.5 per 100,000 people) was 2.9 times greater
  - 7. Drowning (35.3 per 100,000 people) was 20 times greater
  - 8. Homicide (35.1 per 100,000 persons) was 70% greater
  - 9. Suicide (34.5 per 100,000 persons) was 3.8 times greater
- Majority of unintentional injury deaths occurred among those residing on tribal land for most types of unintentional injury deaths, with the exception of Drug-induced deaths where majority (57%) occurred among those living off tribal land (Figure 18).

<sup>&</sup>lt;sup>13</sup> Note, categories are not mutually exclusive and a death case can be represented multiple times across categories.



2012 2013

94.8 104.5

46.3

42.4

2014 2015

85.4 139.0

48.1

43.3

2016

53.7

139.1

2017

55.3

142.0 144.5

55.9

2018 2019 2020 2021

71.5

129.4 180.1 206.9 206.5

77.8

59.2

2022

74.8

Figure 13. Unintentional Injury Mortality Trends in Arizona by Race/Ethnicity (2009–2022)<sup>14</sup>

Figure 14. Unintentional Injury Mortality Among Al/AN by Sex in Arizona, 2022<sup>14</sup>

2009

43.1

92.6

Arizona

American Indian/Alaska Native

2010

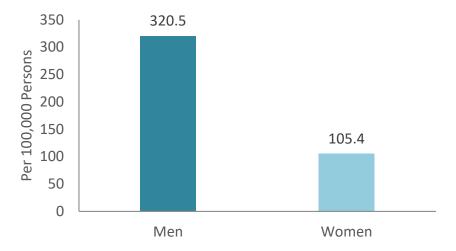
43.8

99.2

2011

45.5

100.6



 $<sup>^{14} \</sup> Source: 2022 \ Arizona \ Health \ Status \ Report\underline{\ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf}$ 

**Figure 15.** Percent of Unintentional Injury Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>15</sup>



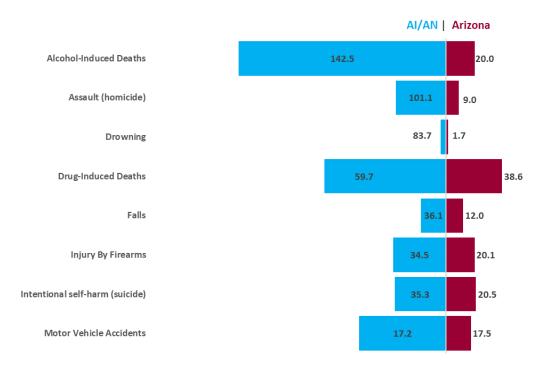
**Figure 16.** Proportion of Deaths Caused by Unintentional Injury Among AI/AN by Tribal Land Residence and Sex, 2022<sup>15</sup>



<sup>\*</sup> Percent of all cause deaths among men and women who resided on and off Tribal lands.

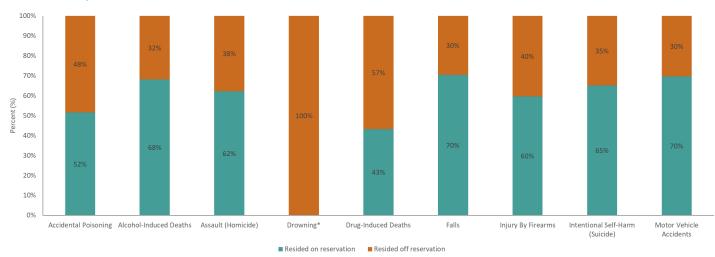
<sup>&</sup>lt;sup>15</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

**Figure 17.** Alcohol-Induced Mortality Rates\* in Arizona and Among AI/AN Population Groups, 2022<sup>16</sup>



<sup>\*</sup> Rates per 100,000 population; Suicide, drug-induced and alcohol-induced death rates are not mutually exclusive

**Figure 18.** Percent of Unintentional Injury Deaths Among AI/AN by Injury Type and Tribal Land Residence, 2022<sup>16</sup>



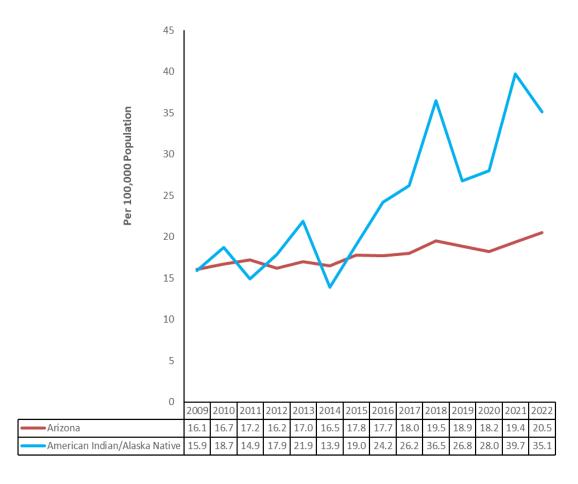
<sup>\*</sup> Data suppressed for resided on reservation category due to count less than 6.

 $<sup>^{16} \</sup> Source: 2022 \ Arizona \ Health \ Status \ Report\underline{\ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf}$ 

#### **SUICIDE**

- AI/AN's have disproportionate rates of suicide deaths compared to the overall population, with rates peaking in 2018 (36.5 per 100,000) and 2020 (35.1 per 100,000) (Figure 19).
- In 2022, deaths from suicide among AI/AN men was more than 3 times higher than rates for AI/AN women (54.7 and 16.9 per 100,000, respectively) (Figure 20).
- In 2022, majority (70%) of deaths from suicide occurred among AI/AN individuals who resided on Tribal land (Figure 21).
- Suicide mortality rates among AI/AN in 2022 was higher compared to other rate ethnic groups (Figure 22).
- Approximately 99% of suicide deaths among AI/AN are expected to occur before 77.5 years of age (Figure 23).

Figure 19. Suicide Mortality Trends in Arizona by Race/Ethnicity (2009–2022)<sup>17</sup>



 $<sup>^{17}</sup> Source: 2022\ Arizona\ Health\ Status\ Report\underline{\ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf}$ 

Figure 20. Suicide Mortality Among Al/AN by Sex in Arizona, 2022<sup>18</sup>

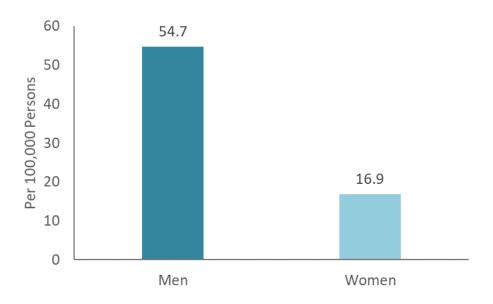


Figure 21. Percent of Suicide Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>18</sup>



<sup>&</sup>lt;sup>18</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

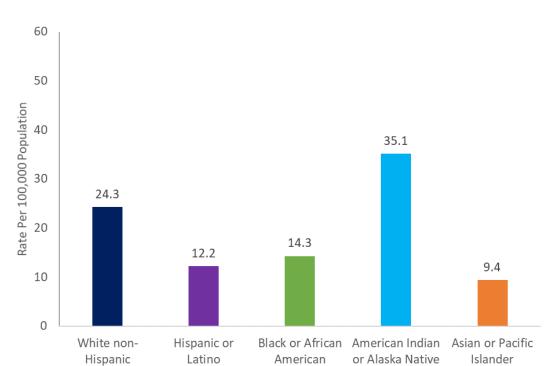
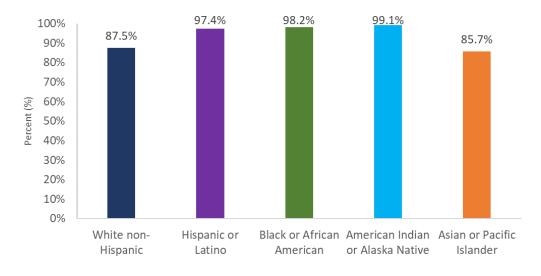


Figure 22. Suicide mortality rates by Race/Ethnicity, Arizona, 2022<sup>19</sup>

**Figure 23.** Percent of Deaths Before Expected Years of Life<sup>a</sup> Reached for Suicide by Race/Ethnicity, Arizona, 2022<sup>19</sup>



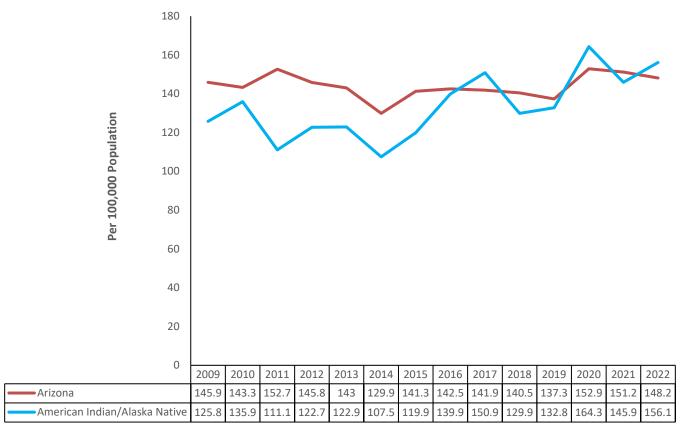
<sup>&</sup>lt;sup>a</sup> Expected years of life at birth for all U.S. residents (77.5 years in 2022).

<sup>&</sup>lt;sup>19</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

# **HEART DISEASE**

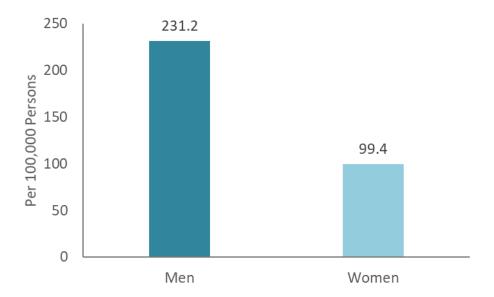
- Heart disease mortality rates for AI/AN show variability over time. In early years, heart AI/AN disease mortality was lower than rates for the state, but rates peaked and surpassed Arizona in 2020 before stabilizing at 156.1 per 100,000 persons in 2022 (Figure 24).
- In 2022, deaths from heart disease among AI/AN men was 2.3 times greater than rates for AI/AN women (231.2 and 99.4 per 100,000, respectively) (Figure 25).
- In 2022, majority (63%) of deaths from heart disease occurred among AI/AN individuals who resided on Tribal land (Figure 26). Particularly, women who resided off Tribal land had the lowest proportion of deaths attributed heart disease (7.5%). (Figure 27).

Figure 24. Heart Disease Mortality Trends in Arizona by Race/Ethnicity (2009–2022)<sup>20</sup>.



<sup>&</sup>lt;sup>20</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 25. Heart Disease Mortality Among Al/AN by Sex in Arizona, 2022<sup>21</sup>



**Figure 26.** Percent of Heart Disease Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>21</sup>



<sup>&</sup>lt;sup>21</sup> Source: 2022 Arizona Health Status Report chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

**Figure 27.** Proportion of Deaths Caused by Heart Disease Among AI/AN by Tribal Land Residence and Sex, 2022<sup>22</sup>



**Resided on Tribal land** 

**Resided off Tribal land** 

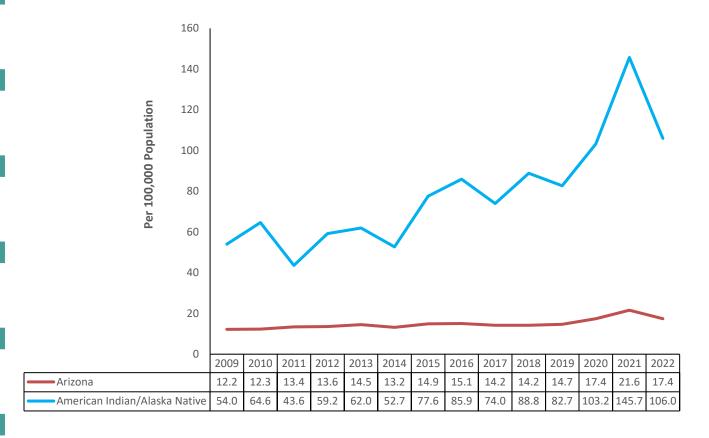
<sup>\*</sup> Percent of all cause deaths among men and women who resided on and off Tribal lands.

 $<sup>{\</sup>small ^{22} Source: 2022\ Arizona\ Health\ Status\ Report\underline{\ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf}}$ 

#### **CHRONIC LIVER DISEASE**

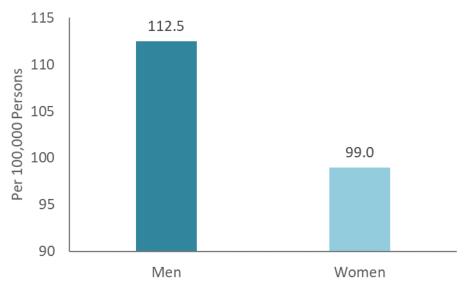
- Rates of chronic liver disease mortality among the AI/AN population have been consistently higher than Arizona's overall rate, with disparities increasing over time. The most significant peak occurred between 2019 and 2021, followed by a drop in 2022 (Figure 28).
- In 2022, deaths from cancer among AI/AN men was 14% greater than rates for AI/AN women (112.5 and 99.0 per 100,000, respectively) (Figure 29).
- In 2022, majority (63%) of chronic liver disease deaths among AI/AN individuals occurred among those who resided on Tribal land (Figure 30).
- Chronic liver disease accounted for a lower proportion of deaths among AI/AN men compared to AI/AN women regardless of living on or off Tribal land (Figure 31).

Figure 28. Chronic Liver Disease Mortality Trends in Arizona by Race/Ethnicity (2009–2022)<sup>23</sup>



<sup>&</sup>lt;sup>23</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 29. Chronic Liver Disease Mortality Among AI/AN by Sex in Arizona, 2022<sup>24</sup>



**Figure 30.** Percent of Chronic Liver Disease Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>24</sup>



<sup>&</sup>lt;sup>24</sup> Source: 2022 Arizona Health Status Report chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

**Figure 31.** Proportion of Deaths Caused by Chronic Liver Disease Among AI/AN by Tribal Land Residence and Sex, 2022<sup>25</sup>



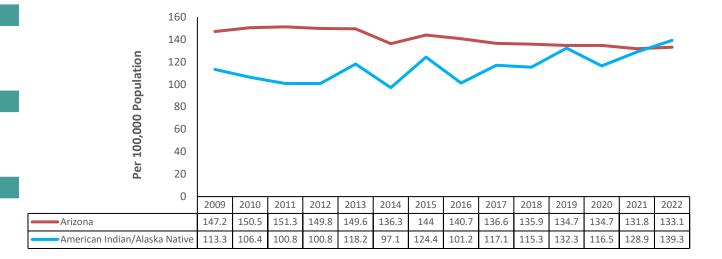
<sup>\*</sup> Percent of all cause deaths among men and women who resided on and off Tribal lands.

<sup>&</sup>lt;sup>25</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

#### **CANCER**

- Cancer mortality rates for the AI/AN population have remained lower than the state but the most recent data shows an increase, surpassing rates for the state (139.3 and 133.1 per 100,000 persons, respectively) (Figure 32).
- In 2022, deaths from cancer among AI/AN men was 39% greater than rates for AI/AN women (166.6 and 120.0 per 100,000, respectively) (Figure 33).
- In 2022, majority (55%) of cancer deaths among AI/AN individuals occurred among those who resided on Tribal land (Figure 34).
- The proportion of deaths due to cancer was 40% higher among AI/AN women who resided off Tribal land compared to AI/AN men off Tribal land (Figure 35).

Figure 32. Cancer Mortality Trend in Arizona by Race/Ethnicity (2009–2022)<sup>26</sup>



<sup>&</sup>lt;sup>26</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 33. Cancer Mortality Among Al/AN by Sex in Arizona, 2022<sup>27</sup>

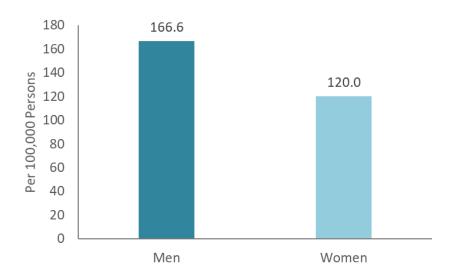


Figure 34. Percent of Cancer Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>27</sup>



<sup>&</sup>lt;sup>27</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/healthstats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

**Figure 35.** Proportion of Deaths Caused by Cancer Among AI/AN by Tribal Land Residence and Sex, 2022<sup>28</sup>



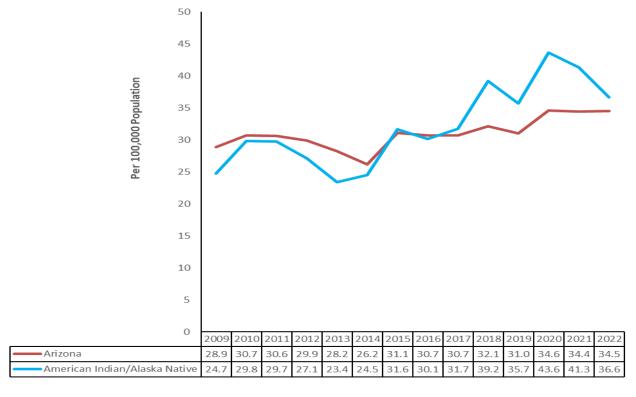
<sup>\*</sup> Percent of all cause deaths among men and women who resided on and off Tribal lands.

<sup>&</sup>lt;sup>28</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

### **STROKE**

- While there was an increase in stroke mortality among AI/AN over time, the most recent data shows a decline from the 2020 peak (43.6 per 100,000 persons) to 2022 (36.6 per 100,000 persons) (Figure 36).
- In 2022, deaths from stroke among AI/AN women was 27% greater than rates for AI/AN men (39.3 and 31.0 per 100,000, respectively) (Figure 37).
- In 2022, majority (53%) of stroke deaths among AI/AN individuals occurred among those who resided off Tribal land (Figure 38).

Figure 36. Stroke Mortality Trend in Arizona by Race/Ethnicity (2009–2022)<sup>29</sup>



<sup>&</sup>lt;sup>29</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkai/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf

Figure 37. Stroke Mortality Among Al/AN by Sex in Arizona, 2022<sup>30</sup>

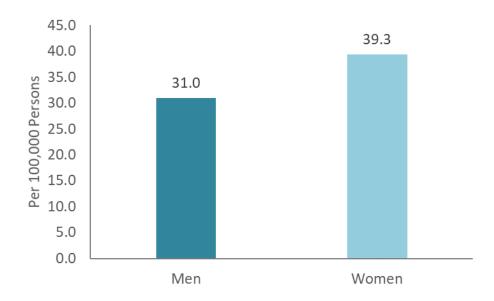
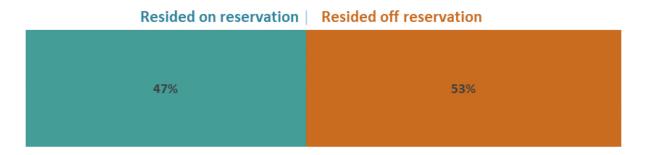


Figure 38. Percent of Stroke Deaths by Tribal Land Residence Among AI/AN Populations, 2022<sup>30</sup>

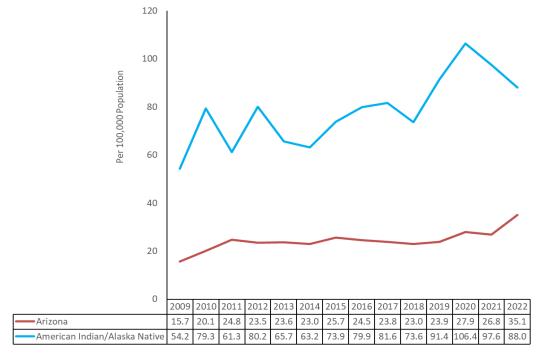


<sup>&</sup>lt;sup>30</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

## **DIABETES**

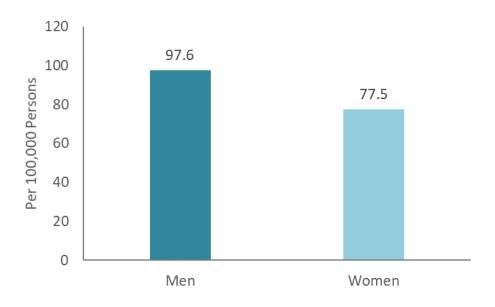
- The diabetes mortality rate among AI/AN is substantially higher than rates for the state, with rates peaking at 106.4 per 100,000 in 2020 before decreasing to 88.0 in 2022 (Figure 39).
- In 2022, deaths from diabetes among AI/AN men was 26% greater than rates for AI/AN women (97.6 and 77.5 per 100,000, respectively) (Figure 40).
- In 2022, majority (66%) of deaths from diabetes among AI/AN individuals occurred among those who resided on Tribal land (Figure 41).

Figure 39. Diabetes Mortality Trend Among AI/AN in Arizona (2009–2022)<sup>31</sup>



<sup>&</sup>lt;sup>31</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 40. Diabetes Mortality Among Al/AN by Sex in Arizona, 2022<sup>32</sup>



**Figure 41.** Percent of Diabetes Deaths by Tribal Land Residence Among AI/AN Populations,  $2022^{32}$ 

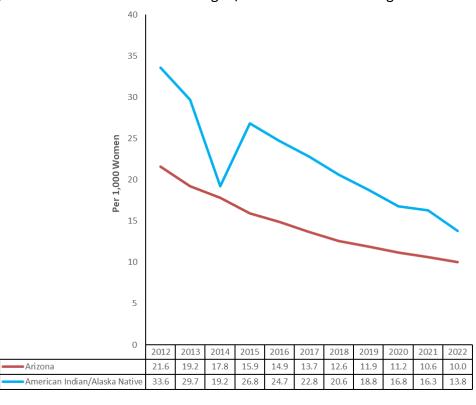


<sup>&</sup>lt;sup>32</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

### MATERNAL AND NEWBORN HEALTH

- While American Indian/Alaska Native teenage pregnancies are more common than Arizona's average, rates have dramatically declined and the disparities gap has narrowed (Figure 42).
- Compare to the state pregnancies among AI/AN teenagers are more common, and the greatest disparity is among young mothers age 18-19 years, and rates among AI/AN aged 18-19 years is 47% greater than Arizona mothers the same age (Figure 43).
- The percentage of newborns born to AI/AN mothers with gestational diabetes and hypertension was nearly two times greater than percentages for Arizona (Figure 44).
- In 2022, the percent of newborns born to AI/AN mothers who were unmarried, had gestational diabetes, hypertension or weight gain was higher among those who lived on Tribal land compared to those who did not live on Tribal land (Figure 45).
- The Percent of live births born to AI/AN women who delayed entry into prenatal care and did not receive prenatal care during pregnancy, was greater among AI/AN women, particularly among those who lived on Tribal land compared to those who lived off Tribal land (Figure 46).
- Compared to the state, newborns born to AI/AN mothers have higher mortality (Figure 47) and less favorable health outcomes (Figure 48).

Figure 42. Rate of Live Births Among AI/AN Arizona Mothers Age 19 and Younger (2012–2022)<sup>33</sup>



<sup>&</sup>lt;sup>33</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

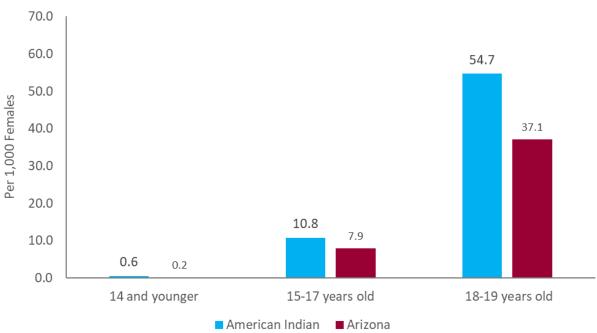


Figure 43. Rate of Live Births Among AI/AN Arizona Teenage Mothers by Age Group, 2022 34

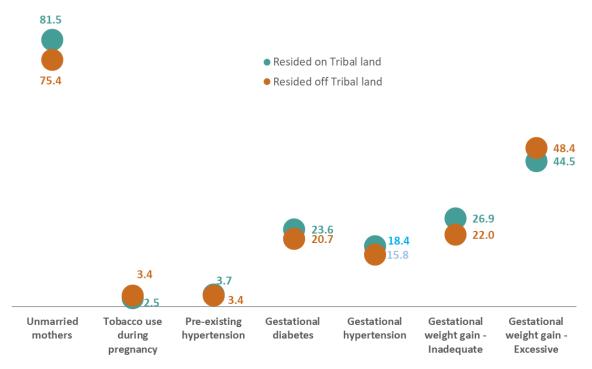
**Figure 44.** Percent of Live Births Born by Maternal Characteristics and Lifestyle of AI/AN Mothers Compared to Arizona, 2022<sup>34</sup>

_	AI/AN   Arizona		
Unmarried mothers	78.2		44.9
Tobacco use during pregnancy		2.9	2.6
Pre-existing hypertension		3.5	1.9
Gestational diabetes		22.0	10.2
Gestational hypertension		17.0	9.9
Gestational weight gain - Inadequate		24.2	22.8
Gestational weight gain - Excessive	46.6 45.6		45.6

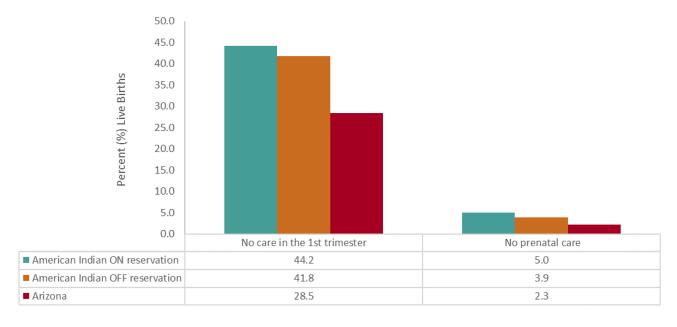
<sup>\*</sup> Rates per 100 live births

<sup>&</sup>lt;sup>34</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health\_stats/report/ahs/ahs2022/pdf/ahs2022.pdf

**Figure 45.** Percent of Live Births Born by Maternal Characteristics, Lifestyle and Tribal Land Residence of AI/AN Mothers, 2022<sup>35</sup>



**Figure 46.** Percent of AI/AN Live Births by Tribal Land Residence and Maternal Utilization of Prenatal Care Services Compared to the State of Arizona, 2022<sup>35</sup>



<sup>&</sup>lt;sup>35</sup> Source: 2022 Arizona Health Status Report <u>chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf</u>

Figure 47. Newborn Death Rates Among AI/AN Women Compared to Arizona, 2022<sup>36</sup>

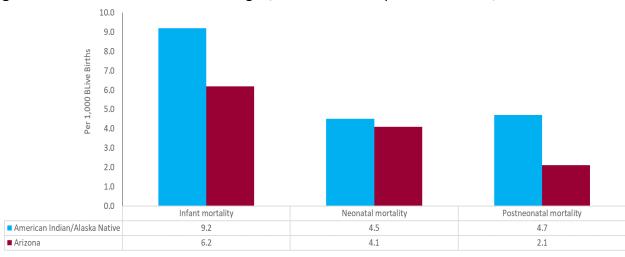
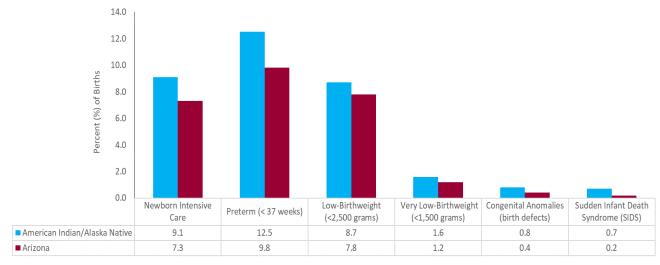


Figure 48. Newborn Health Among AI/AN Women Compared to Arizona, 2022<sup>36</sup>



<sup>&</sup>lt;sup>36</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf

### **SEXUALLY TRANSMITTED INFECTIONS**

- In 2022, incidence rates for sexually transmitted infections were higher among AI/AN adults compared to rates for Arizona (Figure 49).
  - Early syphilis (212.1 per 100,000 people) more 3 times greater for AI/AN
  - o Early chlamydia (795.8 per 100,000 people) 36.4% greater for AI/AN
  - o Gonorrhea (384.5 per 100,000 people), more than 3 times greater for AI/AN
  - HIV/AIDS (12.1 per 100,000 people) 53.3% greater for AI/AN
- Compared to other racial and ethnic groups, incidence of early syphilis, gonorrhea and chlamydia among AI/AN individuals ranked second to Black/African Americans and incidence of HIV/AIDS ranked second to Hispanics in 2022 (Table 3).

**Figure 49.** Incidence of Sexually Transmitted Infections Among AI/AN Population in Arizona, 2022<sup>37</sup>

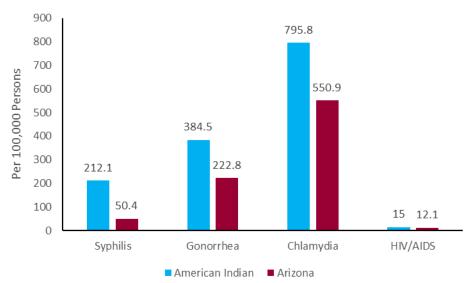


Table 3. Incidence\* of Sexually Transmitted Infections in Arizona by Race/Ethnicity, 2022

Race/Ethnicity	Early Syphilis	Gonorrhea	Chlamydia	HIV/AIDS
White Non-Hispanic	22.5	79.1	161.4	6.5
Black or African American	122.8	639.2	968.5	6.6
Hispanic or Latino	62.5	205.1	494.6	102.2
Asian or Pacific Islander	16.5	56.5	138.3	9.1
American Indian	212.1	384.5	795.8	15.0

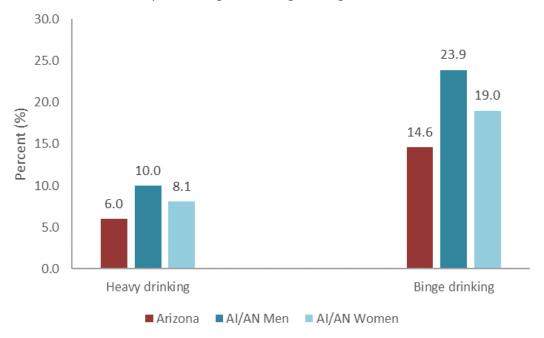
<sup>\*</sup> Cases per 100,000 persons in specific group

<sup>&</sup>lt;sup>37</sup> Source: 2022 Arizona Health Status Report\_chrome-extension://efaidnbmnnnibpcajpcglclefindmkai/https://pub.azdhs.gov/health-stats/report/ahs/ahs2022/pdf/ahs2022.pdf

## **HEALTH RISK BEHAVIORS**

- Alcohol Use: Compared to the general population the prevalence of heavy drinking and binge drinking was 67% and 64% greater among AI/AN men reported heavy and binge drinking (Figure 50).
- Weight Management: The general Arizona population has the highest percentage of overweight individuals, while AI/AN women have the lowest. For obesity, the prevalence of is more than 40% higher among AI/AN men and women compared to the general population (Figure 51).
- Physical Activity: There is a notable gender difference within the AI/AN group, with AI/AN women being much more physically active compared to AI/AN men (24.2% and 13.3%, respectively) (Figure 52).
- Smoking Status: The prevalence of smoking is relatively low in the state, and the prevalence among AI/AN adults is 1% lower (Figure 53).

Figure 50. Prevalence of Heavy<sup>a</sup> and Binge<sup>b</sup> Drinking Among AI/AN Adults, Arizona 2022<sup>38</sup>



<sup>&</sup>lt;sup>a</sup> Heavy drinking is defined as >14 drinks per week for adult men and >7 drinks per week for adult women.

<sup>&</sup>lt;sup>b</sup> Binge drinking is defined as 5 or more drinks on one occasion for adult men and 4 or more drinks on one occasion for adult women.

<sup>&</sup>lt;sup>38</sup> Arizona BRFSS: <a href="https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php">https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php</a>

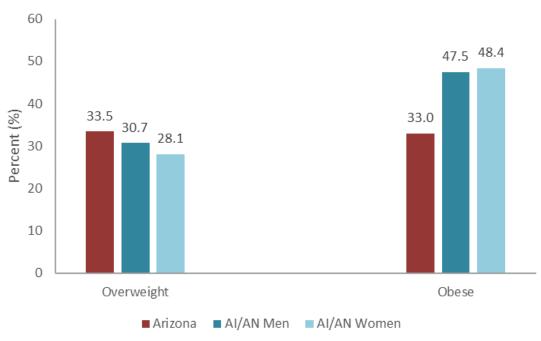
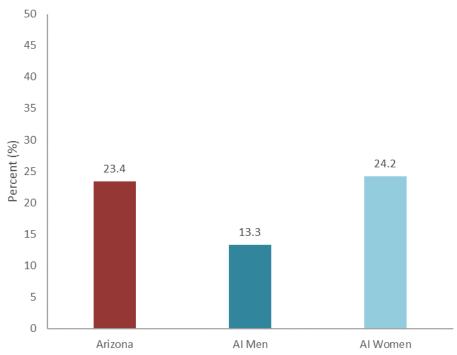


Figure 51. Prevalence of Overweight<sup>a</sup> and Obesity<sup>b</sup> Among Al/AN Adults, Arizona 2022<sup>39</sup>

Figure 52. Prevalence of Physically Active AI/AN Adults<sup>a</sup>, Arizona 2022<sup>39</sup>



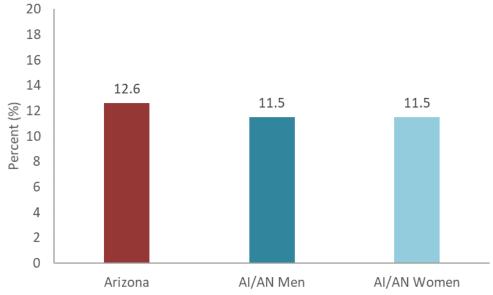
<sup>&</sup>lt;sup>a</sup> Percent of adults who reported, other than their regular job, participating in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise in the past month.

<sup>&</sup>lt;sup>a</sup> Overweight is defined as Body Mass Index >=25.

<sup>&</sup>lt;sup>b</sup> Obese is defined as Body Mass Index >=30.

 $<sup>{\</sup>color{blue}^{39}}~Arizona~BRFSS:~\underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

Figure 53. Prevalence of Smoking Among AI/AN Adults<sup>a</sup>, Arizona 2022<sup>40</sup>



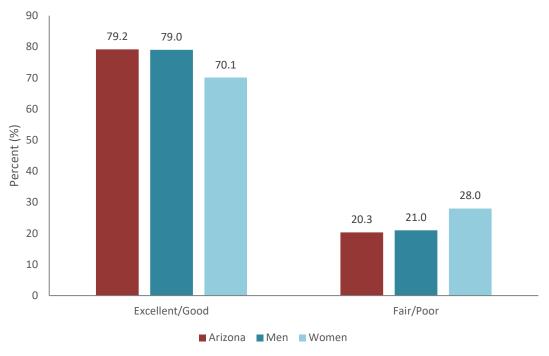
<sup>&</sup>lt;sup>a</sup> Percent of adults who are current smokers.

 $<sup>{\</sup>color{blue}^{40}}~Arizona~BRFSS:~\underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

### **HEALTH STATUS**

- Overall, majority of AI/AN adults in Arizona are in good health, but the prevalence of AI/AN women who are in poor health is 39% greater than the general population and 33% greater than AI/AN men (Figure 54).
- In 2022, a greater proportion of AI/AN women experienced poor physical and mental health for more than 14 days compared to AI/AN men and the general population (Table 4).

Figure 54. General Health Status of Al/AN Adults<sup>a</sup>, Arizona 2022<sup>41</sup>



<sup>&</sup>lt;sup>a</sup> Percent of adults who reported that their general health is excellent, very good, good, fair, or poor.

Table 4. Mental and Physical Health Among AI/AN Adults by Gender, Arizona 2022<sup>41</sup>

Health Status	Arizona (%)	95% CI	Al Men (%)	95% CI	Al Women (%)	95% CI
Poor Physical Health*						
1-14 days	24.3	22.9-25.7	25.7	15.1-36.2	27.1	17.4-36.8
>14 days	13.1	12.0-14.2	8.89	3.9-13.8	16.3	8.1-24.6
Poor Menta Health*						
1-13 days	26.1	24.6-27.5	27.9	16.5-39.3	30.9	21.0-40.8
>14 days	16.3	15.0-17.6	10.1	3.8-16.3	21.7	12.5-30.9

<sup>(%) =</sup> Percent; CI = Confidence Interval

<sup>\*</sup> Physical health includes illness and injury; mental health includes stress, depression, and problems with emotions.

 $<sup>{\</sup>color{blue}^{41}} \ Arizona \ BRFSS: \underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

# **SOCIAL DETERMINANTS OF HEALTH & HEALTH EQUITY**

Social Determinants of Health (SDOH) greatly impact the health and well-being of American Indian and Alaska Native (AI/AN) populations in Arizona. These factors encompass conditions in which people are born, grow, live, learn, work, play, and age, and these conditions affect a wide range of health risks and outcomes. AI/AN communities in Arizona face notable barriers and challenges that contribute to significant health inequality (unfair opportunity to achieve highest level of health) and chronic disease health disparities. Addressing SDOH requires comprehensive strategies that focus on improving education, economic opportunities, healthcare access, and community infrastructure to enhance health outcomes of AI/AN populations in Arizona.

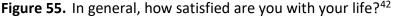
The Arizona Behavioral Risk Factor Surveillance System (BRFSS) is a key resource for tracking and monitoring changes in health behaviors and chronic conditions over time. It collects data crucial for understanding the impact of SDOH on health risk behaviors and chronic conditions. In the 2000s, Arizona incorporated more detailed questions on socioeconomic status, housing, education, food insecurity, and other SDOH. Over time, additional SDOH questions have been included in the survey to understand emerging SDOH and health equity (HE) concerns. Below is a summary of new SDOH and HE questions added to the most recent available BRFSS survey data (2022).

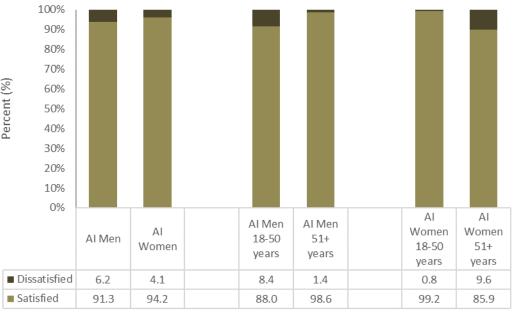
- **Life satisfaction:** Overall life satisfaction is high among AI/AN individuals, with women aged 18-50 years reporting the highest levels. However, older AI/AN women (51+ years) reported the highest dissatisfaction at 9.6% (Figure 55).
- Social and emotional support: The majority of AI/AN adults report receiving adequate social and emotional support, with women more likely to report having this support. However, older AI/AN men (50+ years) were 57% more likely than their female counterparts to report lacking social and emotional support (28.5% vs. 18.2%) (Figure 56).
- **Social isolation:** While overall social isolation is low, AI/AN women aged 18-50 years have the highest percentage of sometimes feeling socially isolated (36%) (Figure 57).

#### Socioeconomics:

- The majority of AI/AN adults have stable employment; however, AI/AN men aged 18-50 years were four times more likely than men aged 50+ years to experience job loss or reduced work hours (Figure 58).
- AI/AN women were 84% more likely than AI/AN men to receive food stamps, with the highest percentage reported among women aged 18-50 years (Figure 59).

- The proportion of AI/AN women aged 51+ years who reported experiencing food insecurity was twice as high as those aged 18-50 years. (Figure 60).
- Data shows a gender disparity with inability to pay mortgage, rent or utility bills among AI/AN, with AI/AN women being 2 times more likely than AI/AN men.
   Women aged 51+ years report the highest percent (40%) (Figure 61).
- Gender disparity with threatened shut off of utilities among AI/AN, with AI/AN women being nearly 3 times more likely than AI/AN men. Women aged 51+ years report the highest percent (25.8%) (Figure 62).
- Reliable transportation: While most AI/AN adults have reliable transportation, 67% of AI/AN women aged 51+ years reported lack of reliable transportation prevented them from attending medical appointments, work, or obtaining daily necessities (Figure 63).
- **Stress:** AI/AN women reported 24% higher stress levels than AI/AN men, with the highest stress levels among women aged 51+ years (49.3%) (Figure 64).





 $<sup>{\</sup>color{blue}^{42}} \ Arizona \ BRFSS: \underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

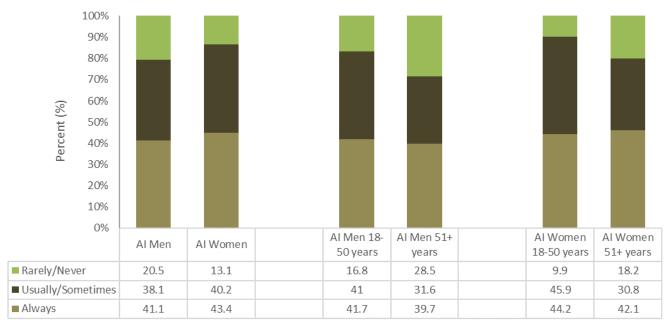
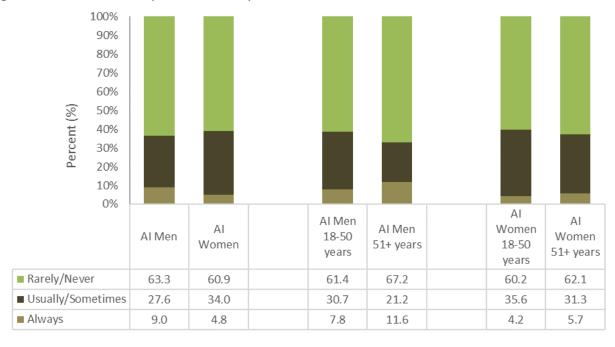


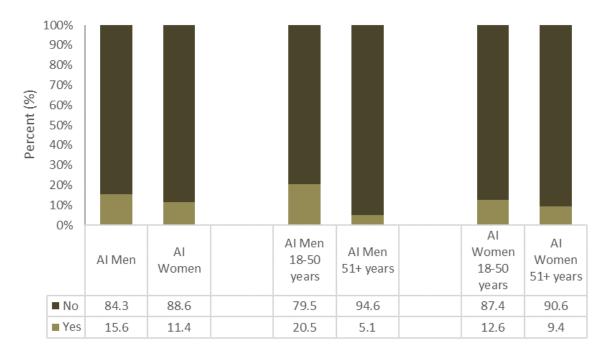
Figure 56. How often do you get the social and emotional support you need?<sup>43</sup>

Figure 57. How often do you feel socially isolated from others?<sup>43</sup>

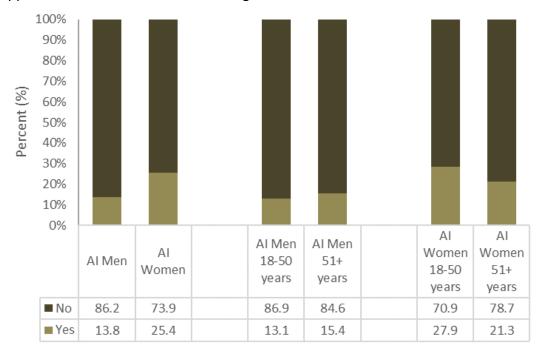


 $<sup>{\</sup>color{blue}^{43}} \ Arizona \ BRFSS: \underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

Figure 58. In the past 12 months have you lost employment or had hours reduced?<sup>44</sup>

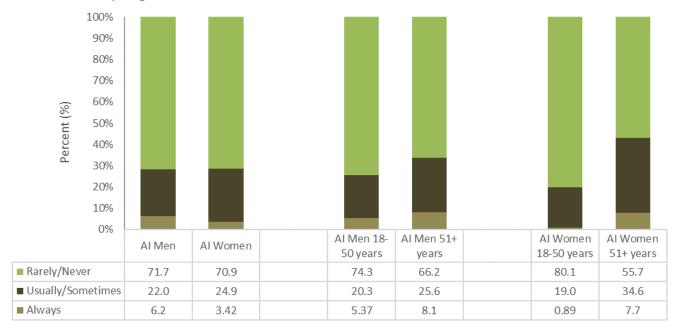


**Figure 59.** During the past 12 months, have you received food stamps, also called SNAP, the Supplemental Nutrition Assistance Program on an EBT card?<sup>44</sup>

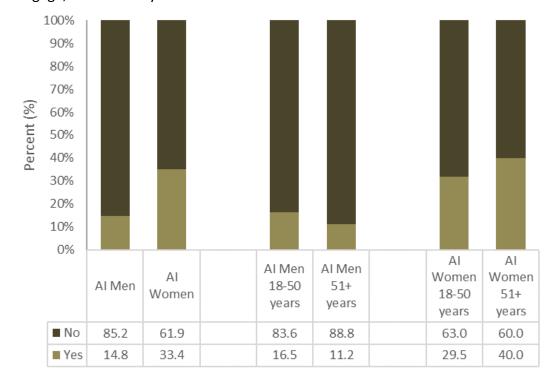


 $<sup>{\</sup>color{blue}^{44}}\ Arizona\ BRFSS: \underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

**Figure 60.** During the past 12 months how often did the food that you bought not last, and you didn't have money to get more?<sup>45</sup>

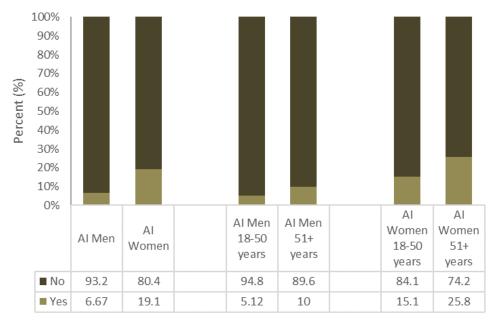


**Figure 61.** During the last 12 months, was there a time when you were not able to pay your mortgage, rent or utility bills?<sup>45</sup>

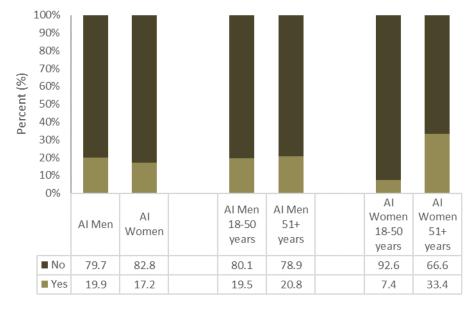


 $<sup>{\</sup>color{blue}^{45}} \ \textbf{Arizona BRFSS:} \ \underline{\textbf{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

**Figure 62.** During the last 12 months was there a time when an electric, gas, oil, or water company threatened to shut off services?<sup>46</sup>



**Figure 63.** During the past 12 months has a lack of reliable transportation kept you from medical appointments, meetings, work, or from getting things needed for daily living?<sup>46</sup>



 $<sup>{\</sup>color{blue}^{46}} \ A rizona \ BRFSS: \underline{https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php}$ 

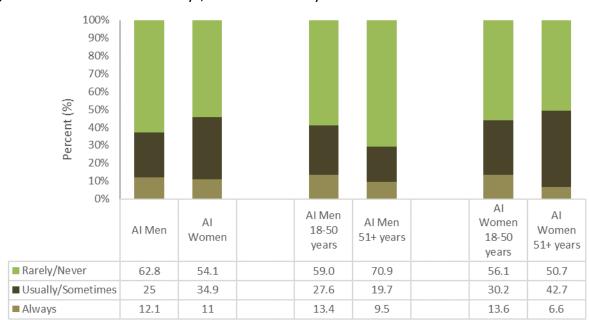


Figure 64. Within the last 30 days, how often have you felt stress\*?<sup>47</sup>

<sup>\*</sup> Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his/her mind is troubled all the time.

<sup>47</sup> Arizona BRFSS: https://www.azdhs.gov/preparedness/public-health-statistics/behavioral-risk-factor-surveillance/index.php

### **QUALITATIVE DATA**

The Arizona Department of Health Services partnered with Lenartz Consulting Group to create the ADHS Community Engagement Toolkit. Lenartz Consulting Group subcontracted with Tinhorn Consulting to conduct listening sessions with the American Indian and Alaskan Native population in Arizona. There were 17 participants, one online (statewide) and one in-person (Phoenix, AZ).

# What does "health and wellness" mean to you & your community?

 Overall theme in responses – "balance" of physical, mental/emotional and spiritual health

### Communication

- All had access to Internet, and most were accessing through a cell phone.
- Most preferred text communication or phone alerts for urgent issues; social media, websites or email for non-urgent. Most common social media used is Facebook and Instagram.

#### **Partners**

- Taking time for questions and to explain in clear language are important.
- To ensure partners are providing good service, participants suggested: accountability measures; third-party surveys (especially given onsite and with incentives); and a public telephone line and/or web form for the community to provide input.

#### Data

- Yes! Would like to see numbers specific to their communities, rather than state- or county-level data.
- Share this data through: community meetings; email; put it in Tribal newspapers or radio; translate and use large fonts for elders. Community leaders also need to see this data.

### **Community Engagement**

- Medium level of trust of the state health department. Feel IHS does more on the Tribal lands, the State doesn't often do outreach to Tribal areas, and rural communities are many times underserved.
- To engage with the community, build rapport and establish "intentional partnerships" with trusted entities or community leaders. The community members will trust the state health department more with this cooperation, efforts to connect and listen, and visiting the Tribal communities more frequently.
- Engage community through social events with incentives, promote through Tribal radio and newspapers.
- Train public health staff on cultural competence and understanding cultural norms of American Indians.

- LeCroy & Milligan Associates created the "Data and Funding Landscape for the Arizona
  Justice Reinvestment Program" report and conducted community listening sessions.
  One of the community listening sessions was conducted in partnership with the Native
  American Connections.
- Native American Connections provides culturally appropriate behavioral health, affordable housing, and community development services to Native American communities in 22 sites throughout Phoenix, Arizona. The organization's vision is to "be recognized as an innovative Native American service & development organization." Overall, it promotes commitment to the community by integrating Native American healing with evidence-based practices, providing behavioral healthcare to support individuals in recovery, and participating in community efforts to end homelessness.

# **Top Priorities for Justice Reinvestment**

### 1. Mental health education and services, and trauma treatment

- Mobile unit with mental health professionals who can travel to different communities and provide counseling
- Trauma-informed care education for first responders
- Managed care plans that are individualized and provide longer time frames to address trauma and the root causes of substance use.
- A case manager said she doesn't start offering trauma therapy until a client has been sober for at least 6 months and is stable enough to handle it. "Recovery is a process. Managed care limits the care you get and can lead to relapse."

# 2. Youth development

- Early intervention and prevention activities for substance use, and afterschool programs that offer youth activities
- Programs that are centered on the youth's perspective and honor their voice.
- Programs that are accessible to families, consider the cost of living, and include parental
  and caregiver involvement so they can help youth outside of the program in their
  everyday environments.

# 3. Community development

- Low income/transitional housing and community spaces to rebuild trust
- Workforce resources (e.g., job skill trainings, bus passes, ID vouchers, intensive reentry outpatient programs)
- Public official accountability through a community advisory board for Prop 207 funds. "We lost trust in the system. There's years and years of mistrust."

### **Tribal Maternal and Child Health Needs Assessment**

ADHS wanted to engage its Tribal partners in a meaningful way to better understand their unique needs for preventive and primary care services for their MCH populations. Arizona is home to 22 federally recognized tribes; each of which have their own unique culture. Recognizing that the tribes are a significant population in our State and that the greatest

burden regarding maternal and child health outcomes falls on them, ADHS partnered with the Inter Tribal Council of Arizona and Diné College/Navajo Department of Health Epidemiology Center for this portion of the assessment. Both entities developed their own methodology based on what they understood would work best in Tribal lands; therefore, the methodology in both assessments is diverse and unique. Please refer to the hyperlinks to access each health assessment report.

- Navajo Nation Maternal and Child Health Needs Assessment
- Arizona Maternal and Child Health Needs Assessment

### RECOMMENDATIONS AND CONCLUSIONS

The Arizona Department of Health Services is dedicated to ensuring the "Health and Wellness of All Arizonans." The following are suggested recommendations for consideration by ADHS staff, and Tribal and urban Indian partners.

#### For ADHS and Stakeholder Recommendations

- Identify and build meaningful working relationships between ADHS staff, Tribal, Inter
  Tribal Council of Arizona, urban Indian partners, Indian Health Services (IHS). These
  working relationships will allow ADHS and Tribal partners to work closely to decrease
  mortality and prevalence rates, identify cross collaboration opportunities, and ensure
  communication among program areas within ADHS and Tribal programs. For example,
  such as data sharing agreements, advisory councils/workgroups, newsletters for Tribes,
  regular meetings, etc.
- Maximize inclusion and participation of Tribal partners in the implementation of the 2021-2025 Arizona Health Improvement Plan (AzHIP) priority areas of Health Equity, Health in All Policies/Social Determinants of Health, Mental Well-Being, Rural and Urban Underserved Health, and Pandemic Recovery and Resiliency.
- Utilize the data to connect recommendations with policy that can drive sustainable change to address the higher rates of health disparities among AI/AN communities as compared to the state rates.
- ADHS should continue to prepare reports specific to AI/AN on the leading causes of death, the health risk factors, and social determinants of health for the ADHS Tribal Liaison and Tribal partners.
- Incorporate the Vitalyst Health Foundation's <u>Elements of a Healthy Tribal Community Wheel</u> tool that was created in partnership with Inter Tribal Council of Arizona and Arizona Advisory Council on Indian Health Care to help guide the development of policies, funding sources, and programs generated by Tribal governments through resources involved in providing health care services to AI/AN people.

### Other ADHS Reports with Recommendations:

- <u>Diabetes Action Plan</u> Recommendations are on pages 12
- Opioid Programming
- Overdose Fatality Review Report Recommendations are on pages 10-12
- Arizona Child Fatality Review Team Thirtieth Annual Report
- Maternal Mortality in Arizona, 2018-2019 Report

### **DATA SOURCES AND LIMITATIONS**

Health and mortality trends and figures are based on data from Arizona Health Status and Vital Statistics. Information on births, deaths, and fetal deaths is compiled from the original documents filed with the Arizona Department of Health Services', Office of Vital Records and from transcripts of original birth and death certificates filed in other states but affecting Arizona residents.

Data from the 2022 Arizona Behavioral Risk Factor Surveillance System (BRFSS) was used to examine the prevalence of selected sociodemographic, health-related risk factors, and chronic conditions among Native American adults. The BRFSS is a national health-related telephone (landline and cell) survey conducted annually in all 50 states, the District of Columbia, and U.S. territories. Participants are non-institutionalized U.S. adults aged 18 years or older who report on their health-related behavioral risk factors, preventable health practices, health care access, and chronic conditions. Of note, the BRFSS is self-reported and subject to recall and social desirability bias. Place of residence (urban, rural, suburban, or Tribal lands) is not elucidated but might influence the degree to which health disparities or risk behaviors affect certain groups. Persons who could not be reached by telephone (landline or cell line) could not respond to the BRFSS. Data could be skewed because persons of lower socioeconomic status might not have been included in the survey due to poorer phone access.

Potential misclassification of American Indians and Alaskan Natives for health status and vital statistics may be due to individuals not accurately identifying as American Indians on health forms and inconsistencies in how American Indian is defined across data sources. Health disparities across specific tribes are not reported.