LEADING CAUSES OF DEATH AND HEALTH DISPARITIES AMONG THE AMERICAN INDIAN AND ALASKA NATIVE POPULATION IN ARIZONA

2019

ARIZONA DEPARTMENT
OF HEALTH SERVICES

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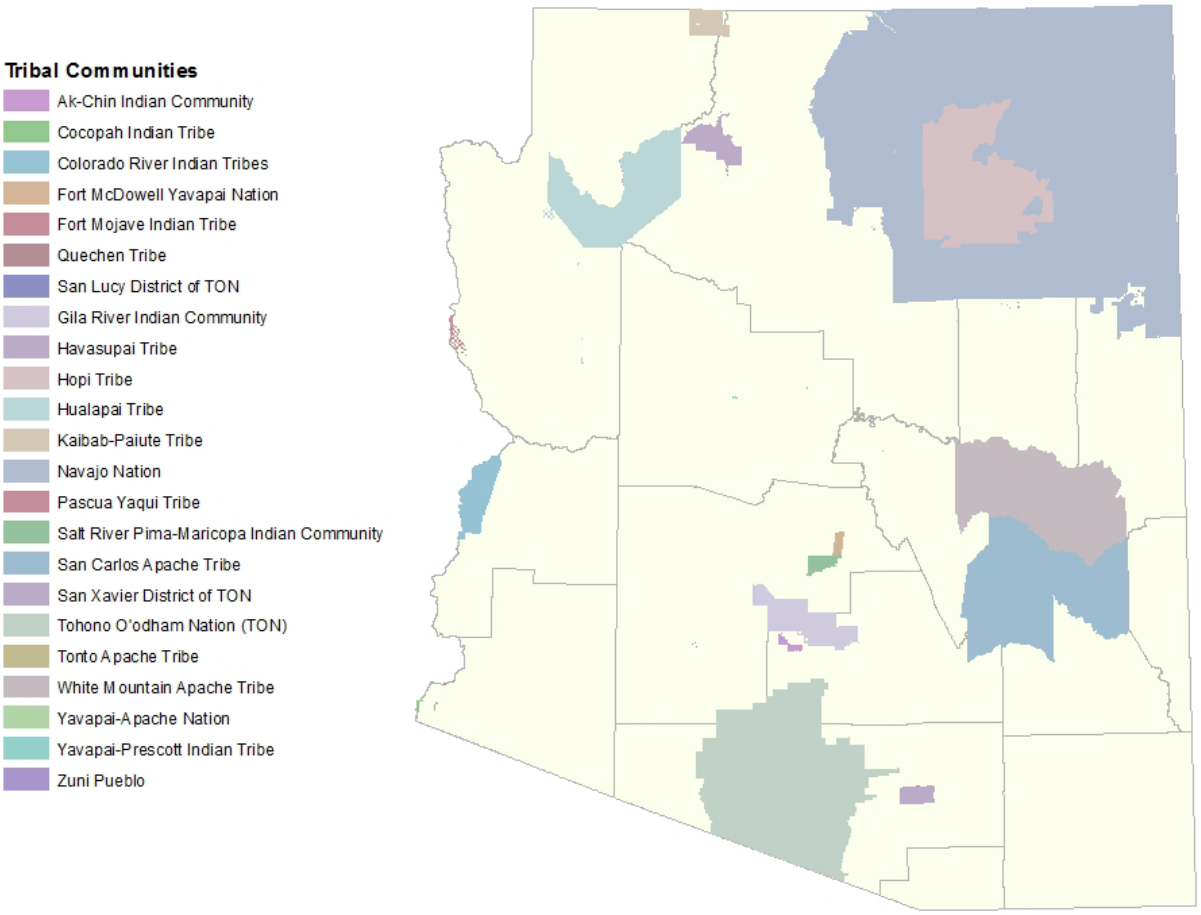
Background

Arizona Tribal Lands and Reservations

The state of Arizona is home to 22 sovereign American Indian Tribes. Of the 22 American Indian Tribes, 21 tribes have a land base. The San Juan Southern Paiute Tribe does not currently have a land base and was not included in this map The American Indian/Alaska Native (AI/AN) community represents a vital and significant part of Arizona's population. In 2017, 5.3% of residents in Arizona identified as AI/AN, representing nearly 362,000 persons[1]. This is the 3rd largest state AI/AN population in the United States with only California and Oklahoma having a larger population of AI/AN individuals[2]. Tribal lands comprise 28% of Arizona's land base. The map below illustrates tribal lands across the state.



[1] United States Census Bureau Quick Facts,2015
[2] United States Census, Census Brief, 2010

Arizona Counties

There are fifteen counties in the state of Arizona, and each county varies by population size, environment, and demographic makeup. 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[3]. The map below illustrates all fifteen counties.

[3] United States Census Bureau Geography Division, 2017

Executive Summary

Compared to other races and ethnicities, AI/AN have a lower life expectancy and are disproportionally impacted by many chronic diseases such as diabetes and chronic liver disease. AI/AN are more likely to live in poverty, suffer from tobacco-related deaths, have a higher prevalence of diabetes and obesity.

This profile highlights some of the health disparities and major causes of death faced by the AI/AN community in Arizona. The purpose of this report is to inform tribal leaders and organizations on health disparities impacting AI/AN, identify health priorities, and serve as a guide to develop programs and interventions aimed at improving the health of AI/AN in Arizona.

This report includes tables and graphs with information on chronic diseases, causes of death, and behavioral risk factors. Data from the Arizona population health and vital statistics, United States Census Bureau, and the Arizona Behavioral Risk Factor Surveillance System (BRFSS) were utilized to compile the information presented in this report. For additional tribal specific data, please refer to the Arizona Department of Health Services' Health Status Profile of American Indians (https://pub.azdhs.gov/health-stats/report/hspam/index.php).

The five major causes of death among AI/AN in Arizona, 2017 are:

- Diseases of the Heart
- Unintentional Injuries/Accidents
- Cancer
- Diabetes
- Chronic Lower Respiratory Diseases

Report Highlights

- In 2017, 5.3% of Arizonans identified as AI/AN.
- In Arizona, on average, mortality due to all causes for AI/AN was 15 years younger than the state average in 2017.
- Compared to other racial/ethnic groups, the prevalence of diabetes was highest among AI/AN.
- From 2007 through 2017, death rates due to diabetes, chronic liver disease/cirrhosis, motor vehicle accidents, unintentional accidents, and Intention self-harm (suicide), were significantly higher among AI/AN when compared across other racial/ethnic groups and the overall state rate.
- The Arizona BRFSS highlighted lower levels of educational attainment, lower income, and higher levels of unemployment among AI/AN adults in Arizona when compared to other racial/ethnic groups.
- Across racial/ethnic groups, AI/AN adults in Arizona had the second highest prevalence of health care coverage, but a lower prevalence of having a personal doctor or health care providers.

- Obesity was highest among AI/AN adults in Arizona when compared across other racial/ethnic groups.
- Compared to other racial/ethnic groups, the prevalence of smokeless tobacco, consumption of sugar-sweetened beverages, and self-perceived health as fair or poor, was highest among AI/AN adult in Arizona.

Race/Ethnicity Distribution

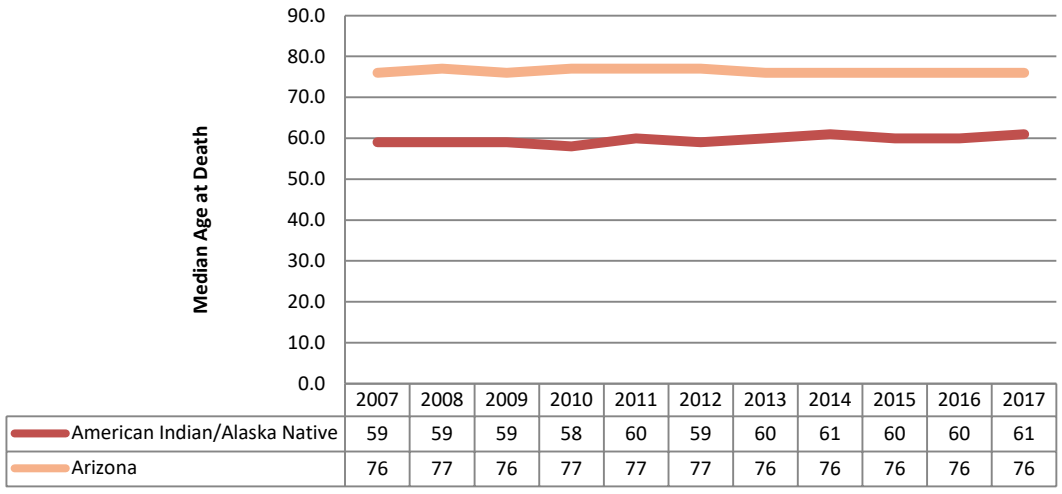
Table 1. Race/Ethnicity Distribution, 2017[4]

Race/Ethnicity	Percent
Non-Hispanic White	54.4%
Hispanic	31.6%
American Indian/Alaska Native	5.3%
Black/African American	5.1%
Asian/Pacific Islander	4.0%

Life Expectancy

On average, mortality due to all causes for AI/AN in Arizona was 15 years younger than the state average in 2017 (Figure 1). The life expectancy of AI/AN in Arizona is 61 years, 15 years less than the state average of 76 years[5]. Looking broadly at the United States, AI/AN born today have a life expectancy that is 4.4 years less than the United States population (73.7 years to 78.1 years, respectively)[6]. There are a variety of factors that contribute to this higher risk of early death, including social determinants of health, location of residence, and higher rates of chronic health conditions. Many of these social determinants are highlighted in this report.

Figure 1. Median Age at Death from all Causes among American Indians/Alaska Natives Compared to the State of Arizona (2007-2017)



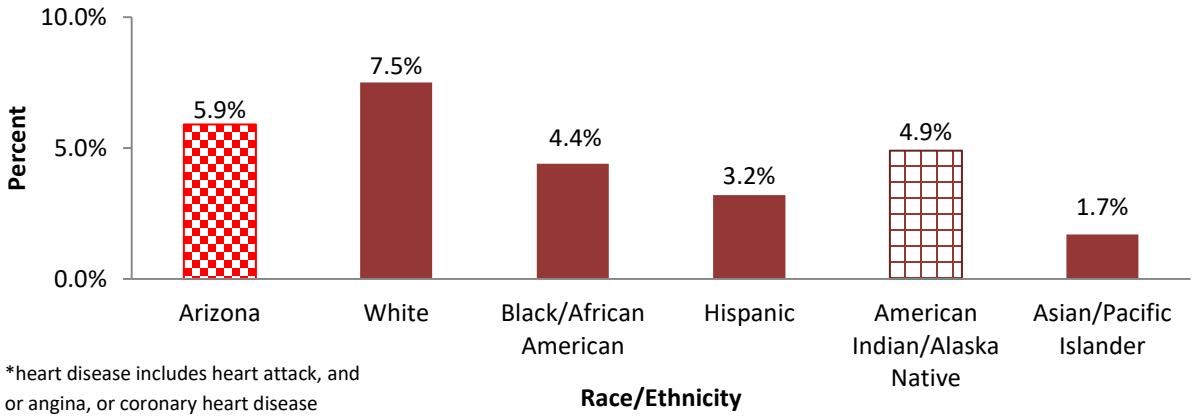
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
American Indian/Alaska Native	59	59	59	58	60	59	60	61	60	60	61
Arizona	76	77	76	77	77	77	76	76	76	76	76

[4] Arizona Quick Facts, United States Census Bureau, 2017
[5] http://pub.azdhs.gov/health-stats/report/hspam/2015/index.php
[6] https://www.ihs.gov/newsroom/factsheets/disparities/

Heart Disease

Heart disease is the leading cause of death among AI/AN[7]. Compared to other racial/ethnic groups, AI/AN die from heart disease at a younger age[6]. Compared to the entire state of Arizona, AI/AN adults had a lower prevalence of heart disease in 2017. Relative to other racial/ethnic groups, AI/AN adults in Arizona had the second highest prevalence of heart disease (Figure 2). The total prevalence in Arizona is highlighted in red checkered. To better compare AI/AN prevalence with other racial/ethnic groups, prevalence is illustrated in dark red with lines. Since 2014, mortality due to heart disease has been increasing for AI/AN from 107.5 in 2014 to 150.9 in 2017, surpassing the state rate in 2017 (141.9) (Figure 3).

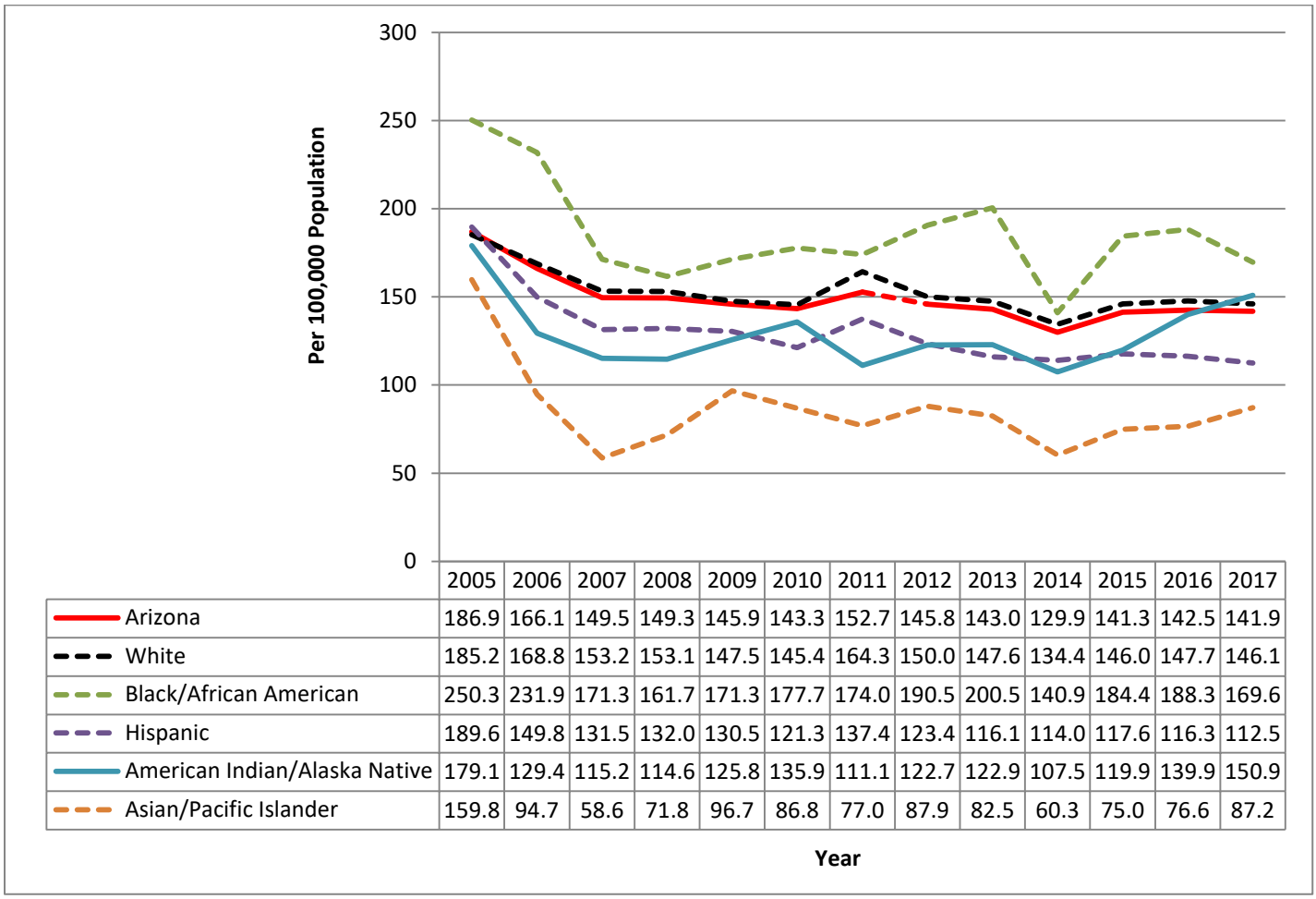
Figure 2. Percentage of Arizona Adults with Heart Disease* by Race/Ethnicity BRFSS 2017[8]



*heart disease includes heart attack, and or angina, or coronary heart disease

[7] https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_aian.pdf
[8] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 3. Age-Adjusted Mortality Rate for Heart Disease by Race/Ethnicity 2007-2017[9]



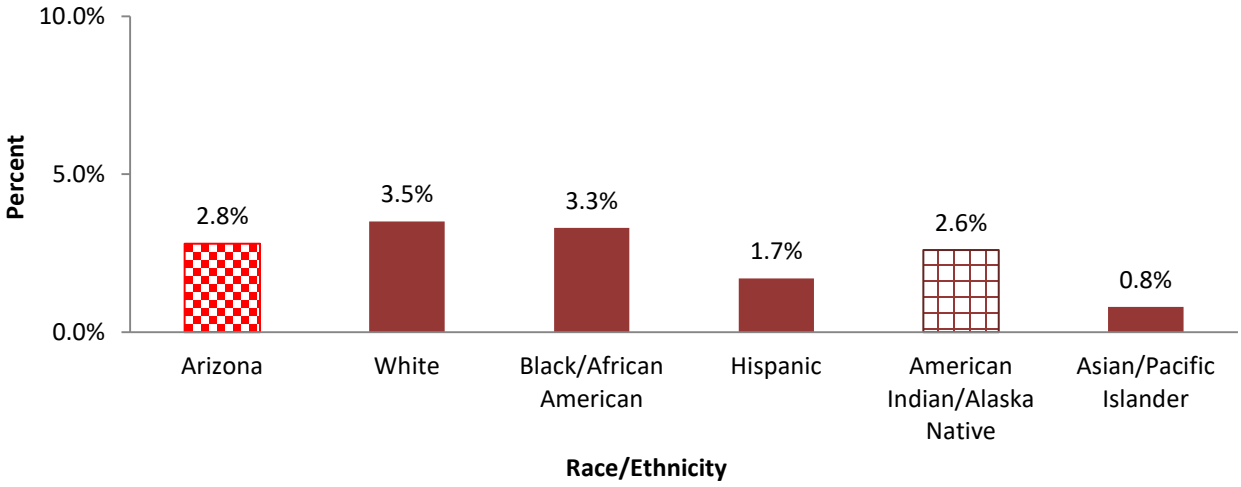
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	186.9	166.1	149.5	149.3	145.9	143.3	152.7	145.8	143.0	129.9	141.3	142.5	141.9
White	185.2	168.8	153.2	153.1	147.5	145.4	164.3	150.0	147.6	134.4	146.0	147.7	146.1
Black/African American	250.3	231.9	171.3	161.7	171.3	177.7	174.0	190.5	200.5	140.9	184.4	188.3	169.6
Hispanic	189.6	149.8	131.5	132.0	130.5	121.3	137.4	123.4	116.1	114.0	117.6	116.3	112.5
American Indian/Alaska Native	179.1	129.4	115.2	114.6	125.8	135.9	111.1	122.7	122.9	107.5	119.9	139.9	150.9
Asian/Pacific Islander	159.8	94.7	58.6	71.8	96.7	86.8	77.0	87.9	82.5	60.3	75.0	76.6	87.2

[9] Arizona Department of Health Services Bureau of Public Health Statistics

Stroke

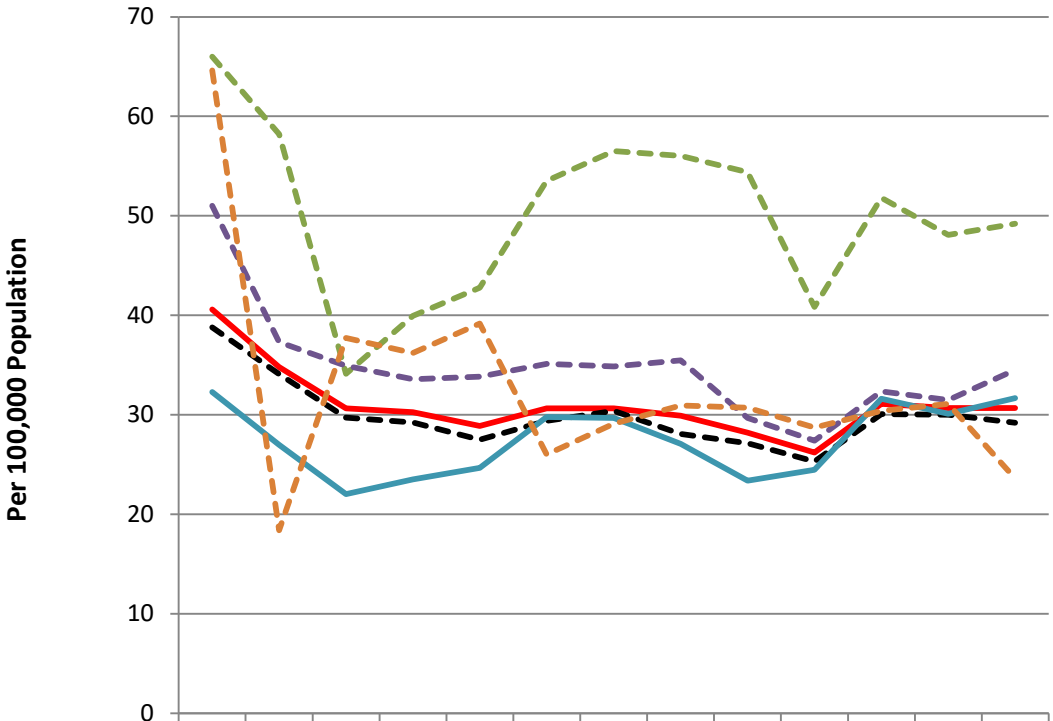
In the US, when compared to Whites, AI/AN are 2.4 times more likely to have a stroke.[10] Stroke is the sixth leading cause of death among AI/AN[11] nationally. Compared to the entire state of Arizona, AI/AN adults had a slightly lower prevalence of stroke in 2017 (Figure 4). Relative to other racial/ethnic groups, AI/AN adults in Arizona had the third highest prevalence of stroke (Figure 4). Among AI/AN in Arizona, mortality due to stroke has increased from 22.0 in 2007 to 31.7 in 2017. Compared to all racial/ethnic groups in Arizona, mortality due to stroke was the third highest among AI/AN in 2017 (Figure 5).

Figure 4. Percentage of Arizona Adults with Stroke by Race/Ethnicity BRFSS, 2017[12]



[10] http://www.stroke.org/understand-stroke/impact-stroke/minorities-and-stroke
[11] https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/docs/fs_aian.pdf
[12] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 5. Age-Adjusted Mortality Rate for Stroke* by Race/Ethnicity 2007-2017[13]



	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	40.6	34.8	30.6	30.3	28.9	30.7	30.6	29.9	28.2	26.2	31.1	30.7	30.7
White	38.8	34.1	29.7	29.2	27.5	29.4	30.4	28.1	27.1	25.3	30.1	30	29.2
Black/African American	66.0	58.2	34.1	40.0	42.8	53.5	56.5	56.0	54.4	40.8	51.8	48.1	49.2
Hispanic	51.0	37.3	34.9	33.6	33.8	35.1	34.9	35.5	29.7	27.4	32.4	31.5	34.5
American Indian/Alaska Native	32.3	27.0	22.0	23.5	24.7	29.8	29.7	27.1	23.4	24.5	31.6	30.1	31.7
Asian/Pacific Islander	64.6	18.4	37.7	36.2	39.2	26.0	29.1	30.9	30.7	28.7	30.4	31.1	23.6

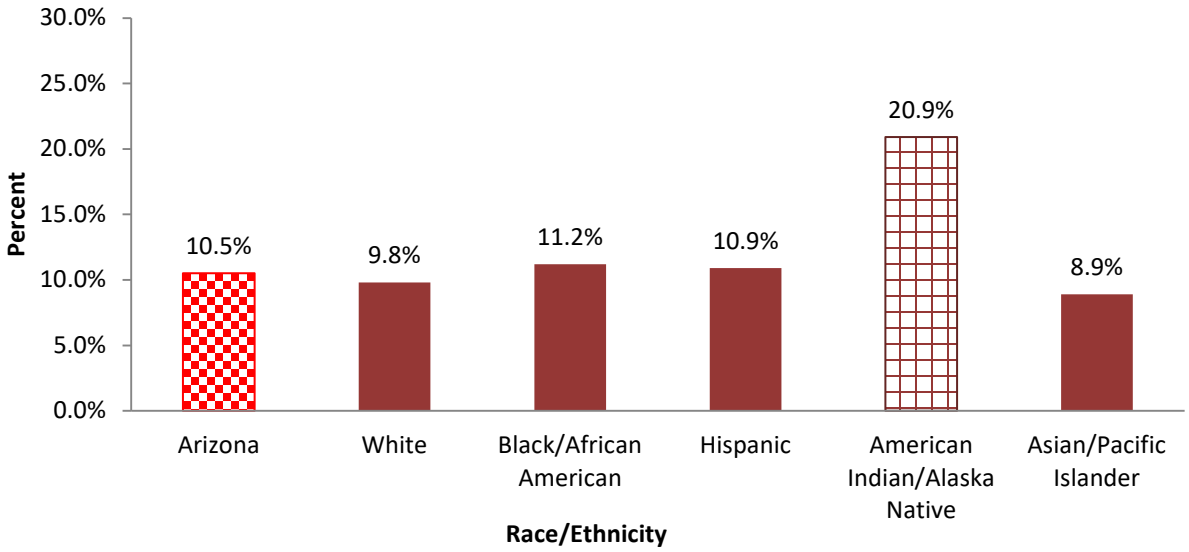
Year

[13] Arizona Department of Health Services Bureau of Public Health Statistics

Diabetes

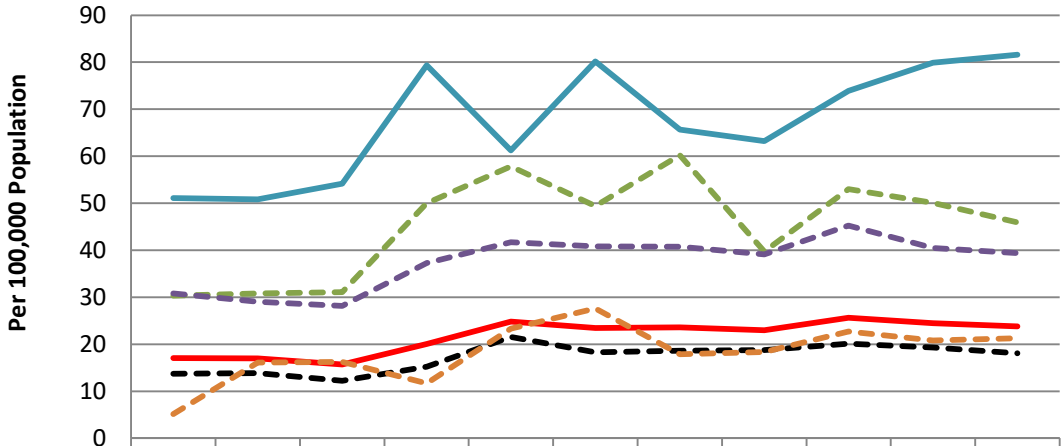
In the US, when compared to Whites, AI/AN adults are twice as likely to have been diagnosed with Type 2 diabetes. People with diabetes can experience devastating complications, including heart disease, stroke, blindness, and amputations. Compared to the entire state of Arizona and other racial/ethnic groups, AI/AN adults in Arizona had the highest prevalence of diabetes in 2017 (Figure 6). Mortality due to diabetes was considerably higher among AI/AN compared to other racial/ethnic groups in Arizona (Figure 7).

Figure 6. Percentage of Arizona Adults with Diabetes by Race/Ethnicity, BRFSS 2017[14]



[14] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 7. Age-Adjusted Mortality Rate for Diabetes by Race/Ethnicity 2007-2017[15]



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	17.0	17.0	15.7	20.1	24.8	23.5	23.6	23.0	25.7	24.5	23.8
White	13.7	13.8	12.2	15.2	21.6	18.3	18.6	18.8	20.1	19.3	18.1
Black/African American	30.3	30.8	31.1	50.0	57.8	49.4	60.2	39.7	53.0	50.1	45.9
Hispanic	30.8	29.1	28.1	37.3	41.7	40.8	40.7	39.1	45.3	40.5	39.4
American Indian/Alaska Native	51.1	50.8	54.2	79.3	61.3	80.2	65.7	63.2	73.9	79.9	81.6
Asian/Pacific Islander	5.1	16.1	16.2	11.7	23.3	27.6	17.9	18.3	22.7	20.8	21.3

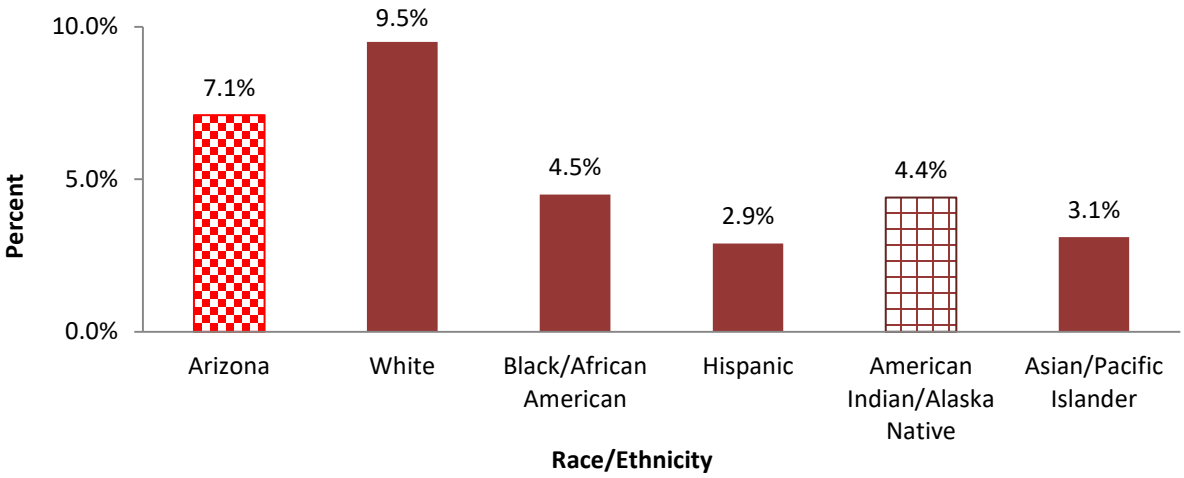
Year

[15] Arizona Department of Health Services Bureau of Public Health Statistics

Cancer

AI/AN are disproportionally impacted by cancer. Cancer rates vary by tribe, region, and gender but are often much higher among AI/AN when compared to Whites. When compared to the entire state of Arizona, AI/AN adults had a lower prevalence of cancer in 2017 (7.1% vs. 4.4%, respectively). Across racial/ethnic groups, AI/AN adults in Arizona had the third highest prevalence of cancer in 2017 (Figure 8). Morality due to cancer has increased in the last ten years among AI/AN in Arizona from 113.9 in 2007 to 117.1 in 2017 (Figure 9).

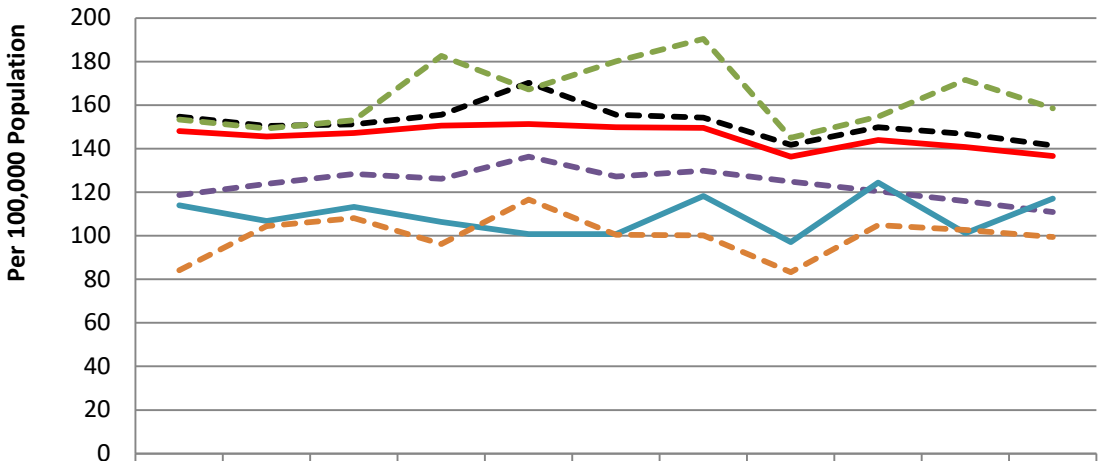
Figure 8. Percentage of Arizona Adults with any Type of Cancer* by Race/Ethnicity BRFSS, 2017[16]



*Does not include skin cancer

[16] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 9. Age-Adjusted Mortality Rate for Cancer* by Race/Ethnicity 2007-2017[17]



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	148	145.5	147.2	150.5	151.3	149.8	149.6	136.3	144	140.7	136.6
White	154.6	150.4	151.1	155.6	170.3	155.6	154.3	141.8	149.8	146.7	141.4
Black/African American	153.4	149.2	153.1	182.6	167.1	180.1	190.4	145	154.7	171.6	158.5
Hispanic	118.6	123.8	128.4	126.2	136.3	127.2	129.8	124.9	120.4	115.9	110.9
American Indian/Alaska Native	113.9	106.7	113.3	106.4	100.8	100.8	118.2	97.1	124.4	101.2	117.1
Asian/ Pacific Islander	84.2	104.4	108.1	96.2	116.6	100.5	100.1	83.2	104.8	102.6	99.4

Year

*Does not include skin cancer

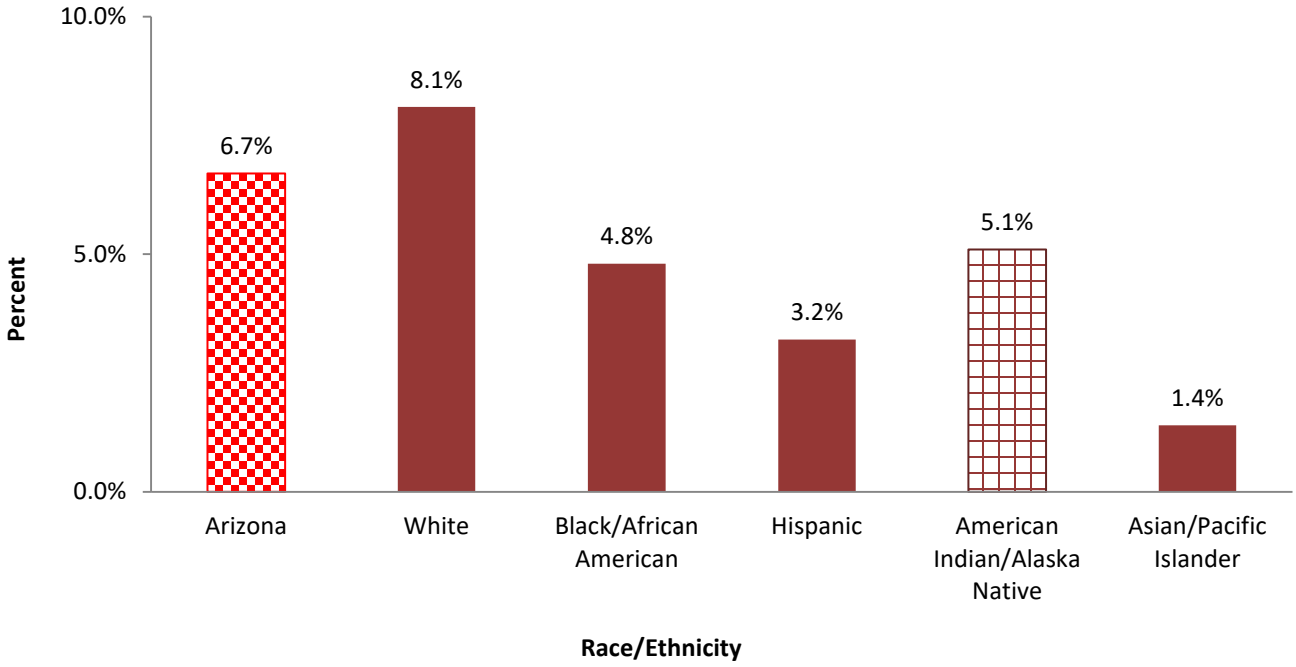
[17] Arizona Department of Health Services Bureau of Public Health Statistics

Chronic Obstructive Pulmonary Disease (COPD)

In the United States, compared to Whites, AI/AN are more likely to report COPD.[18] The most significant risk factor for COPD is cigarette smoking. Compared to other racial/ethnic groups, cigarette smoking is more common among AI/AN in the United States.[19] In Arizona, the prevalence of COPD in 2017 was lower among AI/AN adults when compared to the entire state and the second highest when compared across racial/ethnic groups (Figure 10).

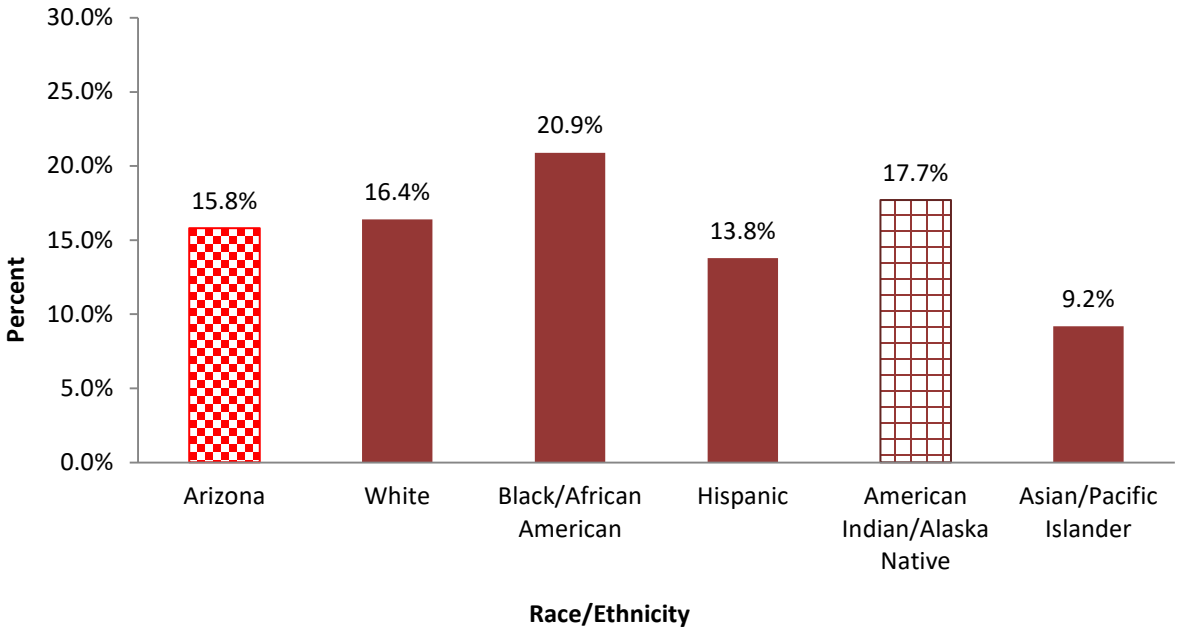
Asthma disproportionally impacts AI/AN. The prevalence of asthma among AI/AN adults was higher than the total Arizona prevalence in 2017 (17.7% vs. 15.8%). Across racial/ethnic groups, AI/AN adults in Arizona had the second highest prevalence of asthma (17.7%) (Figure 11).

Figure 10. Percentage of Arizona Adults with COPD by Race/Ethnicity BRFSS, 2017[20]



[18] https://www.cdc.gov/copd/index.html
[19] https://www.cdc.gov/tobacco/campaign/tips/groups/american-indian-alaska-native.html
[20] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 11. Percentage of Arizona Adults with Asthma by Race/Ethnicity BRFSS, 2017[21]

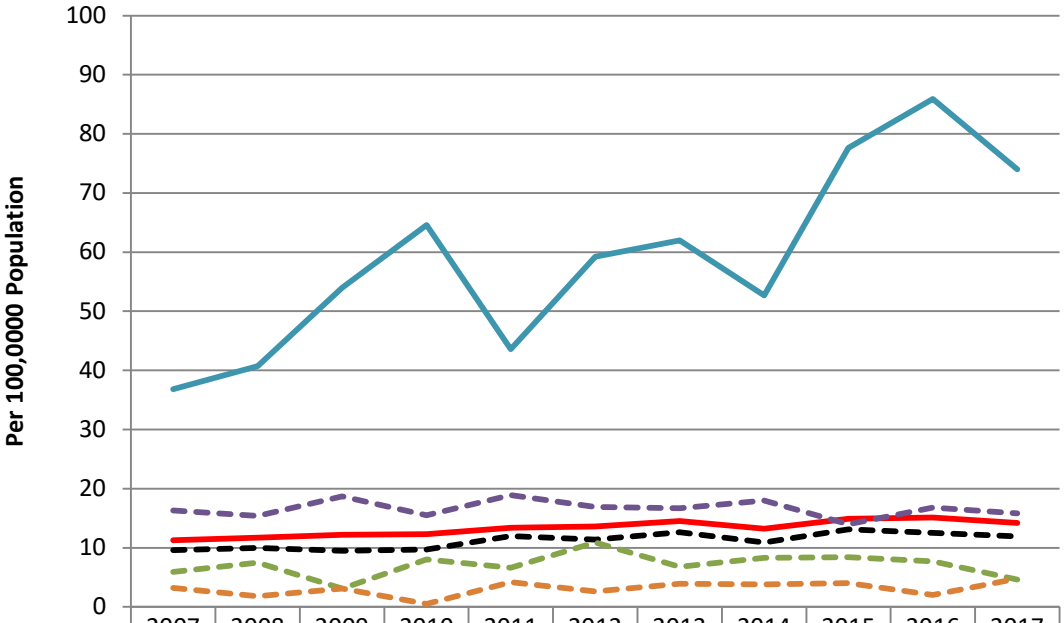


[21] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Chronic Liver Disease and Cirrhosis

In 2015, chronic liver disease was the fifth leading cause of death among AI/AN, and the second leading cause of death for males between the ages of 35-55 in the United States.[22] Excessive alcohol has contributed to chronic liver disease, cirrhosis, and other chronic conditions. It is a leading preventable cause of death in the United States and has substantial public health impact on AI/AN. Compared to the entire state of Arizona and other racial/ethnic groups, mortality due to chronic liver disease and cirrhosis between 2007 through 2017 was significantly higher among AI/AN (Figure 12). Most striking was the 33.2 mortality rate increase between 2014 through 2016 among AI/AN (Figure 12).

Figure 12. Age-Adjusted Mortality Rate for Chronic Liver Disease and Cirrhosis by Race/Ethnicity, 2007-2017[23]



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	11.3	11.7	12.2	12.3	13.4	13.6	14.5	13.2	14.9	15.1	14.2
White	9.6	10	9.5	9.7	12	11.4	12.6	10.9	13.1	12.5	11.9
Black/African American	5.9	7.5	3.1	8	6.6	10.9	6.8	8.3	8.4	7.7	4.6
Hispanic	16.3	15.4	18.7	15.5	18.9	16.9	16.7	18	14	16.8	15.8
American Indian/Alaska Native	36.8	40.7	54	64.6	43.6	59.2	62	52.7	77.6	85.9	74
Asian/ Pacific Islander	3.2	1.8	3.1	0.5	4.2	2.6	3.9	3.8	4	2	4.8

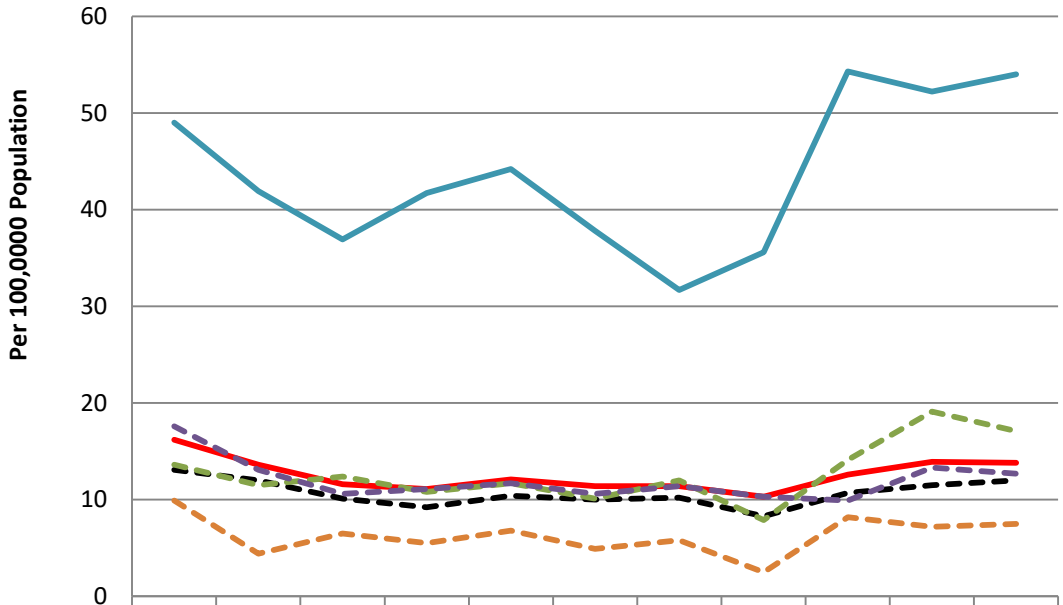
Year

[22] https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=32
[23] Arizona Department of Health Services Bureau of Public Health Statistics

Motor Vehicle Accidents

In the United States, motor vehicle accidents are the leading cause of unintentional injuries for AI/AN[24]. Compared to the entire state of Arizona and other racial/ethnic groups, AI/AN had the highest mortality rate due to motor vehicle accidents between 2007 to 2017. Most striking was the increase of deaths from 2013 (31.7) to 2015 (54.3) among AI/AN (Figure 13).

Figure 13. Age-Adjusted Mortality Rate for Motor Vehicle Accidents by Race/Ethnicity 2007-2017[25]



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	16.2	13.6	11.6	11.1	12.1	11.4	11.4	10.3	12.6	13.9	13.8
White	13.1	12	10.1	9.2	10.4	10	10.2	8.3	10.7	11.5	12
Black/African American	13.6	11.5	12.4	10.8	11.7	10.1	12	7.9	14.1	19.1	17.1
Hispanic	17.6	13.1	10.6	11.1	11.7	10.6	11.4	10.3	9.9	13.3	12.7
American Indian/Alaska Native	49	41.9	36.9	41.7	44.2	37.8	31.7	35.6	54.3	52.2	54
Asian/ Pacific Islander	9.9	4.4	6.5	5.5	6.8	4.9	5.8	2.5	8.2	7.2	7.5

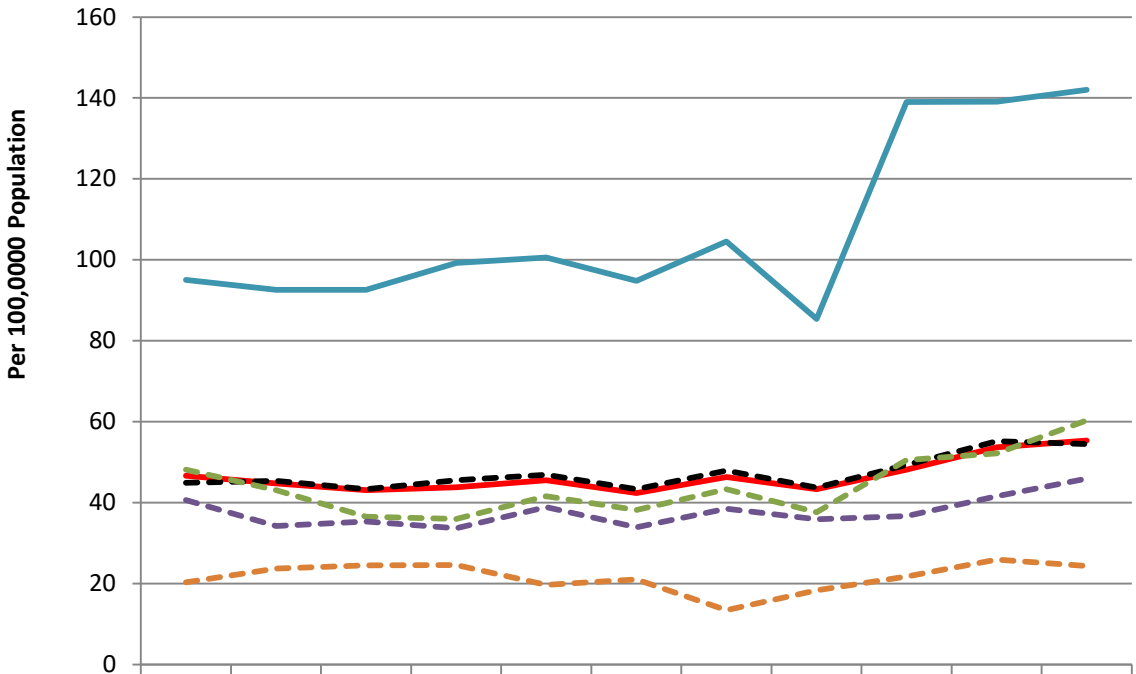
Year

[24] https://www.cdc.gov/motorvehiclesafety/native/index.html
[25] Arizona Department of Health Services Bureau of Public Health Statistics

Accidents (Unintentional injuries)

Compared to the state of Arizona and other racial/ethnic groups, AI/AN had the highest mortality rate due to unintentional injuries with a 53.6 rate increase rate from 2014 to 2015. The mortality rate in 2017 increased to 142.0 (Figure 14).

Figure 14. Age-Adjusted Mortality Rate for Accidents (Unintentional Injuries) by Race/Ethnicity, 2007-2017[26]



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	46.6	44.7	43.1	43.8	45.5	42.4	46.3	43.3	48.1	53.7	55.3
White	44.9	45.4	43.3	45.5	46.9	43.3	47.9	43.7	49.3	55.2	54.5
Black/African American	48.1	43.1	36.5	36	41.6	38.2	43.3	37.6	50.5	52.2	60.3
Hispanic	40.6	34.2	35.3	33.7	38.9	33.9	38.5	35.9	36.7	41.6	45.9
American Indian/Alaska Native	95	92.6	92.6	99.2	100.6	94.8	104.5	85.4	139	139.1	142
Asian/ Pacific Islander	20.3	23.7	24.5	24.6	19.7	21	13.4	18.3	21.7	25.9	24.3

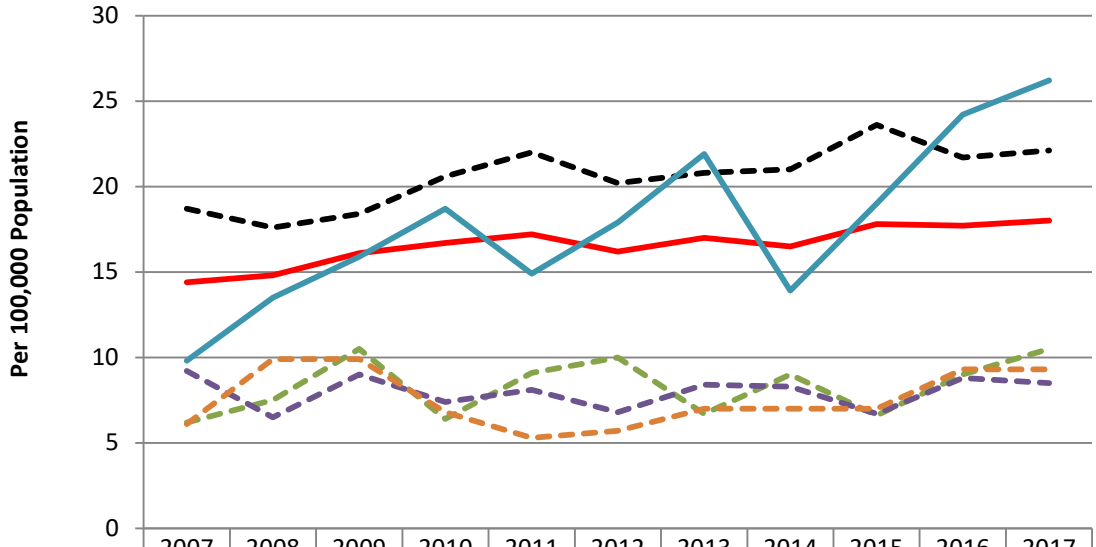
Year

[26] Arizona Department of Health Services Bureau of Public Health Statistics

Intentional Self-Harm (Suicide)

Suicide disproportionally impacts AI/AN. The mortality rate due to suicide among AI/AN has been higher than the overall state rate in Arizona since 2015 (Figure 15). While the rates between AI/AN and White racial/ethnic groups have fluctuated over the past 4 years, AI/AN had the highest mortality rate due to suicide when compared to all racial/ethnic groups in Arizona, with a rate of 26.2 in 2017 (Figure 15).

Figure 15. Age-adjusted Mortality Rate for Intentional Self-Harm (Suicide) by Race/Ethnicity 2007-2017[27]



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Arizona	14.4	14.8	16.1	16.7	17.2	16.2	17	16.5	17.8	17.7	18
White	18.7	17.6	18.4	20.6	22	20.2	20.8	21	23.6	21.7	22.1
Black/African American	6.2	7.5	10.5	6.4	9.1	10	6.7	9	6.6	9	10.5
Hispanic	9.2	6.5	9	7.4	8.1	6.8	8.4	8.3	6.7	8.8	8.5
American Indian/Alaska Native	9.8	13.5	15.9	18.7	14.9	17.9	21.9	13.9	19	24.2	26.2
Asian/Pacific Islander	6.1	9.9	9.9	6.8	5.3	5.7	7	7	7	9.3	9.3

Year

[27] Arizona Department of Health Services Bureau of Public Health Statistics

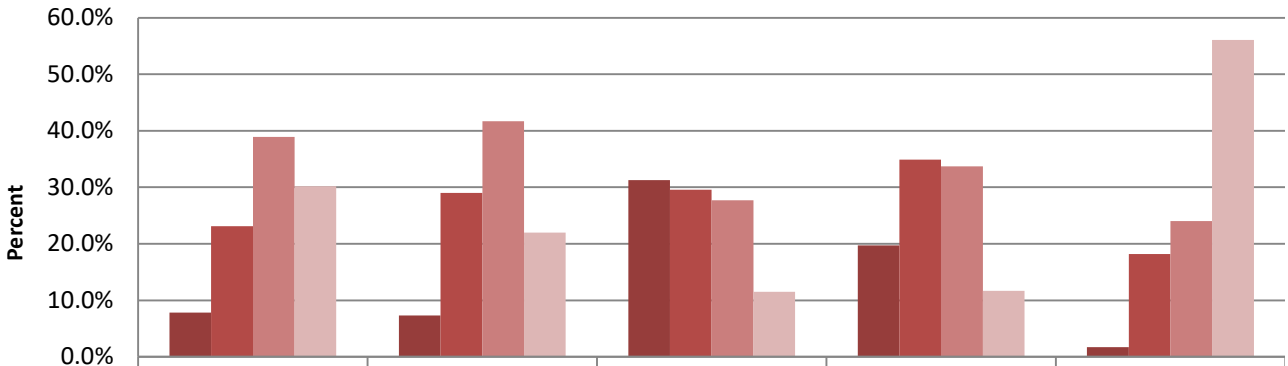
Sociodemographic Characteristics and Health Care Access

Data from the 2017 Arizona BRFSS was used to examine the prevalence of selected sociodemographic, lifestyle health-related behaviors, and chronic conditions among AI/AN adults compared to other racial/ethnic groups. The BRFSS is a telephone (landline and cell) survey conducted annually in all 50 states, the District of Columbia and U.S. territories to collect information on health-related behavioral risk factors, preventable health practices, health care access, and chronic conditions among noninstitutionalized U.S. adults aged 18 years or older.

To increase the sample size and representation of AI/AN, the U.S. Department of Health and Human Services Office of Minority Health collaborated with the CDC to conduct additional interviews of AI/AN adults in the 2017 BRFSS. Arizona is one of eleven states with the largest population of AI/AN, and was selected to oversample AI/AN to gain a better understanding of their health status. The following findings are based on the oversample conducted in the 2017 Arizona BRFSS.

In 2017, AI/AN adults in Arizona had the second highest prevalence of those with less than a high school diploma (19.7%), and the second lowest prevalence with a college degree (11.7%) (Figure 16).

Figure 16. Education Status by Race/Ethnicity BRFSS, 2017[28]

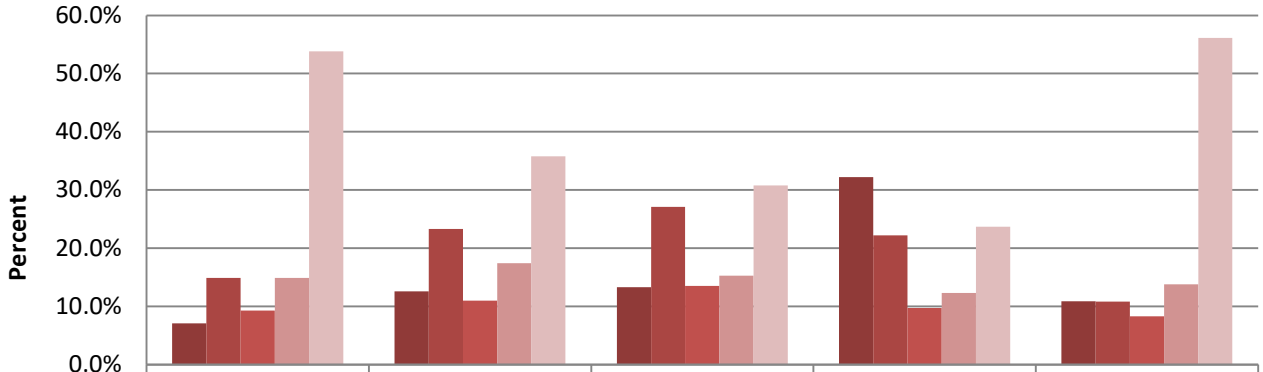


	White	Black/African American	Hispanic	American Indian/Alaska Native	Asian/Pacific Islander
< High School	7.8%	7.3%	31.3%	19.7%	1.7%
High School/GED Graduate	23.1%	29.0%	29.6%	34.9%	18.2%
Some College	38.9%	41.7%	27.7%	33.7%	24.0%
College Graduate	30.2%	22.0%	11.5%	11.7%	56.1%

[28] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

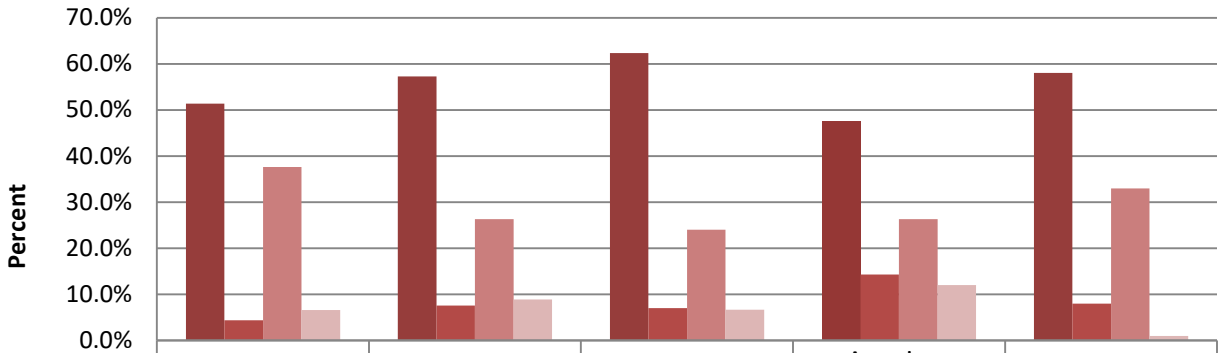
Across racial/ethnic groups, income and unemployment varied. AI/AN adults in Arizona reported the highest prevalence of an income <$15,000 a year (32.2%) (Figure 17) and the highest prevalence of being unemployed (14.3%) (Figure 18) when compared across other racial/ethnic groups.

Figure 17. Income Status by Race/Ethnicity, BRFSS, 2017[29]



	White	Black/African American	Hispanic	American Indian/Alaska Native	Asian/Pacific Islander
<$15,000	7.1%	12.6%	13.3%	32.2%	10.9%
$15,000-$24,999	14.9%	23.3%	27.1%	22.2%	10.8%
$25,000-$34,999	9.3%	11.0%	13.5%	9.7%	8.3%
$35,000- $49,999	14.9%	17.4%	15.3%	12.3%	13.8%
>$50,000	53.8%	35.8%	30.8%	23.7%	56.1%

Figure 18. Employment Status by Race/Ethnicity, BRFSS, 2017[30]



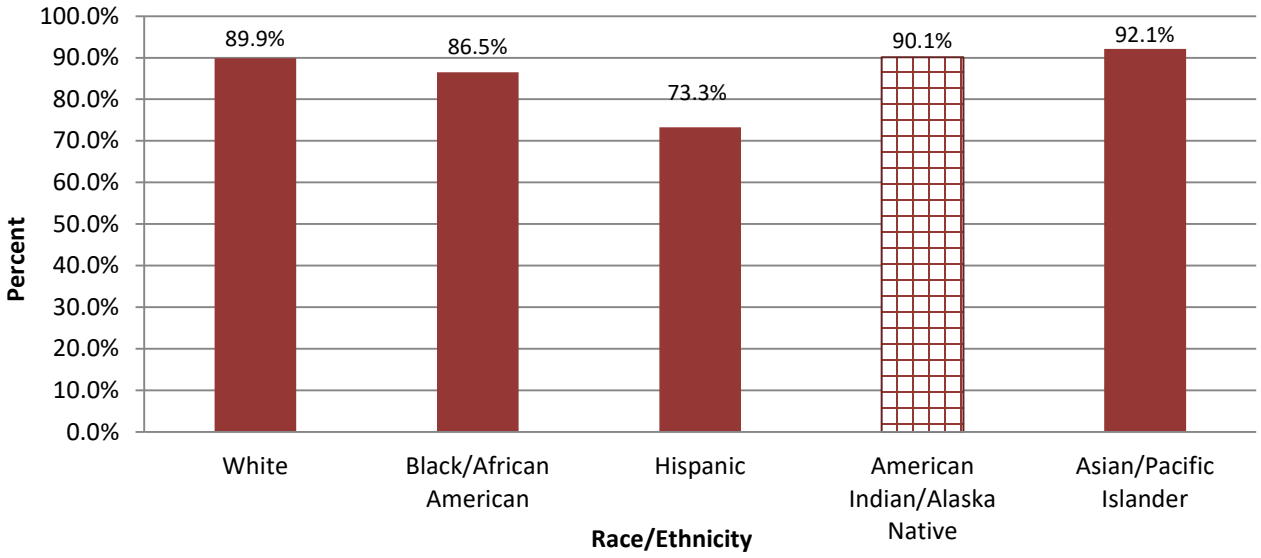
	White	Black/African American	Hispanic	American Indian/Alaska Native	Asian/Pacific Islander
Employed/Self-Employed	51.4%	57.3%	62.3%	47.5%	58.0%
Unemployed	4.4%	7.6%	7.0%	14.3%	8.0%
Unable to Work	37.6%	26.3%	24.0%	26.3%	33.0%
Other	6.6%	8.9%	6.7%	12.0%	1.0%

[29] Arizona Behavioral Risk Factor Surveillance System (BRFSS)
[30] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Across racial/ethnic groups, AI/AN adults in Arizona had the second highest prevalence of health care coverage (90.1%) (Figure 19), but a lower prevalence of having a personal doctor or health care providers (60.0%) (Figure 20). This highlights that having health insurance and availability of services, such as those offered through Indian Health Services (IHS) and tribally-operated facilities, does not guarantee access to a usual source of care. IHS is a health care system that provides clinical, behavioral, and limited specialty health care services to enrolled members of federally recognized AI/AN tribes and is not a health insurance plan[31]. Access to health care services under this form of coverage is only available at federal hospitals and clinics operated or funded by IHS and may not assure that all access barriers are addressed.

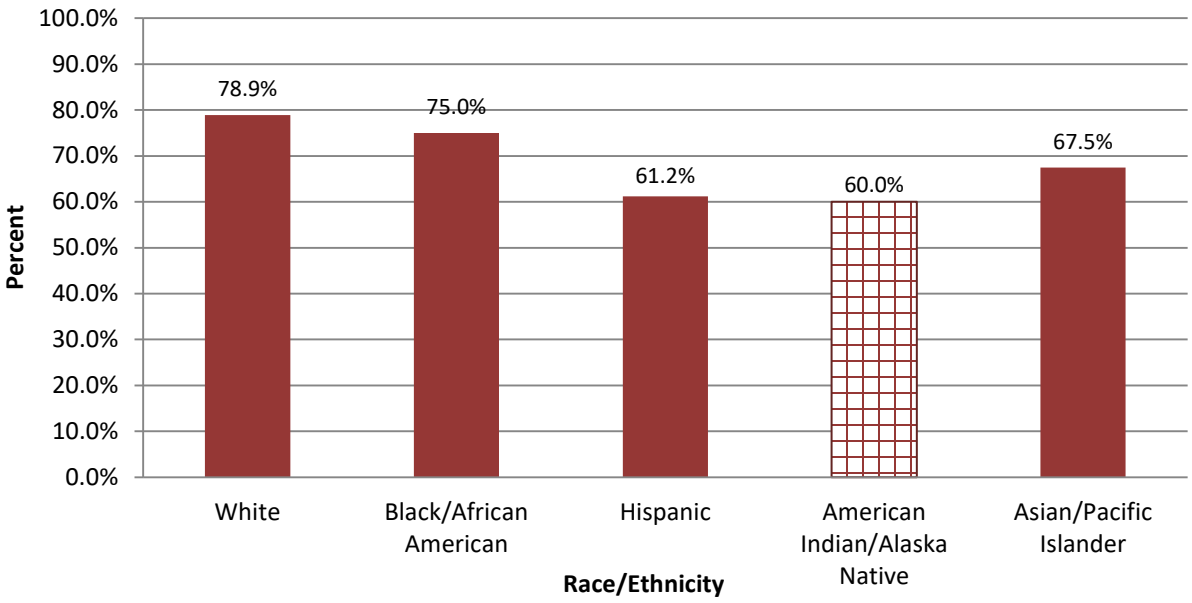
Traditionally, IHS facilities are located in geographically isolated areas, on reservations. As more AI/AN reside in urban areas, access to these facilities is more limited[32]. Other identified barriers include travel time to available facilities, lack of transportation, lack of access to culturally and linguistically appropriate providers, long wait times and limited access to preventive care, screening and early treatment for health conditions[33].

Figure 19. Have Health Care Coverage by Race/Ethnicity, BRFSS, 2017[34]



[31] Zuckerman S, Haley JM, Roubideaux Y, Lillie-Blanton M. Health service access, use, and insurance coverage among American Indians/Alaska Natives and Whites: what role does the Indian Health Service play? Am J Public Health 2004;94:53–59.
[32] Sequist TD, Cullen T, Acton KJ. Indian Health Service innovations have helped reduce health disparities affecting American Indian and Alaska Native people. Health Aff (Millwood) 2011;30:1965–1973. http://dx.doi. org/10.1377/hlthaff.2011.0630
[33] Sequist TD, Cullen T, Acton KJ. Indian Health Service innovations have helped reduce health disparities affecting American Indian and Alaska Native people. Health Aff (Millwood) 2011;30:1965–1973. http://dx.doi. org/10.1377/hlthaff.2011.0630
[34] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 20. Have a Personal Doctor or Health Care Provider by Race/Ethnicity, BRFSS, 2017[35]



[35] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Lifestyle Health-Related Behaviors

Tobacco use, being overweight or obese, and having high blood pressure are risk factors that can lead to heart disease, diabetes, and other chronic diseases. In the United States, AI/AN have the highest prevalence of tobacco use, obesity, and physical inactivity[36].

Across all racial/ethnic groups, AI/AN adults in Arizona had the fourth highest prevalence of smoking (12.9%) (Figure 21), but the highest prevalence of using smokeless tobacco (4.6%) in 2017 (Figure 22).

Figure 21. Percentage of Arizona Adults Who are Current Smokers by Race/Ethnicity, BRFSS, 2017[37]

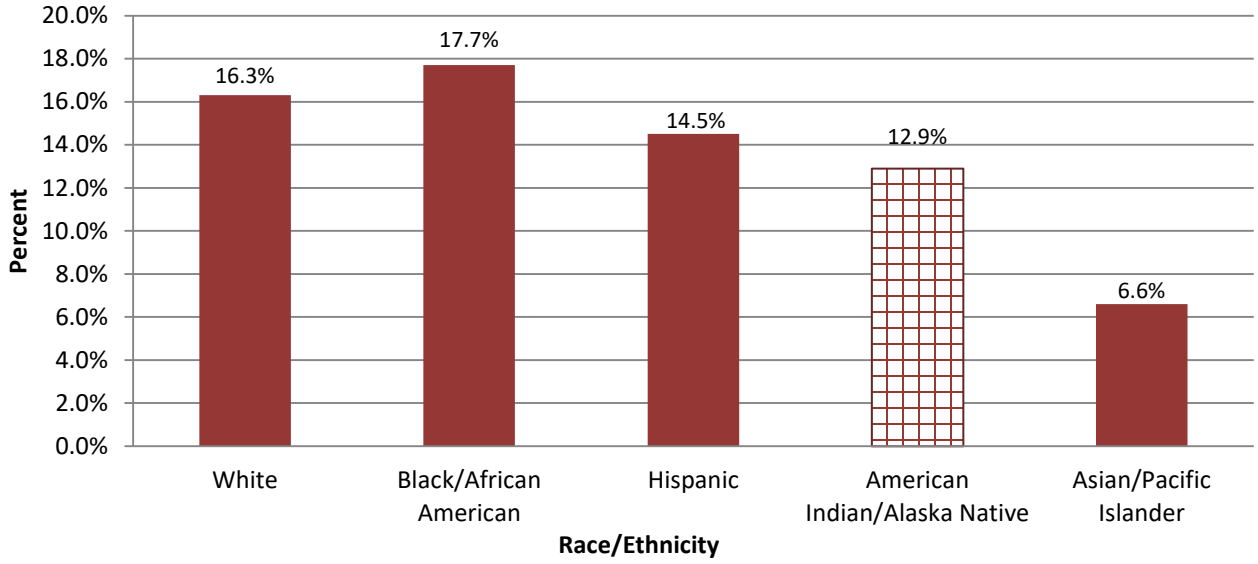
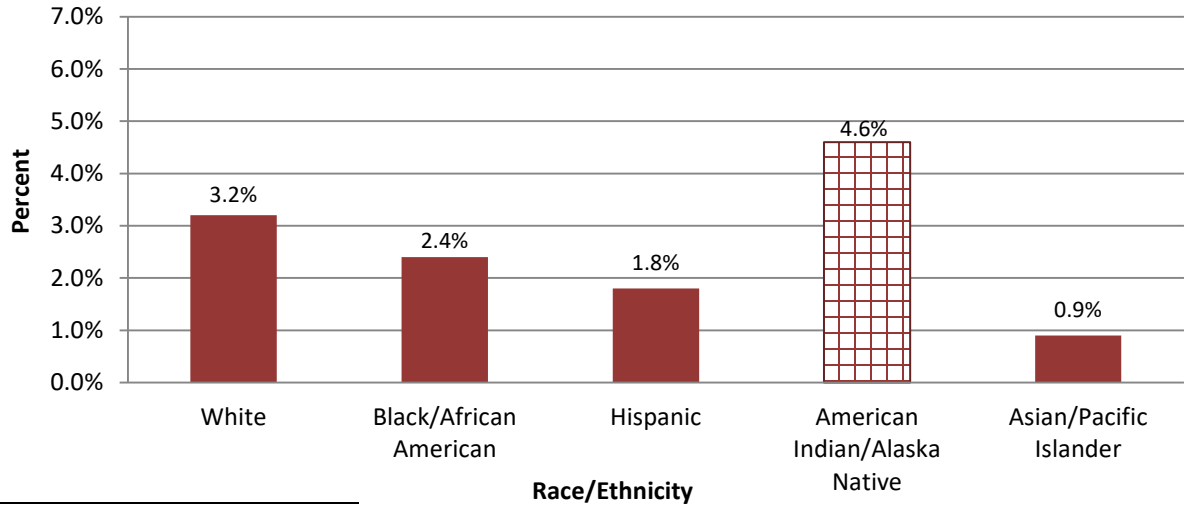


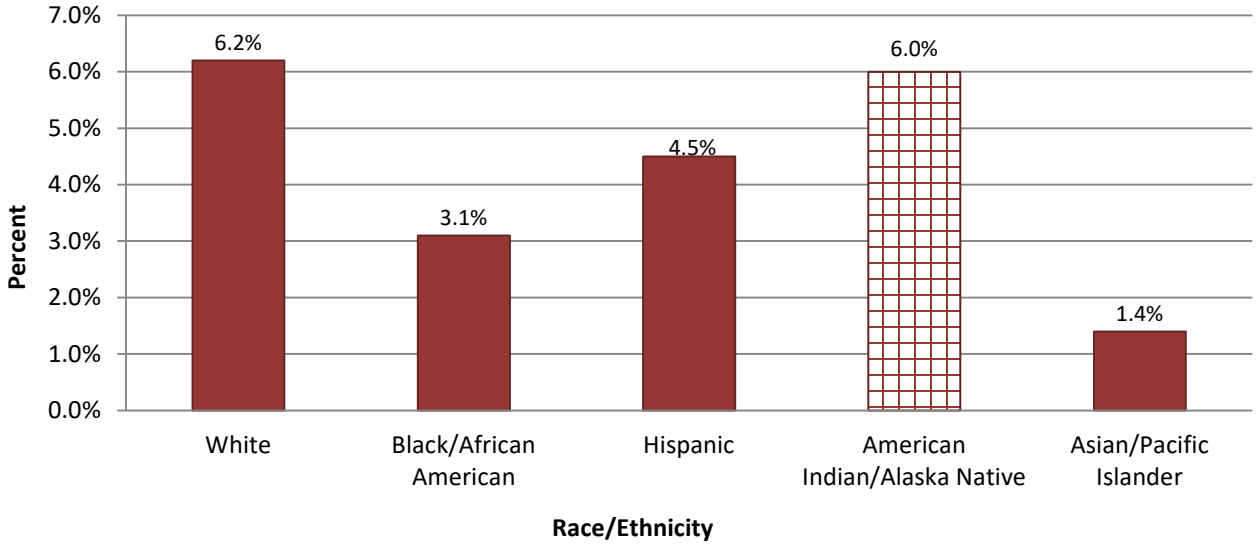
Figure 22. Percentage of Arizona Adults Who are Current Smokeless Tobacco Users by Race/Ethnicity, BRFSS, 2017[38]



[36] https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_aian.htm
[37] Arizona Behavioral Risk Factor Surveillance System (BRFSS)
[38] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Across all racial/ethnic groups, AI/AN adults in Arizona had the second highest prevalence of drinking heavy (6.0%) in 2017 (Figure 23). Heavy drinkers were defined as adult males having more than 14 drinks per week and adult females having more than 7 drinks per week.

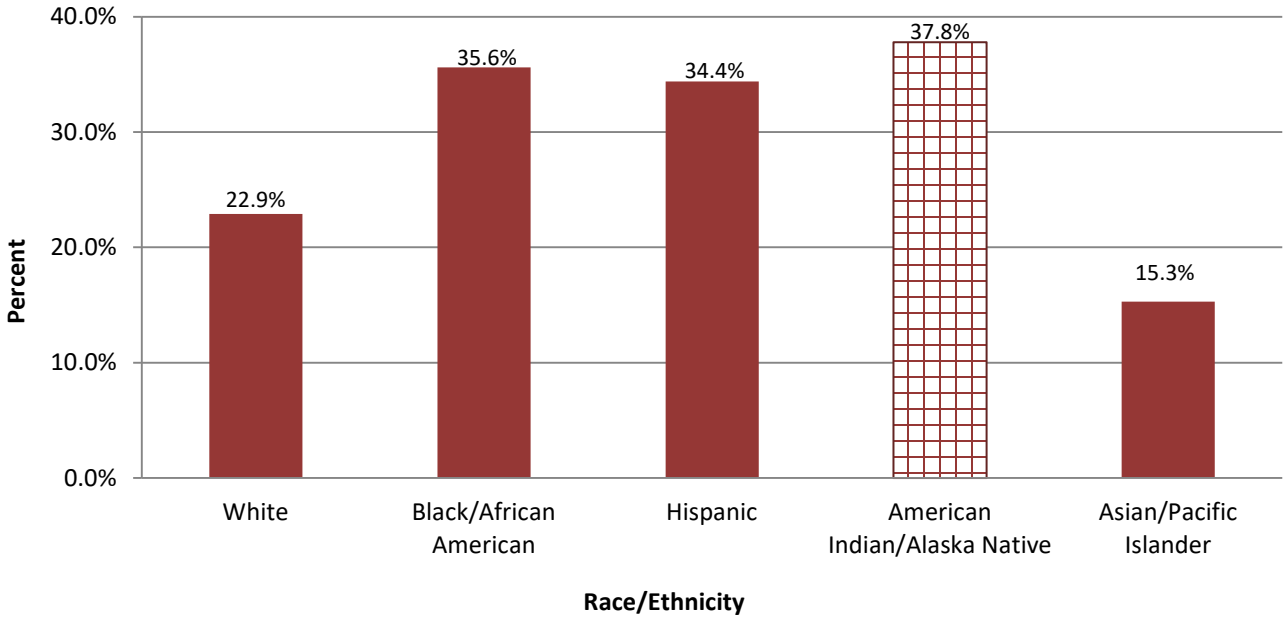
Figure 23. Percentage of Arizona Adults Who Heavy Drinkers* by Race/Ethnicity, BRFSS, 2017[39]



[39] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Factors leading to overweight and obesity such as consumption of sugar-sweetened beverages were highest among AI/AN adults in Arizona (37.8%) (Figure 24), and the prevalence of physical inactivity was the second highest among AI/AN adults in Arizona (27.0%) (Figure 25), when compared across all racial/ethnic groups in 2017. In addition, compared to other racial/ethnic groups, AI/AN adults in Arizona had the highest prevalence of being overweight/obese in 2017 (77.5%) (Figure 26).

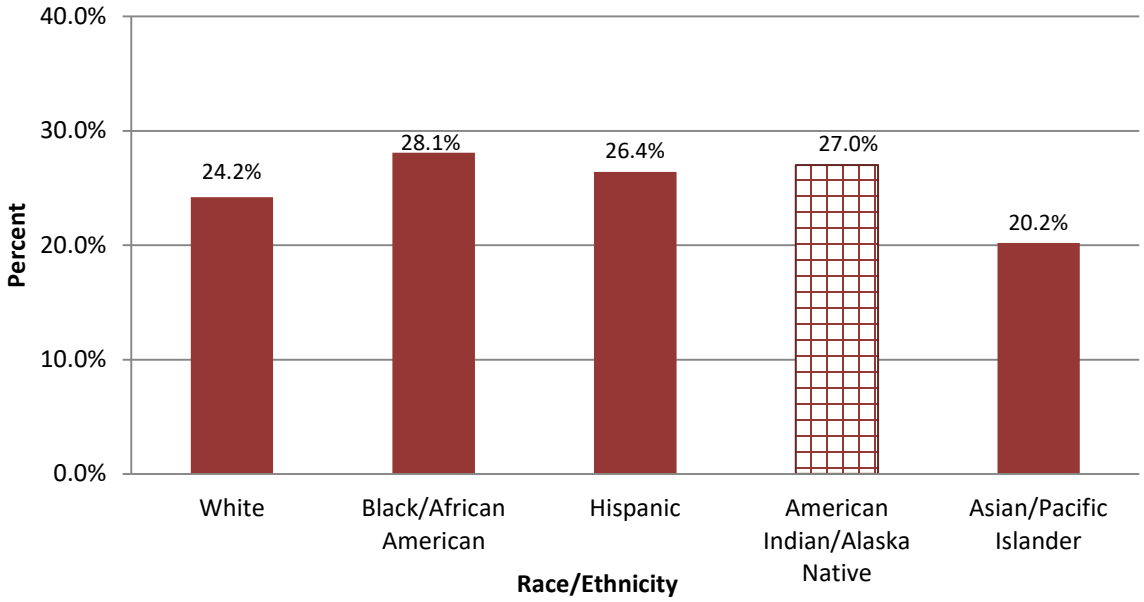
Figure 24. Percentage of Arizona Adults Who Consumed Sugar-Sweetened* Beverages ≥1 Time Per Day* by Race/Ethnicity, BRFSS, 2017[40]



*Sugar-sweetened fruit drinks (such as Kool-Aid and lemonade), sweet tea, and sports or energy drinks (such as Gatorade and Red Bull)? Do not include 100% fruit juice, diet drinks, or artificially sweetened drinks

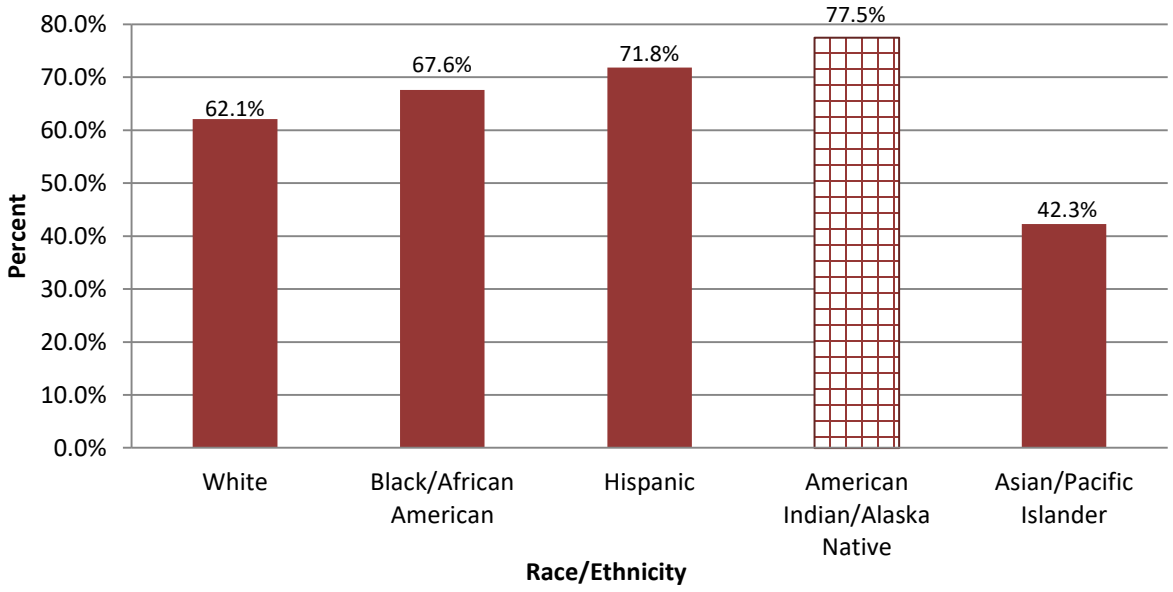
[40] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Figure 25. Percentage of Arizona Adults Who Reported Leisure-Time Physical Inactivity* by Race/Ethnicity, BRFSS, 2017[41]



*Physical inactivity was defined according to a non-confirmatory response to the following question: "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Figure 26. Percentage of Arizona Adults Who are Overweight or Obese by Race/Ethnicity, BRFSS, 2017[42]



[41] Arizona Behavioral Risk Factor Surveillance System (BRFSS)
[42] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

In 2017, AI/AN adults in Arizona had the second highest prevalence of high cholesterol (74.5%) (Figure 27), and the third highest prevalence of having high blood pressure (32.1%) (Figure 28) when compared to other racial/ethnic groups in 2017.

Figure 27. Percentage of Arizona Adults Who Reported High Cholesterol by Race/Ethnicity, BRFSS, 2017[43]

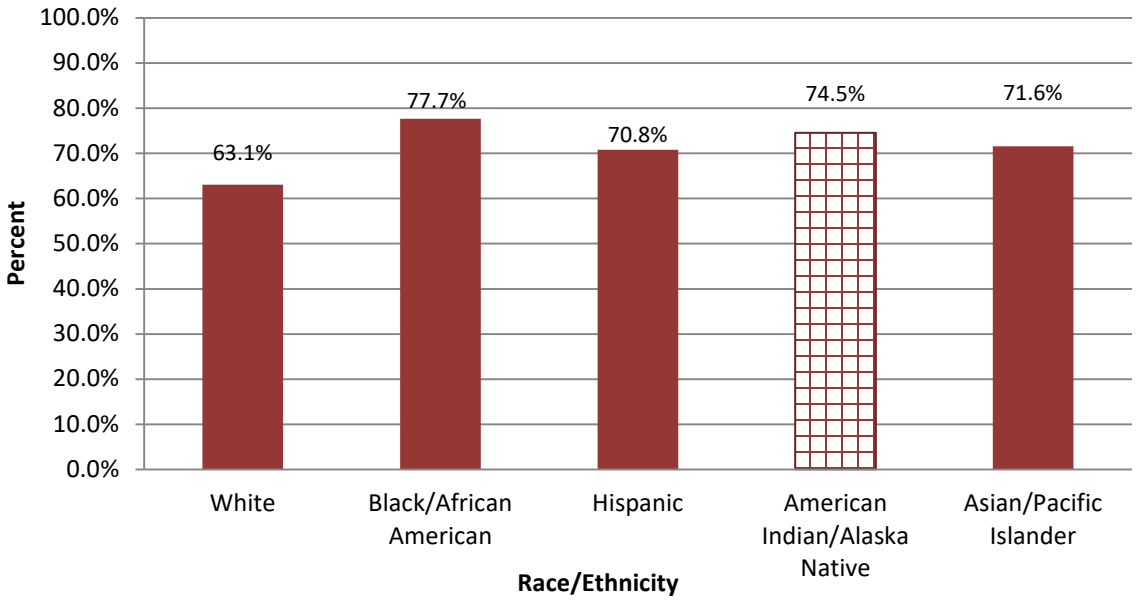
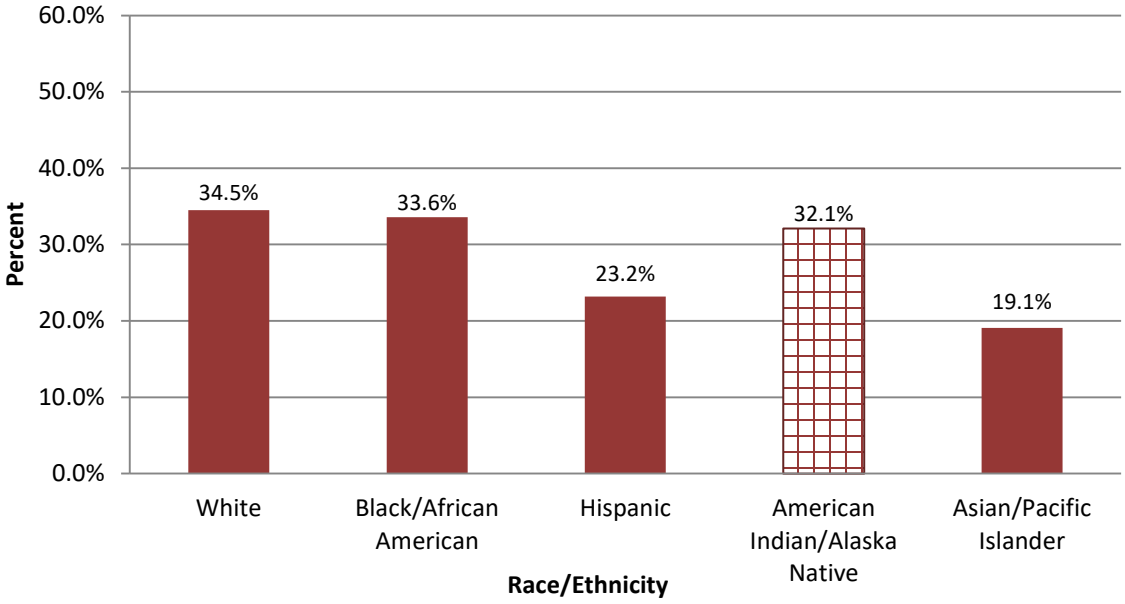


Figure 28. Percentage of Arizona Adults Who Reported High Blood Pressure by Race/Ethnicity, BRFSS, 2017[44]

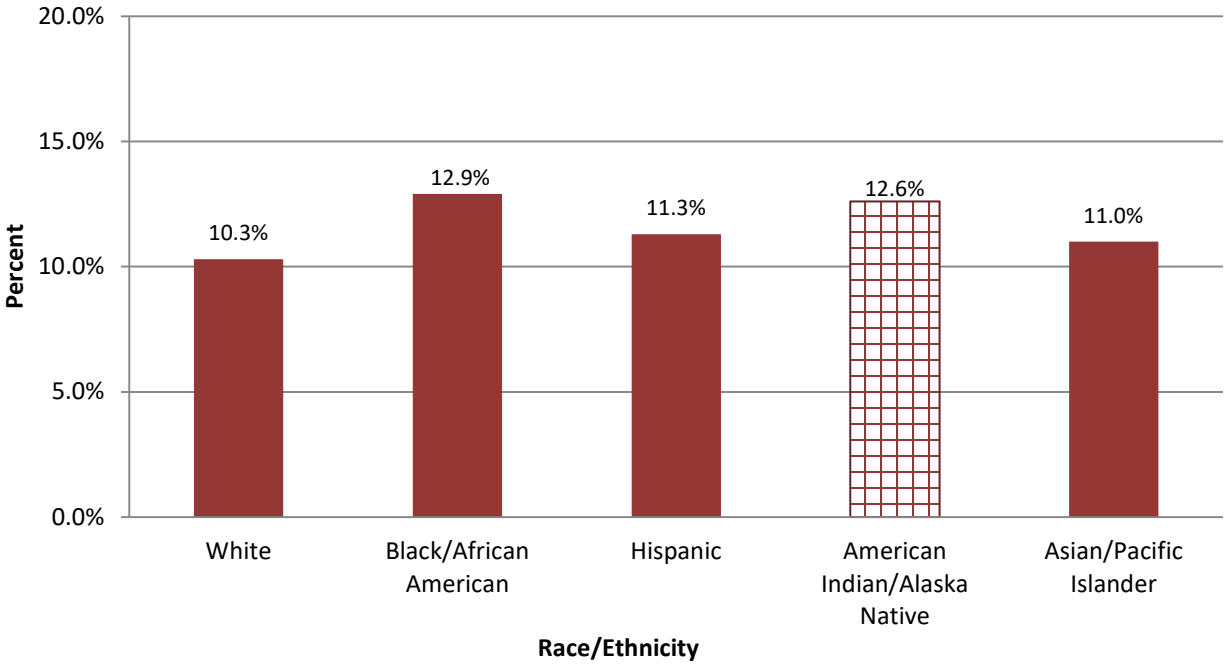


[43] Arizona Behavioral Risk Factor Surveillance System (BRFSS)
[44] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Other Chronic Conditions and Health Status

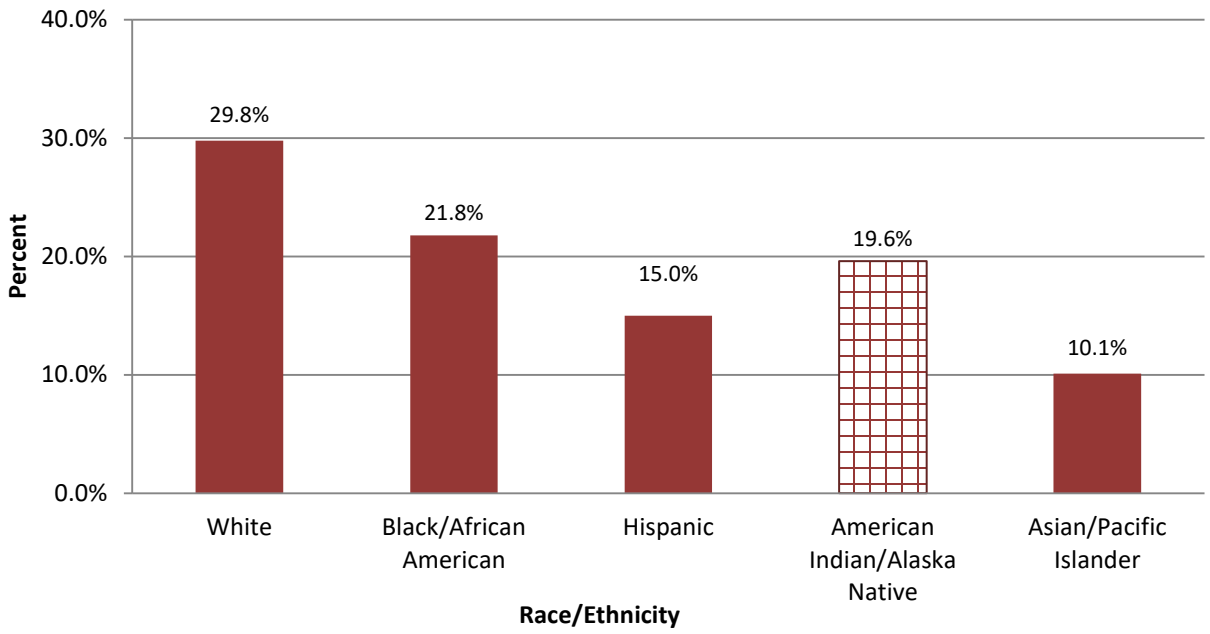
AI/AN have higher rates of chronic disease than other racial/ethnic groups in the United States[45]. Additional chronic diseases impacting AI/AN adults include pre-diabetes and arthritis. In 2017, AI/AN adults in Arizona had the second highest prevalence of pre-diabetes (12.6%) (Figure 29), and the third highest prevalence of having arthritis (19.6%) (Figure 30) when compared to other racial/ethnic groups in 2017.

Figure 29. Percentage of Arizona Adults Who Reported Pre-Diabetes by Race/Ethnicity, BRFSS, 2017[46]



[45] https://www.cdc.gov/tribal/data-resources/information/chronic-diseases.html
[46] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

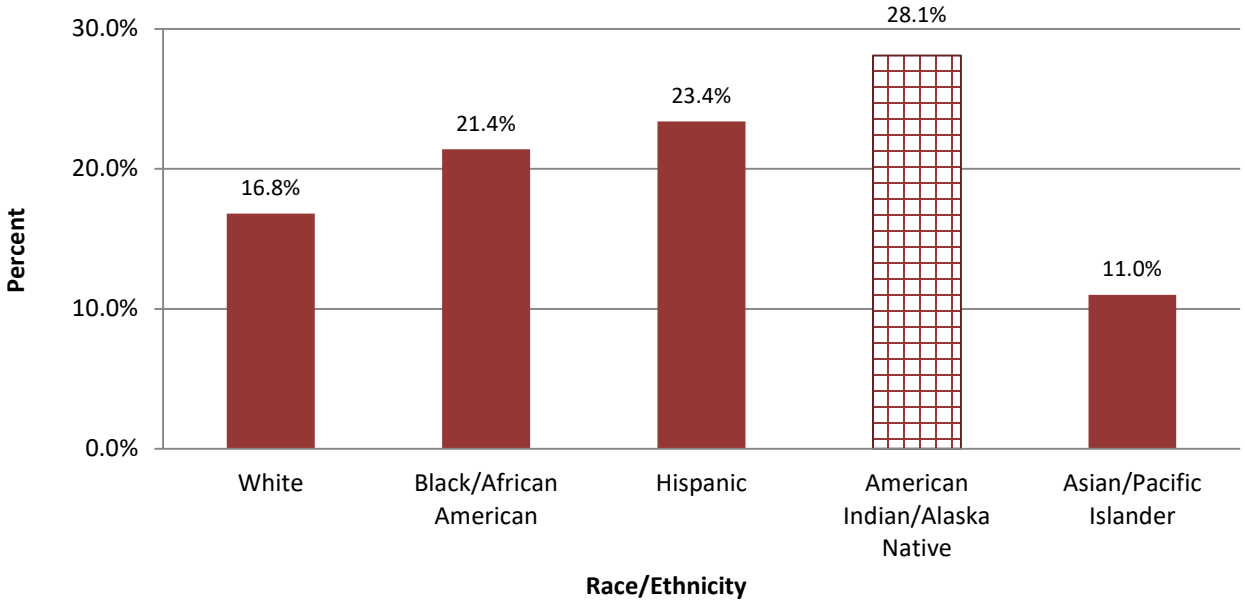
Figure 30. Percentage of Arizona Adults Who Reported Arthritis by Race/Ethnicity, BRFSS, 2017[47]



[47] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

A significant contributor to an individual's perception and report of overall health is their mental health and well-being. Self-assessed health status has been validated as a useful indicator of health among different populations and allows for broad comparisons across a variety of health conditions[48]. In 2017, the percent of individuals reporting their health as fair or poor was highest among AI/AN adults in Arizona (28.1%) when compared across other racial/ethnic groups. (Figure 31).

Figure 31. Percentage of Arizona Adults Who Reported Fair or Poor Health* by Race/Ethnicity, BRFSS, 2017[49]

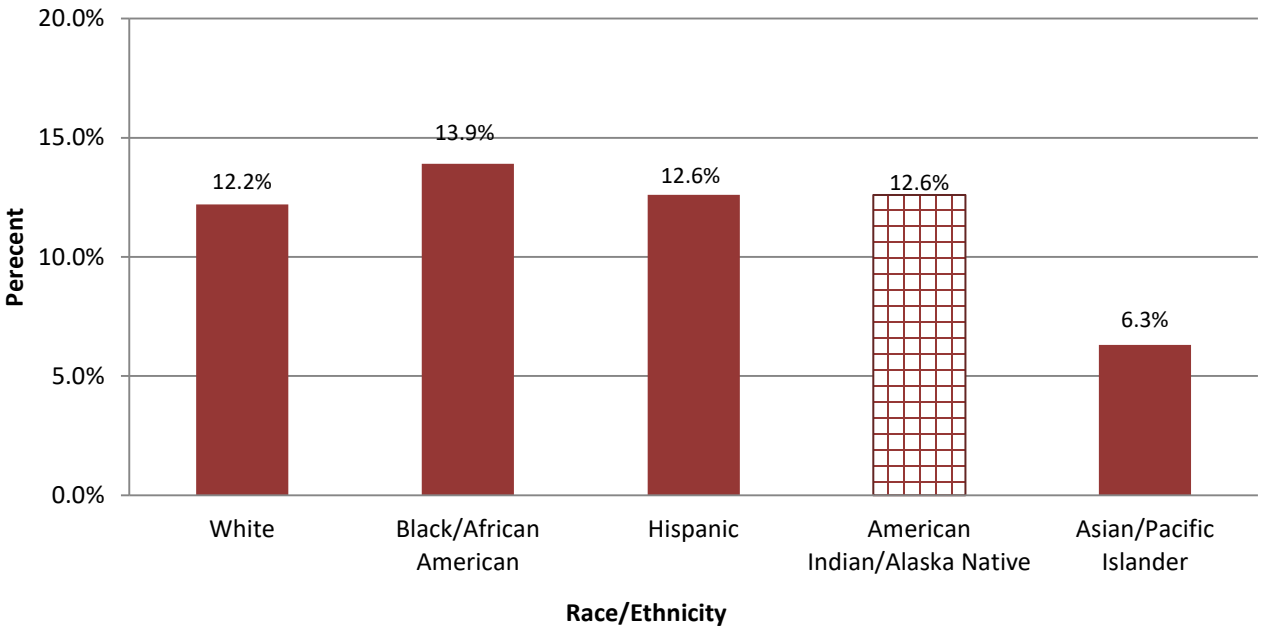


*Respondents rated their general health as being excellent, very good, good, fair, or poor. The responses were then categorized into two groups: 1) those who reported that their health was excellent, very good, or good and 2) those who reported that their health was fair or poor. Fair or poor health status was defined as a report of fair or poor health.

[48] Idler E, Benyamini Y. Self-rated Health and Mortality: a Review of Twenty-Seven Community Studies. J Health Soc Behav. 1997; 38(1): 21-37.
[49] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Mental health distress is a term used to describe a range of symptoms individuals experience such as anxiety, stress, depressions, or problems with emotions[50]. In the 2017 Arizona BRFSS, adults were asked to provide how many days during the past 30 days (zero to all 30 days) their mental health status (e.g., stress, depression, and problems with emotions) was not good. Frequent mental distress was defined as a report of ≥14 mentally unhealthy days during the past 30 days. When comparing across racial/ethnic groups AI/AN and Hispanic adults in Arizona reported the second highest prevalence of frequent mental health distress (12.6%) (Figure 32).

Figure 32. Percentage of Arizona Adults Who Reported Frequent Mental Health Distress by Race/Ethnicity, BRFSS, 2017[51]



[50] https://www.cdc.gov/nchs/products/databriefs/db203.htm
[51] Arizona Behavioral Risk Factor Surveillance System (BRFSS)

Recommendations and Conclusions

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

-Identify and build working relationships between ADHS staff and tribal, urban Indian partners, Indian Health Services (IHS). This working relationship will allow ADHS and tribal partners to work closely to decrease mortality and prevalence rates, identify cross collaboration of activities, and ensure communication among program areas within ADHS and tribal programs.

-Establish a tribal work group to address chronic disease and accompanying health risks, and to offer suggestions and recommendations to ADHS Native American Liaison and Program staff. The work group would convene tribal partners and ADHS to share successful programs/ activities, discuss public health challenges within the AI/AN community, and identify cross collaboration of programs/ activities.

-ADHS continue to prepare an AI/AN report on the leading causes of death and prevalence on the health risk factors for the ADHS Native American Liaison and tribal partners.