Maricopa County 2019 CCHNA: Community Health Status Report

October 2020

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Contents

Overview

The Office of Epidemiology at the Maricopa County Department of Public Health (MCDPH) reviewed multiple data sources to collect and analyze health behaviors at the National, State, and County levels to understand the health of our community and to provide supporting data for the Coordinated Community Health Needs Assessment (CCHNA) for Maricopa County. This report provides data to support the Community Health Status Assessment which is one of the four primary components of the Mobilizing for Action through Planning and Partnerships (MAPP) process and helps to identify health indicators, barriers and resources to consider within Maricopa County. Important health indicators reviewed include communicable diseases, births and causes of deaths. There is also data on behavioral factors such as smoking, exercising, and healthy eating.

To complete this process MCDPH created a workgroup by asking the Health Improvement Partnership of Maricopa County (HIPMC) and the Synapse group for volunteers that had knowledge of epidemiology methodologies, public health program planning, and social science. This data collection piece allowed MCDPH officials and stakeholders to assess public health problems as part of the CCHNA and for the Community Health Improvement Plan (CHIP). The CHIP is defined by the Public Health Accreditation Board as a long-term, systematic effort to address public health problems on the basis of the results of the community health assessment activities and the community health improvement process. The plan is generally updated every three to five years and is used by health, governmental, and human service agencies to collaborate with community partners to set priorities and target goals.

Background

The Epidemiology Expert Workgroup (EEWG) was comprised of 5 community stakeholders holding various positions such as coordinators, supervisors, and epidemiologists from different organizations/agencies who met between February and June of 2019. The EEWG group met through a series of seven meetings for the epidemiology data review. Prior to beginning the project, each member of the workgroup was debriefed and received a general understanding of the Coordinated Community Health Needs Assessment (CCHNA) process and how their feedback will be used.

Methodology

The EEWG reviewed over 200 indicators in 5 topic areas and scored each indicator based on importance to public health, whether the problem was actionable at the community level, if the indicator was linked to prevention or intervention, and if there were barriers affecting change. All indicators that received an average score of 90% or higher during that review received a "Yes" on the Indicator Matrix for Data Support from the EEWG. This was necessary because much of the data reviewed by EEWG was extensive and granular, much more so than could be collected from any of the other data sources.

Health topics under consideration were grouped into categories based on topic, an individual category might have zero indicators and up to six indicators. These indicators were calculated from secondary data according to recommended practices; those with zero indicators were health topics which have been shown to be contributors to or outcomes of health behaviors but there is no available data source for our community. The health topic could still be identified as a priority by the community through one of the other data gathering methods which is why they continued to be included for consideration. Information on each health topic was collected and consolidated across all the data gathering and analysis mechanisms into one overall view, referred to as the Indicator Matrix. Although new priorities were not identified, the prioritization matrix
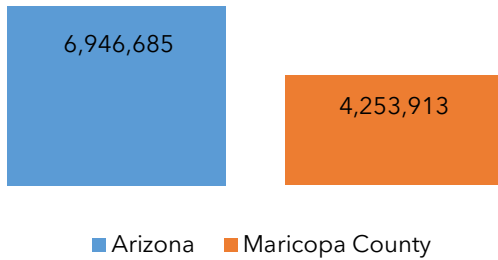
method was utilized to derive our current three priorities of access to care, access to healthy food, and early childhood development.

Four data gathering processes were considered: EEWG, community surveys, focus groups, and key informant interviews. These four processes were grouped into either Data Support (EEWG and community surveys) or Context Support (focus groups and key informant interviews) based on the representativeness of the data collected as well as its purpose. For example, the rate of deaths due to stroke as identified through death certificates was considered fully representative because all death certificates for Maricopa County were included in the data. However, if stroke came up as a significant theme in the focus groups, it was still important to include but likely did not reflect the concerns of the full community, as less than 500 people participated in the focus groups.

Standard qualitative analysis methods were used to examine the focus group and key informant interview feedback (reports can be found at HIPMC.org). Since the importance of a theme is already included within that analysis process, anything that was listed as a key theme on either of those analyses received a "Yes" under the corresponding heading under Context Support. The focus groups and key informant interviews were instrumental in understanding the context of the data being reviewed but were not likely as representative of the community as the data indicators themselves or the community surveys. For instance, there were over 11,000 community surveys completed and only a number of key informant interviews.

Demographics of Maricopa County, AZ

Total Population

Arizona	Maricopa County
6,946,685	4,253,913

■ Arizona ■ Maricopa County

Gender- Maricopa County

2,149,768 (Female)   2,104,145 (Male)

■ Male ■ Female
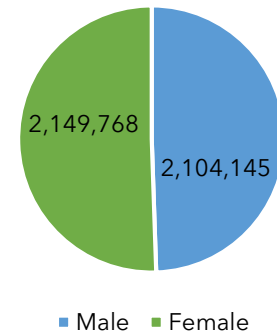
Race/Ethnicity- Maricopa County

331,508
1,311,091
20,058
224,419
122,387
289,587
3,434,157

■ White
■ Black or African American
■ American Indian and Alaska Native
■ Asian
■ Native Hawaiian and Other Pacific Islander
■ Hispanic or Latino
■ Other
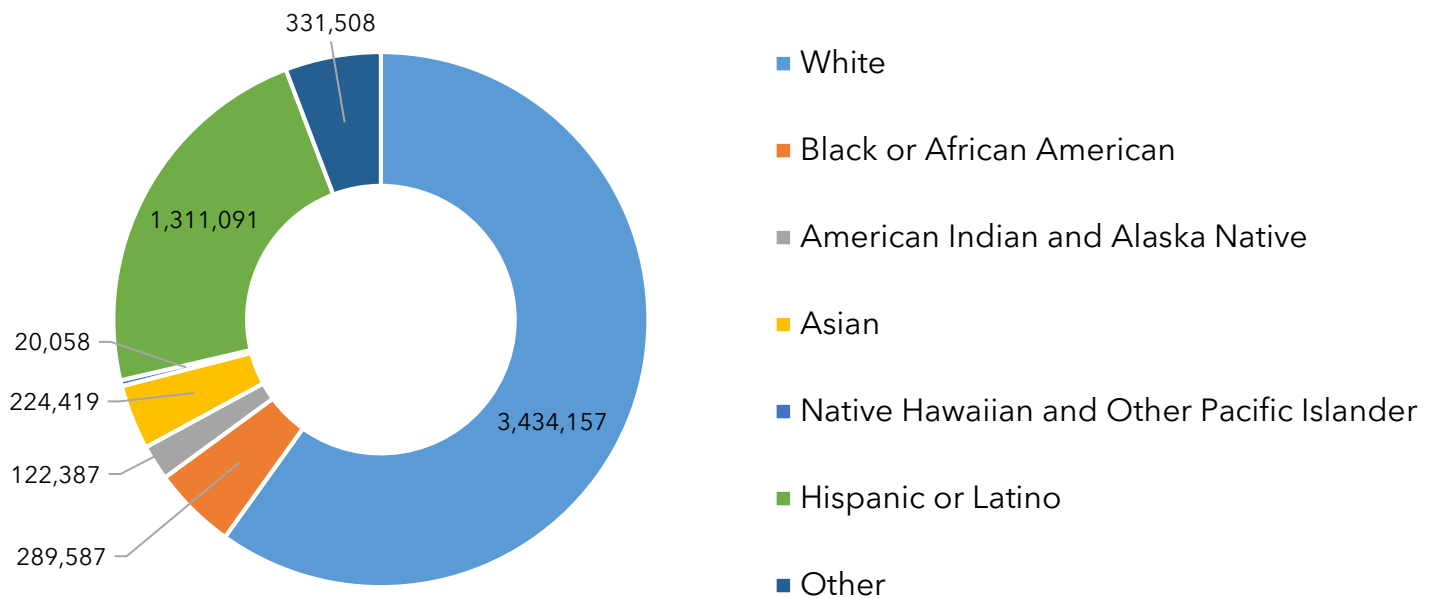
Estimated Housing Cost Burden as a Percentage of Income (2014-2018)

	United States	Arizona	Maricopa County
Owner Cost Burden	18.3%	17.8%	18.1%
Renter Cost Burden	30.1%	29.3%	29.2%

Source: PolicyMap, Census

Data Sources

The following data sources were used to create the list of different indicators and categories. This data was used to present to the Epidemiology Expert Workgroup:

American Community Survey (ACS) – Each year, the nationwide survey collects and produces information on demographic, social, economic, and housing characteristics about our nation's population. Over 3.5 million households across the country are contacted by the U.S. Census Bureau to participate in the ACS. Individuals can complete the questionnaire for their household either online or mailing a paper form. Data from the survey helps determine policymaking and the amount of funds distributed to states each year.

Behavioral Risk Factor Surveillance System (BRFSS) – One of the most powerful tools designed for targeting and building health promotion activities was established in 1984. BRFSS is the largest continuously conducted health survey system collecting data regarding health-related risk behaviors, chronic health conditions, and the use of preventative services. Each year, more than 400,000 adult interviews are conducted by telephone surveys. BRFSS data is collected in all 50 states, including the District of Columbia and three U.S territories.

Centers for Disease Control and Prevention Data – A CDC resource tool created to provide easier access to a wide range of chronic disease data, risk factor indicators, and policy measures.

Children's Bureau, An Office of the Administration for Children and Families: Child Maltreatment – The Children's Bureau partners with federal, state, tribal, and local agencies to improve the health and well-being of our nation's children and families. The Children's Bureau oversees matters related to child welfare, including abuse and neglect, child protective services, family preservation and support, and living situations including independent living, foster care, and adoption.

Feeding America – The concept of food banking, a response to alleviate the hunger crisis in America by providing food to people in need was developed in Phoenix, Arizona by John van Hengel. Today, Feeding America is the nation's largest domestic hunger-relief organization with a network of 200 food banks across the country. One of Feeding America's research in hunger annually analyzes the food insecurity in the United States by counties and congressional district.

National Vital Statistics Reports (Volume 68, Number 6) - Centers for Disease Control and Prevention (CDC), released an updated version of the National Vital Statistics Report. The report presents data on the top 10 leading causes of death in the United States by age, sex, race and Hispanic origin. Leading causes of infant, neonatal, and post-neonatal death are also presented. This report supplements "Deaths: Final Data for 2017," the National Center for Health Statistics' annual report of final mortality statistics.

The Trust for Public Land (TPL) – The TPL works to protect the places people care about and create access to close-to-home parks in cities where 80 percent of Americans live, ensuring healthy livable communities for generations to come. Annually, a City Park Facts Report is produced to provide data to the public including the number of parkland and park units per residents by the city, and the total spending on parks and recreation by city and adjusted for the price of living.

Youth Risk Behavior Surveillance System (YRBSS) - YRBSS monitors the leading causes of death, disability, and social problems often established during childhood and early adolescence. In addition, YRBSS monitors the prevalence of obesity and asthma, health-related behaviors, sexual identity, and sex of sexual contacts. The survey is conducted to middle school and high school students every two years, usually during the spring semester.

Mortality

Mortality rate is the rate of deaths or number of people who died within a population. Mortality data looks at the prevalence of diseases, how likely a disease is to be deadly, and if it impacts specific demographics. Mortality rates are represented by the number of deaths per 100,000 individuals per year unless otherwise noted.

The following table represents the top ten leading causes of all deaths in Maricopa County between 2014 and 2018. The data below shows heart disease altering back as the number one leading cause of death and cancer as the second leading cause of death. Chronic lower respiratory is the third leading cause, followed by Alzheimer's.

	Maricopa County - Leading Causes of Death				
Rank	**2014**	**2015**	**2016**	**2017**	**2018**
1	Cancer	Heart Disease	Cancer	Heart Disease	Heart Disease
2	Heart Disease	Cancer	Heart Disease	Cancer	Cancer
3	Chronic Lower Respiratory	Chronic Lower Respiratory	Chronic Lower Respiratory	Chronic Lower Respiratory	Chronic Lower Respiratory
4	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's	Alzheimer's
5	Stroke	Stroke	Unintentional Injury	Stroke	Unintentional Injury
6	Unintentional Injury	Unintentional Injury	Stroke	Unintentional Injury	Stroke
7	Diabetes	Diabetes	Diabetes	Diabetes	Diabetes
8	Suicide	Suicide	Suicide	Suicide	Suicide
9	Falls	Falls	Falls	Falls	Falls
10	Liver Disease	Liver Disease	Liver Disease	Liver Disease	Influenza/Pneumonia

The table below represents the top five leading causes of death for Maricopa County youth (ages 0-18) between 2014 and 2018. Data shows pregnancy and early life related issues to be the number one leading cause of death. This includes pregnancies with abortive outcomes; complications occurring during pregnancy, labor and delivery (examples; respiratory distress, disorders related to short gestation and low birth weight); and congenital abnormalities (examples: Spina Bifida and Down's syndrome). Unintentional injury is the second leading cause of death, followed by suicide, homicide, and cancer.

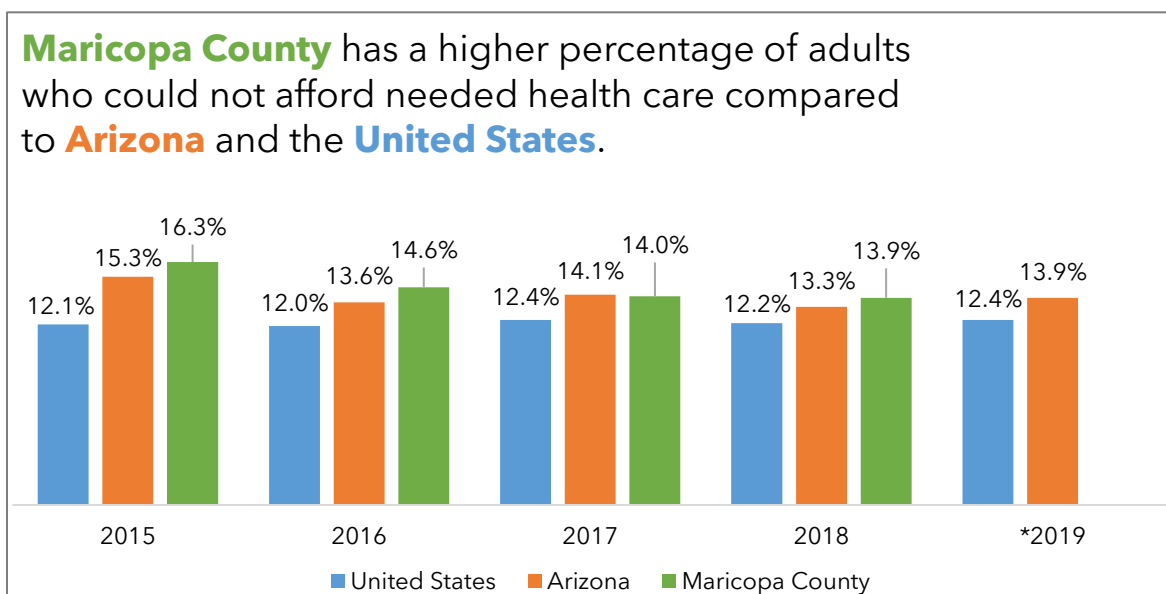|	Maricopa County - Youth Leading Causes of Death				
Rank	**2014**	**2015**	**2016**	**2017**	**2018**
1	Pregnancy and Early Life	Pregnancy and Early Life	Pregnancy and Early Life	Pregnancy and Early Life	Pregnancy and Early Life
2	Unintentional Injury	Unintentional Injury	Unintentional Injury	Unintentional Injury	Unintentional Injury
3	Cancer	Suicide	Cancer	Suicide	Suicide
4	Homicide	Homicide	Homicide	Homicide	Cancer
5	Suicide	Cancer	Suicide	Cancer	Homicide

Health Care: Access and Quality

Access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity for all Americans. Access to health care impacts one's overall physical, social, and mental health status and quality of life. Barriers to health services include high cost of care, inadequate or no insurance coverage, lack of availability of services and lack of culturally competent care. These barriers to accessing health services lead to unmet health needs, delays in receiving appropriate care, inability to get preventive services, financial burdens and preventable hospitalizations.[1]

Health insurance coverage helps individuals gain entry into the health care system. Lack of adequate coverage makes it difficult for people to get the health care they need and, when they do get care, burdens them with large medical bills. Uninsured people are:

- More likely to have poor health status
- Less likely to receive medical care
- More likely to be diagnosed later
- More likely to die prematurely

Improving access to health care services depends in part on ensuring that people have a usual and ongoing source of care. People with a usual source of care have better health outcomes, fewer disparities and lower health costs. Having a primary care provider (PCP) who serves as the usual source of care is especially important. PCPs can develop meaningful and sustained relationships with patients and provide integrated services while practicing in the context of family and community. Improving health care services include increasing access to and use of evidence-based preventive services that prevent illness by promoting healthy behaviors, providing protection to those at risk, and identifying and treating people with no symptoms, but who have risk factors before the clinical illness develops.[1]

Healthcare Affordability

Maricopa County has a higher percentage of adults who could not afford needed health care compared to **Arizona** and the **United States**.

	2015	2016	2017	2018	*2019
United States	12.1%	12.0%	12.4%	12.2%	12.4%
Arizona	15.3%	13.6%	14.1%	13.3%	13.9%
Maricopa County	16.3%	14.6%	14.0%	13.9%	

Usual Source of Health Care

Maricopa County has a higher percentage of those who have a usual source of health care compared to **Arizona** and the **United States**.

County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

Healthcare Coverage

Health care coverage is highest in the **United States** overall compared to **Arizona** and **Maricopa County**.
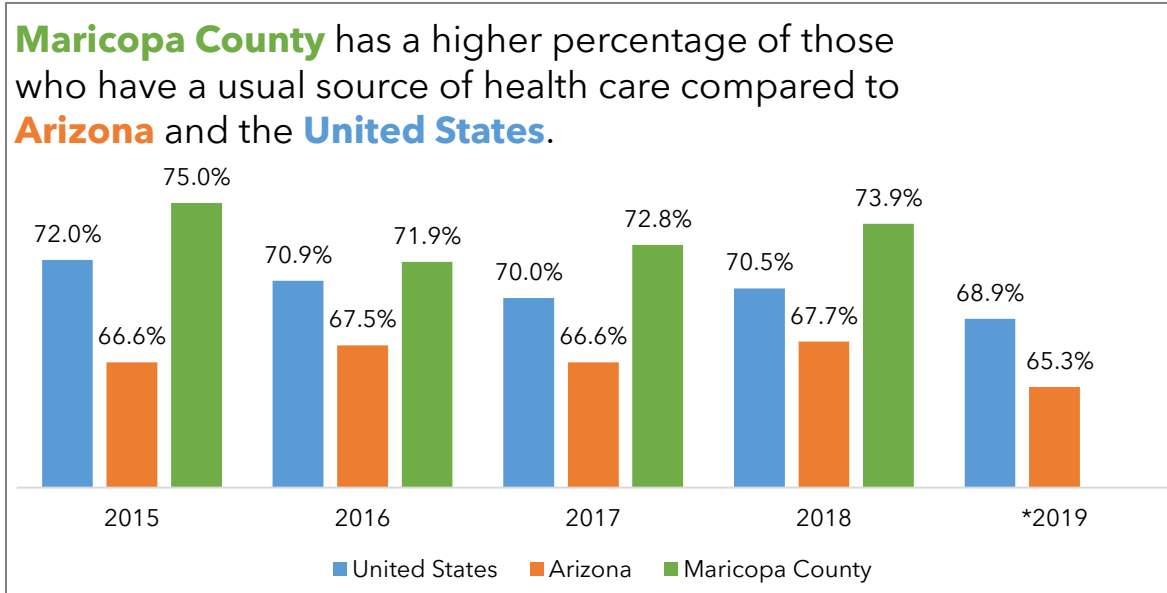
County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101
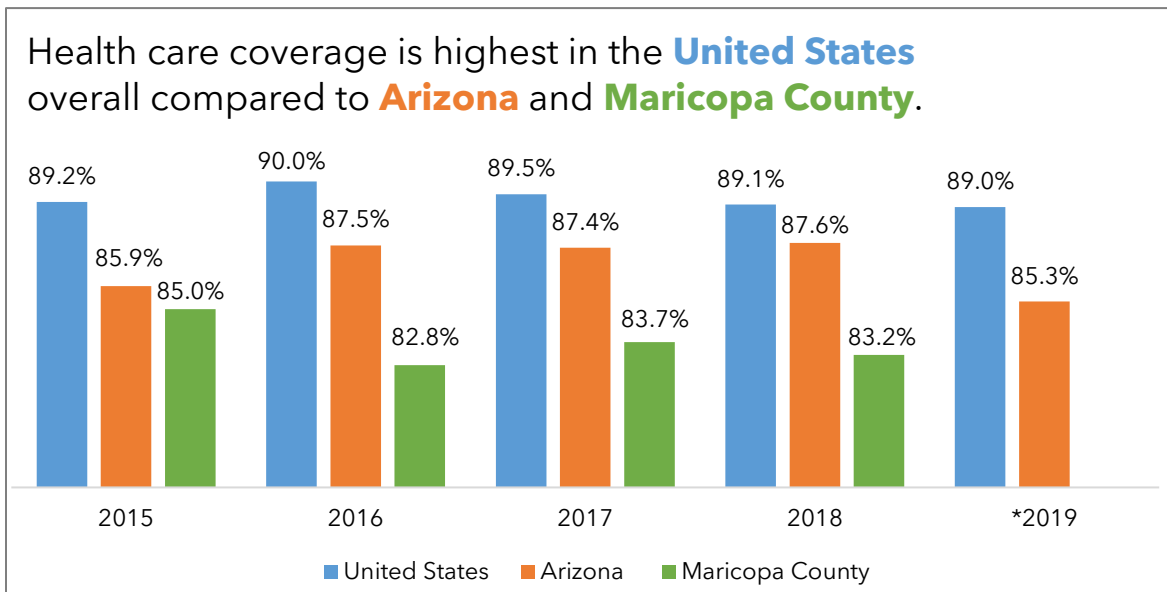
Type of Healthcare Coverage

The percentage of employer-based health insurance coverage has been increasing. **Maricopa County** has a higher percentage of coverage than **Arizona**.
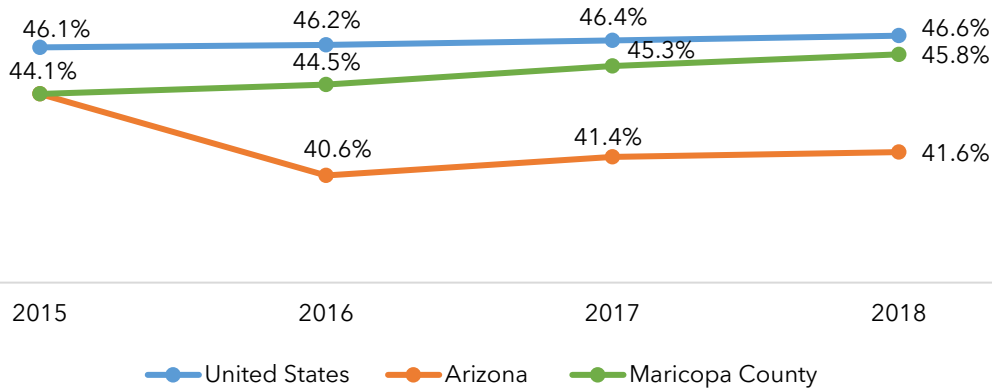
Source:
https://data.census.gov/cedsci/table?q=maricopa%20county%20insurance&g=0100000US_0400000US04&tid=ACSST5Y2015.S2703&hidePreview=false

While the percentage of direct-purchase health insurance coverage is increasing in the **United States**, the coverage has remained steady in **Arizona** and **Maricopa County**.
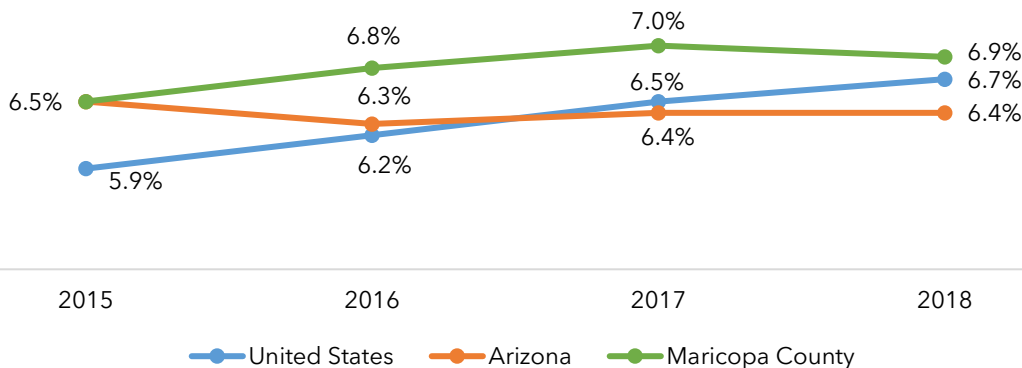
Source:
https://data.census.gov/cedsci/table?q=maricopa%20county%20insurance&g=0100000US_0400000US04&tid=ACSST5Y2015.S2703&hidePreview=false

TRICARE/Military Health Insurance Coverage

The percentage of TRICARE/Military health insurance coverage in the United States, Arizona, and Maricopa County have remained steady across the board between 2015 and 2018.

	United States	Arizona	Maricopa County
2015	1.0%	0.8%	0.8%
2016	1.0%	1.1%	0.8%
2017	1.0%	1.1%	0.7%
2018	1.0%	1.1%	0.7%

Source:
https://data.census.gov/cedsci/table?q=maricopa%20county%20insurance&g=0100000US_0400000US04&tid=ACSST5Y2015.S2703&hidePreview=false

VA Care Health Insurance Coverage

The percentage of VA Care health insurance coverage in the United States (0.3%), Arizona (0.4%), and Maricopa County has declined slightly (0.3%) in recent years.
Source:
https://data.census.gov/cedsci/table?q=maricopa%20county%20insurance&g=0100000US_0400000US04&tid=ACSST5Y2015.S2704&hidePreview=false

The percentage of medicare health insurance coverage for **Maricopa County** falls in between **Arizona** and the **United States**.

Source:
https://data.census.gov/cedsci/table?q=maricopa%20county%20insurance&g=0100000US_0400000US04&tid=ACSST5Y2015.S2704&hidePreview=false

The percentage of Medicaid health insurance coverage has been steadily increasing across the **United States**, **Arizona**, and **Maricopa County**.

15.8%   16.2%   16.5%   17.0%

14.4%   15.0%   15.3%   15.6%

13.7%   14.2%   14.5%   14.9%

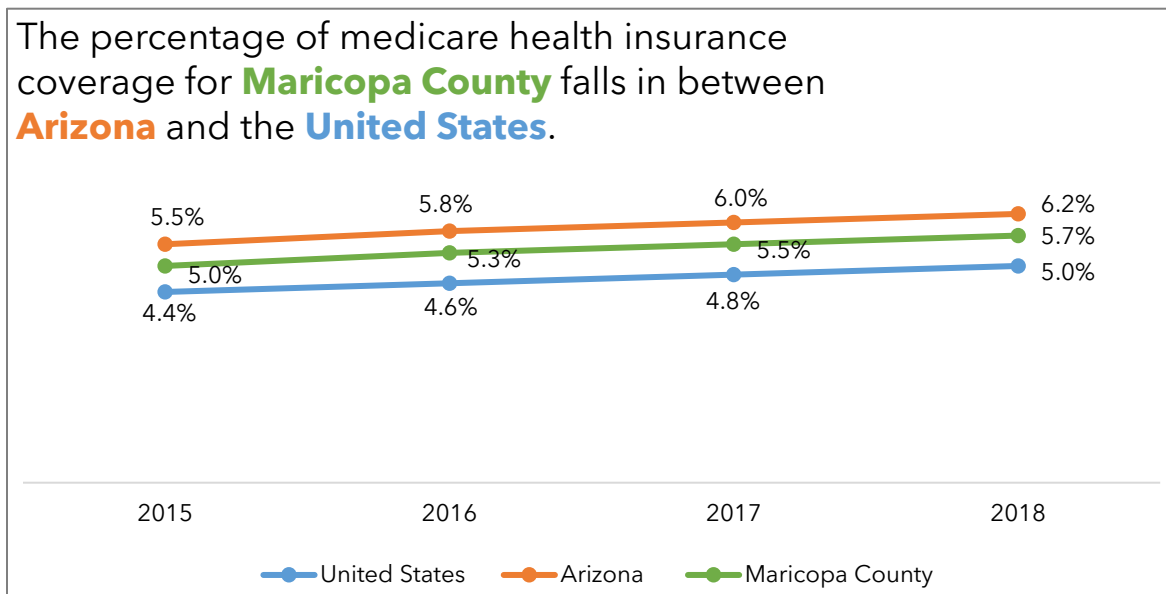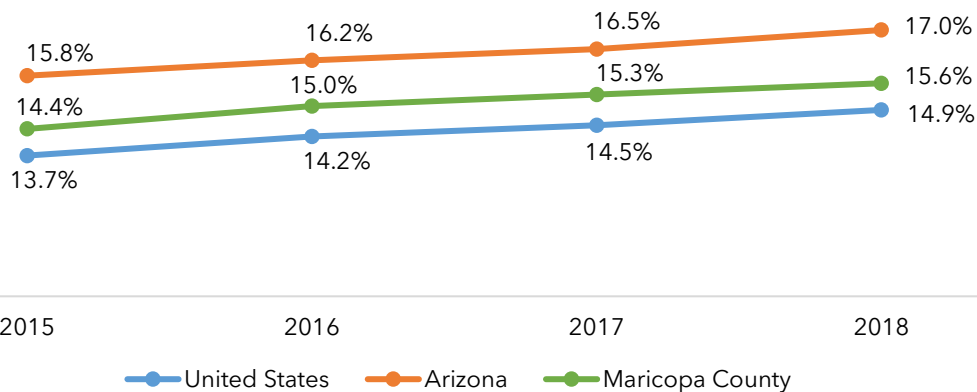| 2015 | 2016 | 2017 | 2018 |

●— United States   ●— Arizona   ●— Maricopa County

Source:
https://data.census.gov/cedsci/table?q=maricopa%20county%20insurance&g=0100000US_0400000US04&tid=ACSST5Y2015.S2704&hidePreview=false

Depression

Depression is a common illness worldwide, with more than 264 million people affected. Depression is different from usual mood fluctuations and short-lived emotional responses to challenges in everyday life. Although there are known, effective treatments for mental disorders, between 76% and 85% of people in low- and middle-income countries receive no treatment for their disorder. Barriers to effective care include a lack of resources, lack of trained health-care providers, social stigma associated with mental disorders, and inaccurate assessments. In countries of all income levels, people who are depressed are often not correctly diagnosed and others who do not have the disorder are too often misdiagnosed and prescribed antidepressants.[2]

The **United States** has a higher percentage of individuals ever told they have a form of depression compared to **Arizona** and **Maricopa County**.

19.0%   18.5%   17.0%   17.4%   16.7%   16.2%   20.5%   18.8%   18.7%   19.6%   16.7%   16.3%   19.9%   16.8%

| 2015 | 2016 | 2017 | 2018 | *2019 |
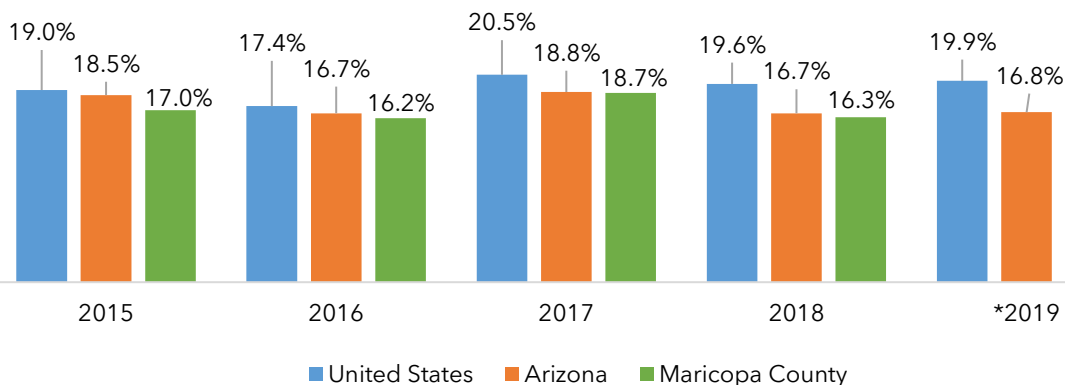
■ United States   ■ Arizona   ■ Maricopa County

Mortality

Heart Disease

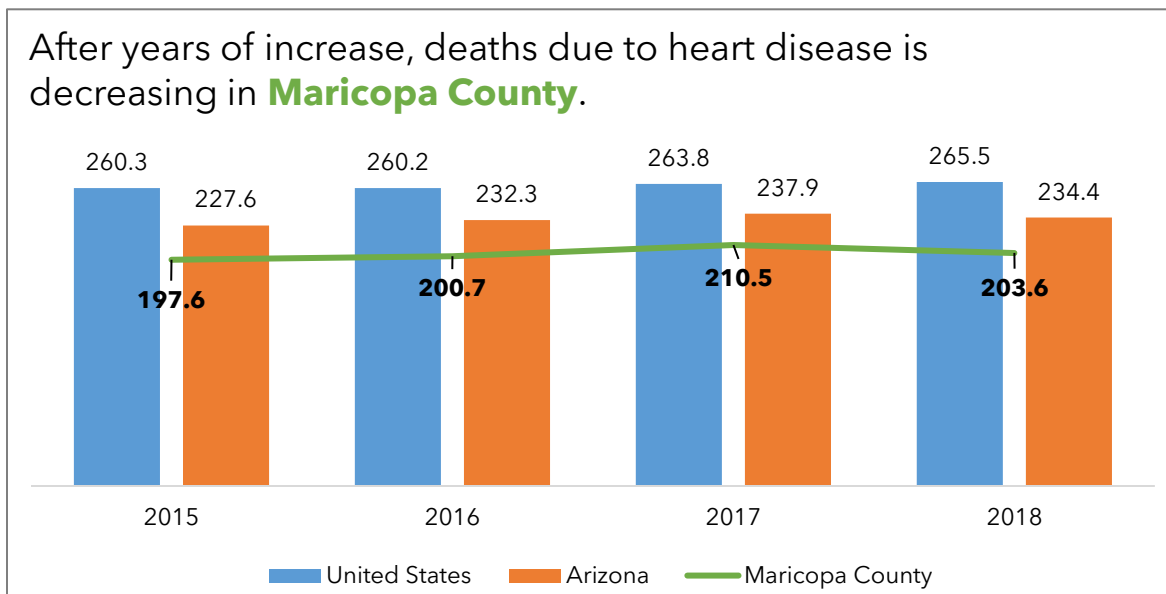Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States and in Maricopa County. About 655,000 Americans die from heart disease each year – that's 1 in every 4 deaths. High blood pressure, high blood cholesterol and smoking are key risk factors for heart disease. About half of Americans (47%) have at least one of these three risk factors.[3] The graph below demonstrates a comparison of deaths due to heart disease at the national, state, and local level from 2015 to 2018.

After years of increase, deaths due to heart disease is decreasing in **Maricopa County**.

	2015	2016	2017	2018
United States	260.3	260.2	263.8	265.5
Arizona	227.6	232.3	237.9	234.4
Maricopa County	197.6	200.7	210.5	203.6

Source: https://wonder.cdc.gov/ucd-icd10.html

Cancer

Cancer is the second leading cause of death in the United States and in Maricopa County, Arizona. In 2018, there were 599,274 cancer deaths; 283,721 were among females and 315,553 among males. Lung cancer is the leading cause of cancer death, accounting for 24% of all cancer deaths. Trends in cancer mortality rates reflect population changes in cancer risk factors, utilization of screening tests, diagnostic practices, and treatment advances.[4] The graphs below (2015-2018) show a comparison of deaths due to all cancers combined and incidence rates (rate of new cases per 100,000 population) at risk for breast, prostate, lung & bronchus, colorectal and melanoma cancer at the national, state and local level.

Death rates (age-adjusted per 100,000) due to all cancers combined is lowest in **Maricopa County** compared to **Arizona** and the **United States**.

	2015	2016	2017	2018
United States	162.9	160.0	156.6	153.1
Arizona	145.1	141.0	139.9	136.4
Maricopa County	143.6	140.3	138.9	133.1

■ United States ■ Arizona ■ Maricopa County

Source: https://wonder.cdc.gov/ucd-icd10.html
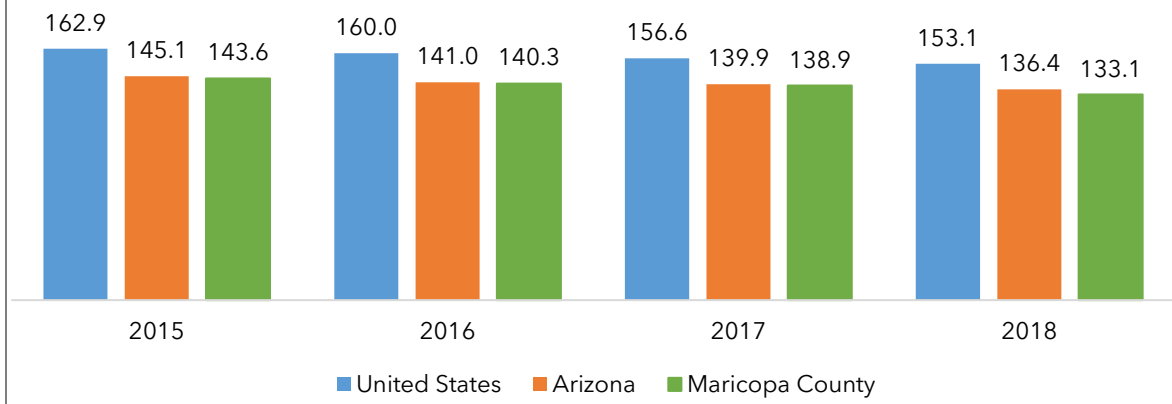
Overall Cancer Incidence Rates (Age-adjusted per 100,000)

The overall cancer incidence rate is greatest in the United States followed by Maricopa County.

	United States	Arizona	Maricopa County
2015	452.6	405.5	416.4
2016	447.8	399.1	404.0
2017	437.8	392.0	402.0

Source: https://wonder.cdc.gov/cancer-v2017.html,
http://healthdata.az.gov/query/module/AzCR/AzCRaCntyICDO2/ageRate.html

Deaths rates due to breast cancer in **Maricopa County** is greater than **Arizona** but overall decreasing all across the board.

	2015	2016	2017	2018
United States	11.2	11.1	11.0	10.9
Maricopa County	10.3	10.5	10.3	9.7
Arizona	10.2	10.2	9.7	9.2

——— United States ——— Arizona ——— Maricopa County

Source: https://wonder.cdc.gov/ucd-icd10.html
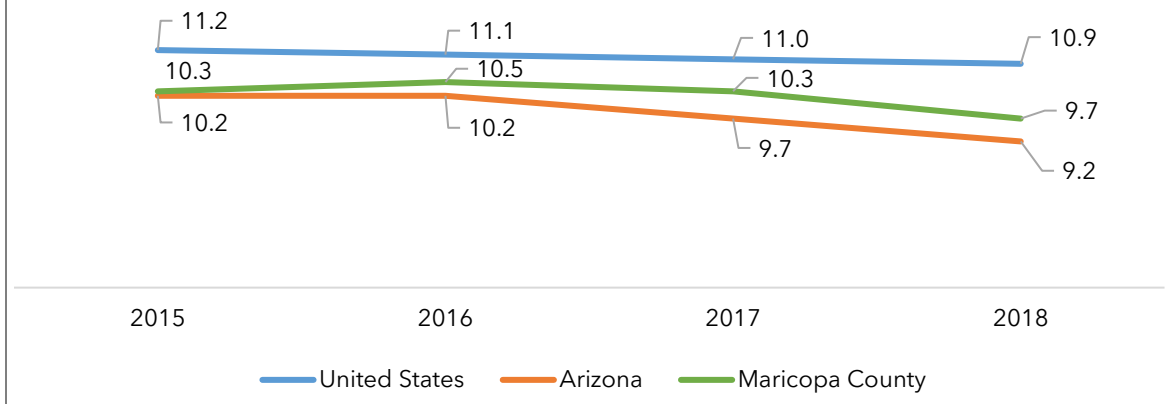
Breast Cancer Incidence Rates (Age-adjusted per 100,000)

The breast cancer incidence rate is greatest in Maricopa County compared to Arizona and the United States.

	United States	Arizona	Maricopa County
2015	72.2	72.6	78.5
2016	73.5	73.7	78.7
2017	69.3	71.5	77.8

Source: https://wonder.cdc.gov/cancer-v2017.html,
http://healthdata.az.gov/query/module/AzCR/AzCRaCntyICDO2/ageRate.html

Death rates due to prostate cancer has remained steady in the **United States** but increased in **Arizona** and **Maricopa County**.

Source: https://wonder.cdc.gov/ucd-icd10.html
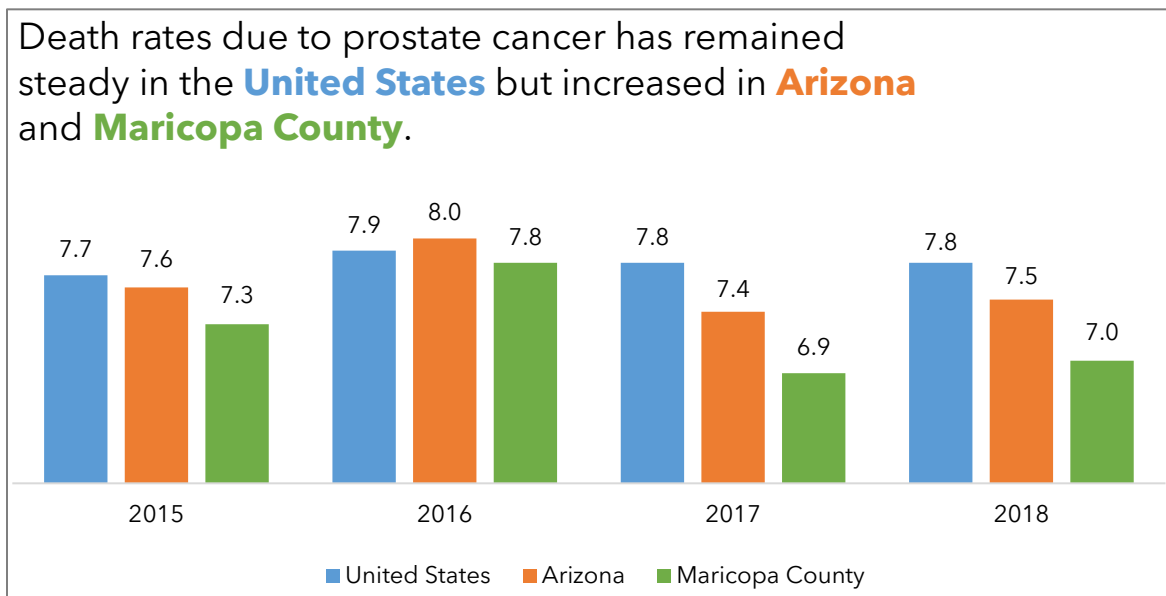
Prostate Cancer Incidence Rates (Age-adjusted per 100,000)

The prostate cancer incidence rate in Maricopa County exceeds Arizona's rates.

	United States	Arizona	Maricopa County
2015	104.1	83.4	90.9
2016	104.9	75.8	77.1
2017	106.5	80.9	84.5

Source: https://wonder.cdc.gov/cancer-v2017.html,
http://healthdata.az.gov/query/module/AzCR/AzCRaCntyICDO2/ageRate.html

Death rates due to lung and bronchus cancer is lowest in **Maricopa County** and decreasing across the board overall.

	2015	2016	2017	2018
United States	40.5	38.3	36.6	34.8
Arizona	34.5	30.4	30.5	27.9
Maricopa County	33.3	29.9	29.8	27.0

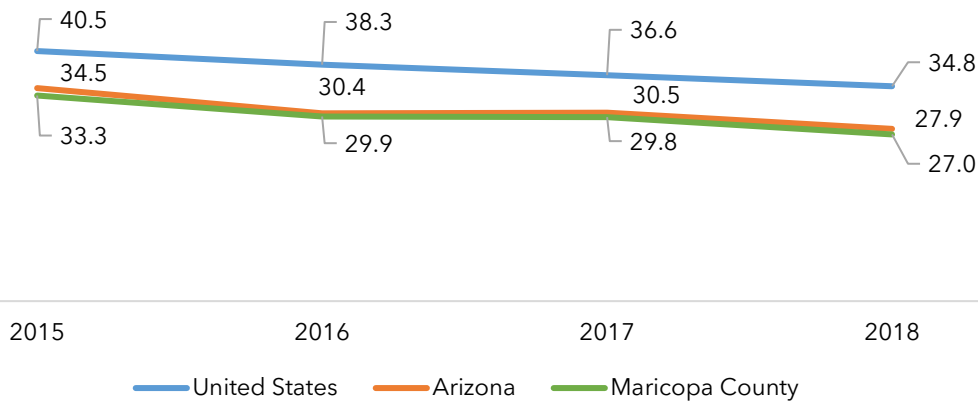*Source: https://wonder.cdc.gov/ucd-icd10.html*

Lung and Bronchus Cancer Incidence Rates (Age-adjusted per 100,000)

The lung and bronchus cancer incidence rate have decreased in the United States and Arizona while the rates have remained steady in Maricopa County.

	United States	Arizona	Maricopa County
2015	58.9	48.0	46.8
2016	57.3	44.8	44.5
2017	55.2	43.6	44.5

Source: https://wonder.cdc.gov/cancer-v2017.html,
http://healthdata.az.gov/query/module/AzCR/AzCRaCntyICDO2/ageRate.html

Death rates due to colorectal cancer in **Maricopa County** have started to decrease after years of exceeding **Arizona's** rates.

	2015	2016	2017	2018
United States	11.3	10.9	10.6	10.4
Arizona	9.9	10.0	10.7	10.2
Maricopa County	10.0	10.3	11.0	10.0

Source: https://wonder.cdc.gov/ucd-icd10.html
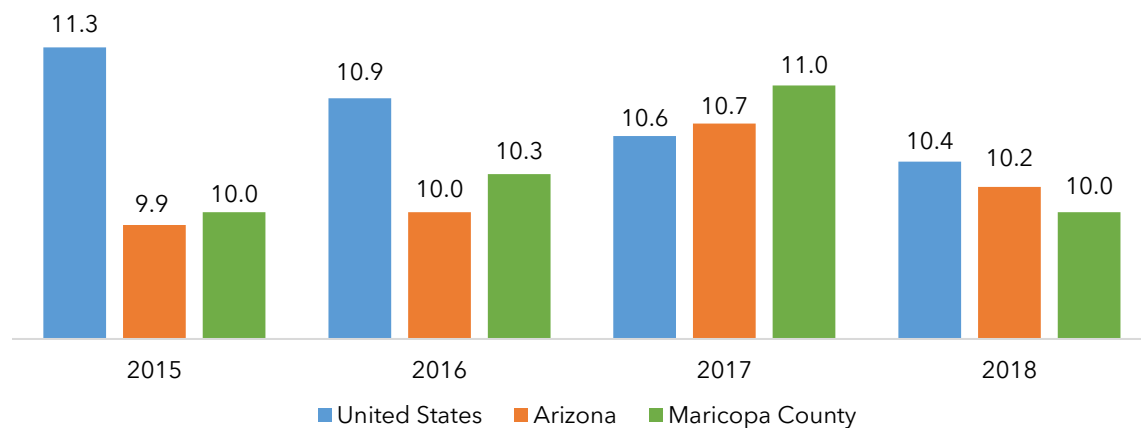
Colorectal Cancer Incidence Rates (Age-adjusted per 100,000)
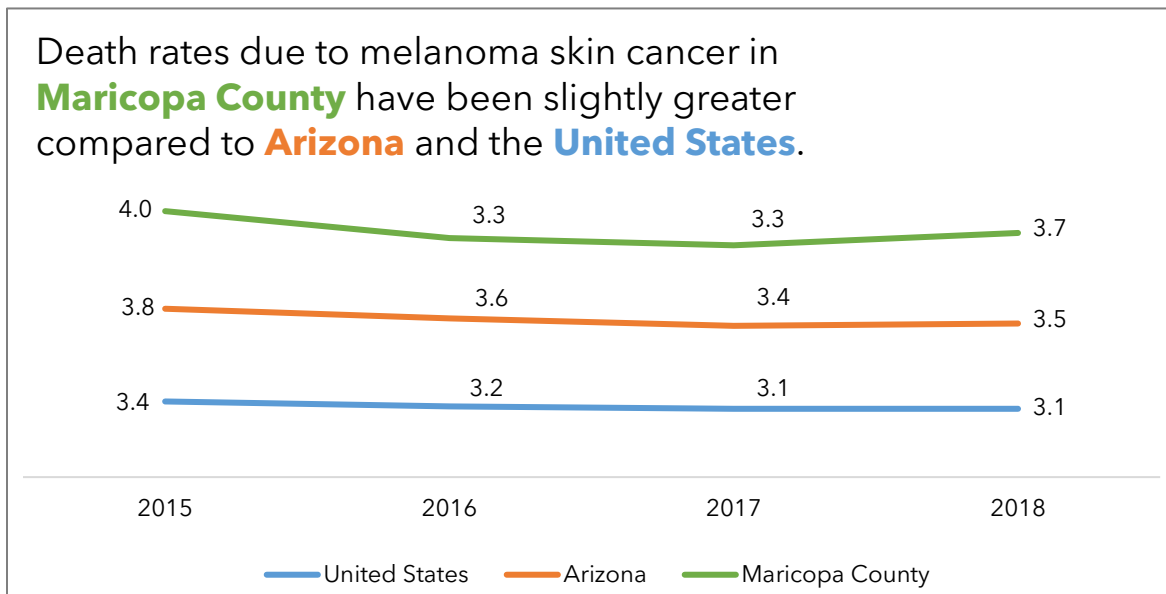
The colorectal cancer incidence rate has declined in the United States, while increased in Arizona and Maricopa County.

	United States	Arizona	Maricopa County
2015	38.7	33.1	34.0
2016	38.1	31.3	30.8
2017	36.8	31.6	31.0

Source: https://wonder.cdc.gov/cancer-v2017.html,
http://healthdata.az.gov/query/module/AzCR/AzCRaCntyICDO2/ageRate.html

Death rates due to melanoma skin cancer in **Maricopa County** have been slightly greater compared to **Arizona** and the **United States**.

Source: https://wonder.cdc.gov/ucd-icd10.html

Melanoma Skin Cancer Incidence Rates (Age-adjusted per 100,000)

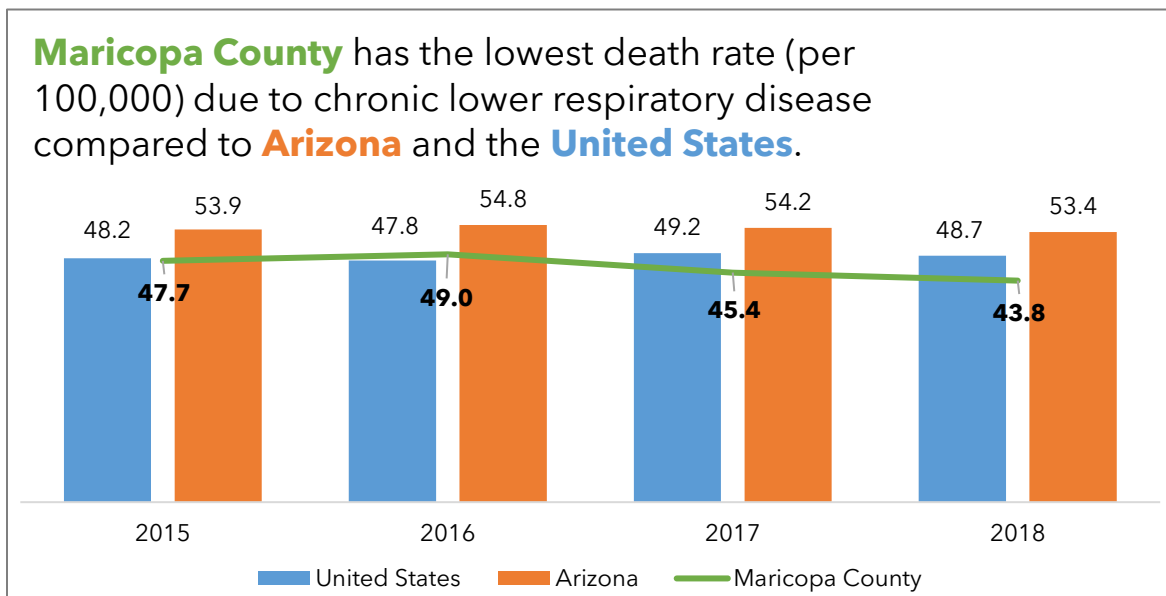The melanoma skin cancer incidence rate in Maricopa County is greatest when compared to Arizona and the United States.

	United States	Arizona	Maricopa County
2015	22.8	23.9	24.9
2016	22.7	26.7	28.2
2017	22.7	29.9	31.8

Source: https://wonder.cdc.gov/cancer-v2017.html,
http://healthdata.az.gov/query/module/AzCR/AzCRaCntyICDO2/ageRate.html

Chronic Lower Respiratory Disease

Chronic lower respiratory disease, primarily COPD, refers to a group of diseases that cause airflow blockage and breathing-related problems.[5] Tobacco smoke is a key factor in the development and progression of COPD.[5] Exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a key role.[5] COPD is the fourth leading cause of death in the United States and the third leading cause of death in Maricopa County. In 2018, there were 159,486 deaths, equivalent to a rate of 48.7 deaths per 100,000 population.[6]

Maricopa County has the lowest death rate (per 100,000) due to chronic lower respiratory disease compared to **Arizona** and the **United States**.

Source: https://wonder.cdc.gov/ucd-icd10.html

Accidents (Unintentional Injuries)

Unintentional injuries from things like falls, drug overdoses, and motor vehicle crashes are a major cause of death in the United States.[7] In 2018, unintentional injuries was the third leading cause of death in the United States and the sixth leading cause of death in Maricopa County.[8] There were 167,127 deaths accounted for in 2018, equivalent to 51.1 deaths per 100,000 population.[8] According to the National Vital Statistics System (2018) there were 37,455 deaths (11.4 deaths per 100,000 population) due to unintentional falls, 37,991 deaths (11.6 deaths per 100,000 population) due to motor vehicle traffic deaths and 62,399 deaths (19.1 deaths per 100,000 population) due to unintentional poisoning.[8]

The graphs below demonstrate a comparison of mortality rates of overall unintentional injury and falls in the United States, Arizona, and Maricopa County between 2015 and 2018.

Arizona has the highest death rate (per 100,000) due to unintentional injuries compared to Maricopa County and the United States.

Source: https://wonder.cdc.gov/ucd-icd10.html
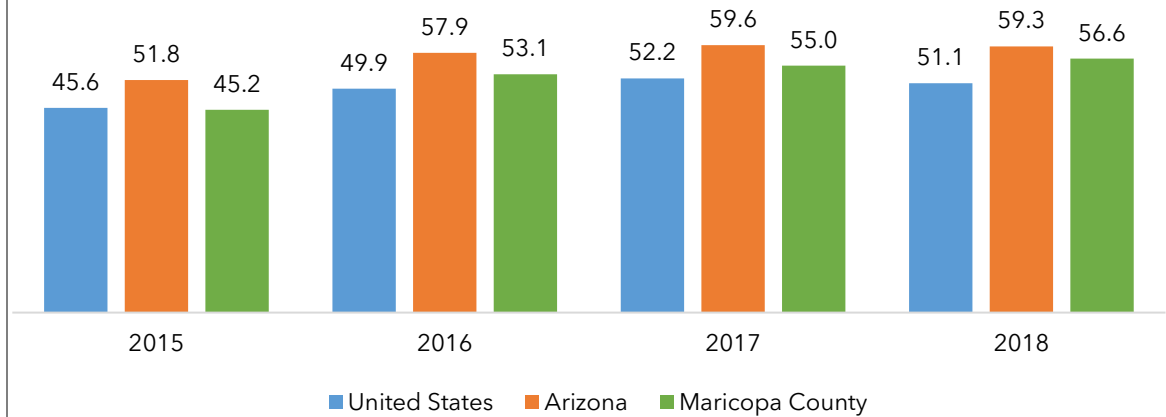
The death rate due to **falls** is greatest in Arizona followed by Maricopa County compared to the United States overall.

	United States	Arizona	Maricopa County
2015	10.4	15.3	13.8
2016	10.7	16.1	15.1
2017	11.2	15.6	14.1
2018	11.4	15.3	14.9

Source: https://wonder.cdc.gov/ucd-icd10.html

Stroke

Stroke is a disease that affects the arteries leading to and within the brain and stands as the fifth leading cause of death and disability in the United States.[9] A stroke occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or ruptures.[9] When that happens, part of the brain cannot get the blood and oxygen it needs, so it and the brain cells die.[9] About 795,000 people in the United States have a stroke each year.[10] In 2018, 1 in every 6 deaths from cardiovascular disease was due to stroke and every 4 minutes, someone died of stroke.[10] High blood pressure, high cholesterol, smoking, obesity, and diabetes are leading causes of stroke. One in three U.S. adults has at least one of these conditions or behavioral habits.[10]

The death rate (per 100,000) due to stroke is increasing consistently across the board in the **United States**, **Arizona** and **Maricopa County**.
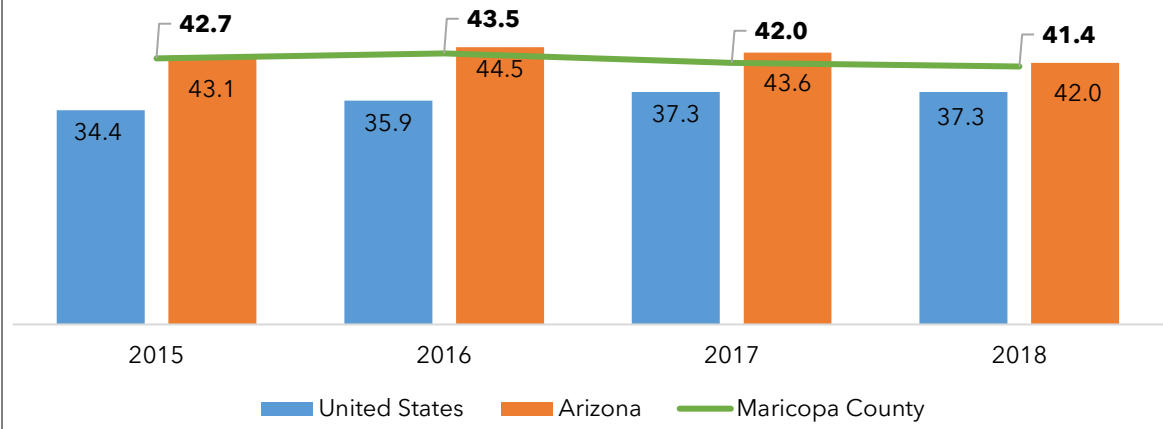
	2015	2016	2017	2018
United States	43.7	44.0	44.9	45.2
Arizona	36.9	36.9	38.2	39.5
Maricopa County	32.2	31.6	33.7	34.6

——United States ——Arizona ——Maricopa County

Source: https://wonder.cdc.gov/ucd-icd10.html
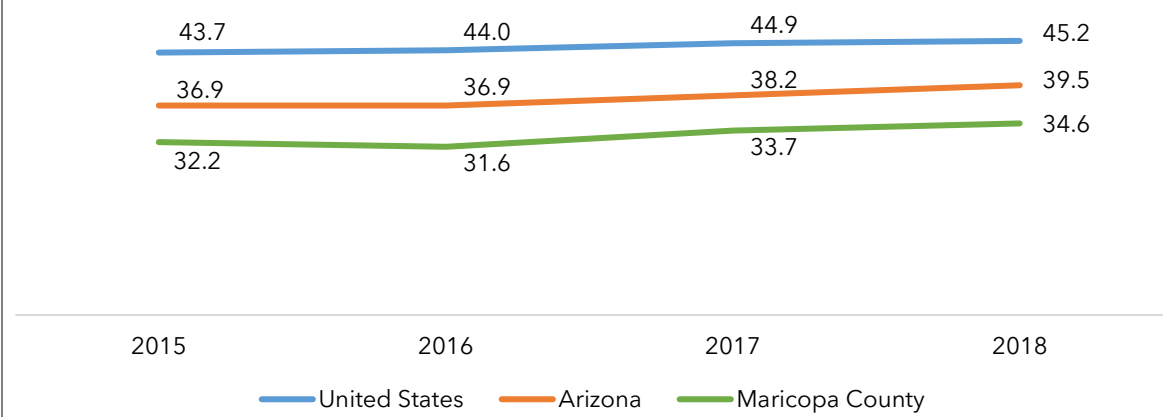
Alzheimer's Disease/Dementia

Alzheimer's disease is an irreversible, progressive brain disorder that slowly destroys memory and cognitive skills and eventually the ability to accomplish the simplest tasks.[11] Alzheimer's disease is currently ranked as the sixth leading cause of death in the United States and the fourth leading cause of death in Maricopa County.[11] This disease is the most common cause of dementia among older adults.[11] Dementia is the loss of cognitive functioning- thinking, remembering, and reasoning- and behavioral abilities to such an extent that it interferes with a person's daily life and activities.[11] According to data from the Centers for Disease Control and Prevention (CDC), 122,019 people died from Alzheimer's disease in 2018.[12] The number of deaths from dementia of any type is much greater than the number of reported Alzheimer's deaths.[12] In 2018, some form of dementia was the officially recorded underlying cause of death for 266,957 individuals.[12]

Maricopa County and **Arizona** have a higher death rate (per 100,000) due to Alzheimer's disease compared to the **United States**.

	2015	2016	2017	2018
United States	34.4	35.9	37.3	37.3
Arizona	43.1	44.5	43.6	42.0
Maricopa County	42.7	43.5	42.0	41.4

——United States ——Arizona ——Maricopa County

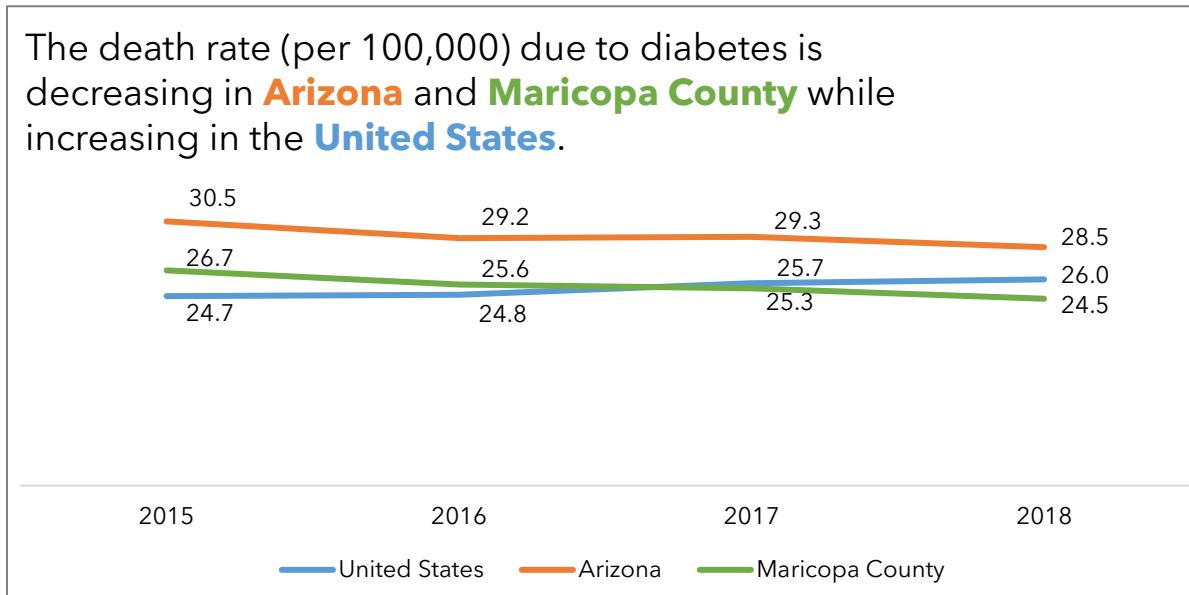*Source: https://wonder.cdc.gov/ucd-icd10.html*

The death rate due to **dementia** is increasing in Maricopa County and decreasing in both Arizona and the United States.

	United States	Arizona	Maricopa County
2015	37.7	18.9	15.0
2016	35.8	18.8	15.7
2017	36.3	18.8	16.8
2018	35.8	18.2	17.1

Source: https://wonder.cdc.gov/ucd-icd10.html

Diabetes

Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces.[13] Over time, diabetes can damage the heart, blood vessels, eyes, kidneys, and nerves.[13] Diabetes is the seventh leading cause of death in the United States and in Maricopa County. In 2018, diabetes accounted for 84,946 deaths (26.0 deaths per 100,000 population).[14]

The death rate (per 100,000) due to diabetes is decreasing in **Arizona** and **Maricopa County** while increasing in the **United States**.

	United States	Arizona	Maricopa County
2015	24.7	30.5	26.7
2016	24.8	29.2	25.6
2017	25.7	29.3	25.3
2018	26.0	28.5	24.5

Source: https://wonder.cdc.gov/ucd-icd10.html

	United States	Arizona	Maricopa County
2015	24.7	30.5	26.7
2016	24.8	29.2	25.6
2017	25.7	29.3	25.3
2018	26.0	28.5	24.5

Intentional self-harm

In 2018, intentional self-harm, also known as suicide, was the tenth leading cause of death overall in the United States, claiming the lives of over 48,000 people.[15] Suicide was the second leading cause of death among individuals between the ages of 10 and 34, and the fourth leading cause of death among individuals between the ages of 35 and 54.[15] In the United States, there were more than two and a half times as many suicides (48,344) as there were homicides (18,830).[15] In Maricopa County, suicide was ranked the eighth leading cause of death.[15] The graphs below demonstrate a comparison of suicide deaths within the United States, Arizona and Maricopa County between 2015 and 2018.

The death rate due to suicide is the greatest in **Arizona** followed closely by **Maricopa County**.
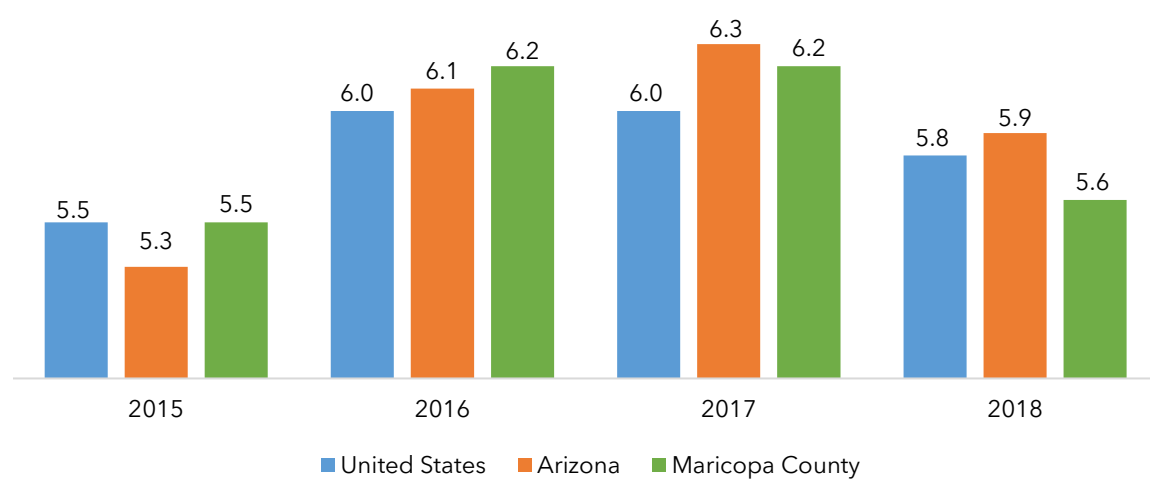

Source: https://wonder.cdc.gov/ucd-icd10.html
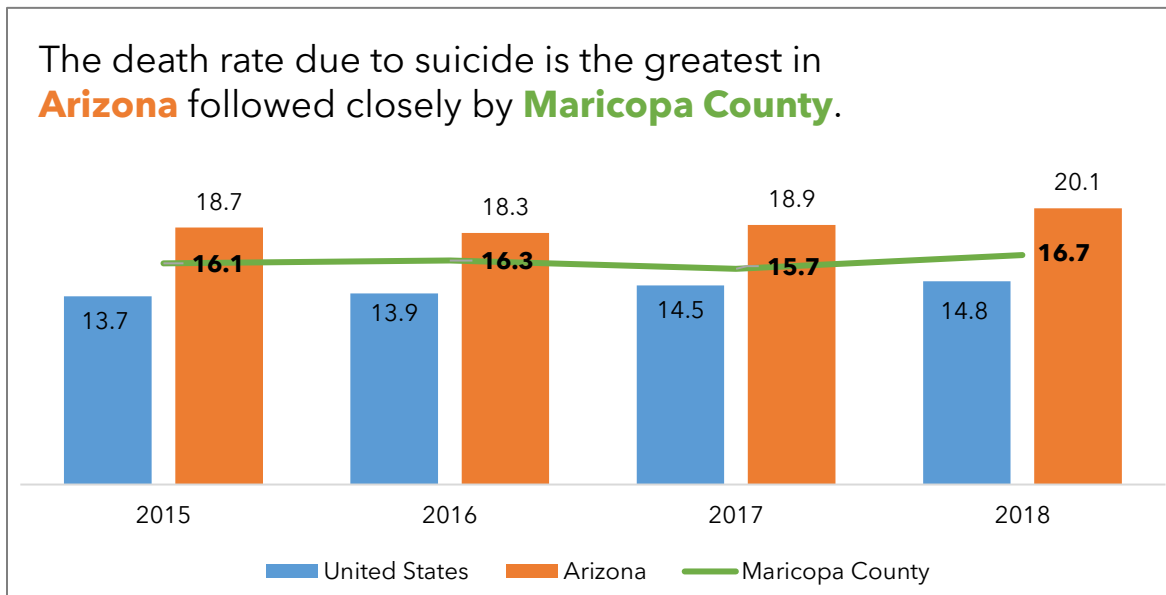
Homicide

In 2018, the numbers of deaths accounted for all homicides was 18,830 and firearm homicides accounted for 13,958 deaths.[16]

The death rate (per 100,000) due to homicide in **Maricopa County** has increased since 2015.
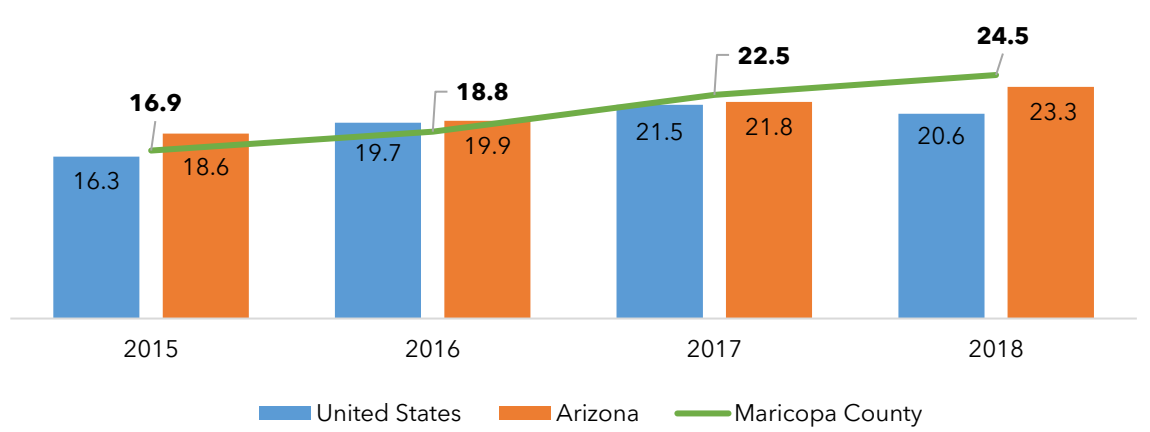

6.3
6.2   6.2
6.0   6.1   6.0
5.5   5.5   5.9
      5.3   5.8   5.6

2015   2016   2017   2018

■ United States ■ Arizona ■ Maricopa County

Source: https://wonder.cdc.gov/ucd-icd10.html

Drug poisoning & Opiate Overdose

In 2018, 67,367 drug overdose deaths occurred in the United States. The age-adjusted rate of overdose deaths decreased by 4.6% from 2017 (21.7 per 100,000) to 2018 (20.7 per 100,000).[17] Opioids- mainly synthetic opioids are currently the main driver of drug overdose deaths.[17] Opioids were involved in 46,802 overdose deaths in 2018 (69.5% of all drug overdose deaths).[17] Two out of three (67%) opioid-involved overdose deaths involve synthetic opioids.[17]

The death rate (per 100,000) due to overall drug poisoning in **Maricopa County** is exceeds the rates of both **Arizona** and the **United States**.


16.9   18.8   22.5   24.5

16.3   18.6   19.7   19.9   21.5   21.8   20.6   23.3

2015   2016   2017   2018

■ United States ■ Arizona ── Maricopa County

Source: https://wonder.cdc.gov/ucd-icd10.html

Morbidity

Obesity

According to the World Health Organization, overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. The fundamental cause of overweight and obesity is an energy imbalance between calories consumed and calories expended. Some common health consequences of overweight and obesity are cardiovascular disease (mainly heart disease and stroke), diabetes, musculoskeletal disorders, and some cancers (endometrial, breast, ovarian, prostate, liver, gallbladder, kidney, and colon). Overweight and obesity as well as their related noncommunicable diseases are largely preventable. Supportive environments and communities are fundamental in shaping people's choices, by making the choice of healthier foods and regular physical activity the easiest choice (the choice that is most accessible, available, and affordable) and therefore preventing overweight and obesity.[18]

The graphs below are comparisons of adult obesity rates (from 2015 through 2019) across the United States, Arizona, and Maricopa County.
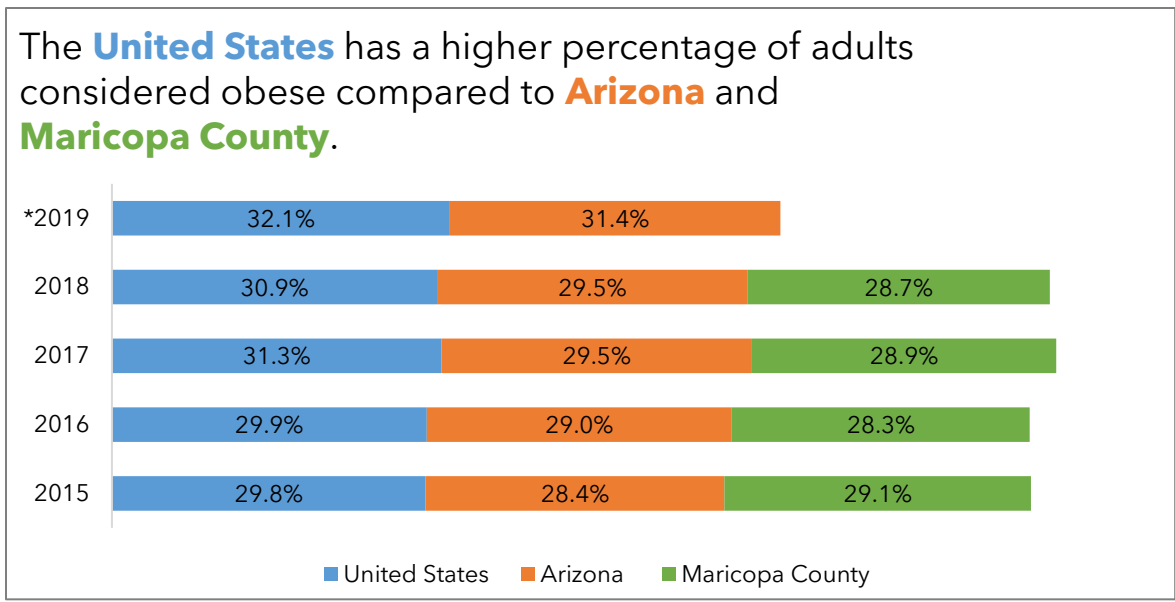
The **United States** has a higher percentage of adults considered obese compared to **Arizona** and **Maricopa County**.

Year	United States	Arizona	Maricopa County
*2019	32.1%	31.4%	
2018	30.9%	29.5%	28.7%
2017	31.3%	29.5%	28.9%
2016	29.9%	29.0%	28.3%
2015	29.8%	28.4%	29.1%

■ United States ■ Arizona ■ Maricopa County

County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

Maricopa County has a higher percentage of adults considered overweight compared to **Arizona** and the **United States**.

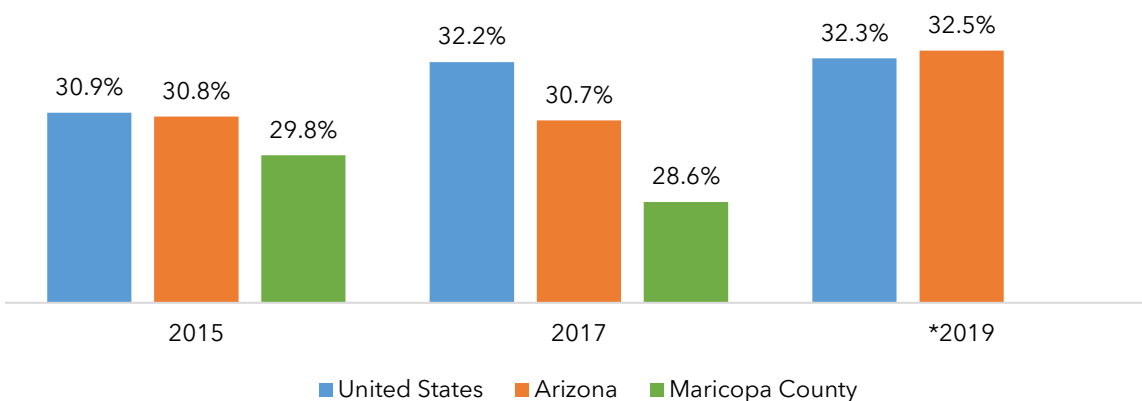|	United States	Arizona	Maricopa County
*2019	34.6%	34.4%	
2018	34.9%	35.2%	35.3%
2017	35.3%	35.3%	35.5%
2016	35.3%	34.2%	34.7%
2015	35.5%	36.9%	37.3%

■ United States ■ Arizona ■ Maricopa County

*County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101
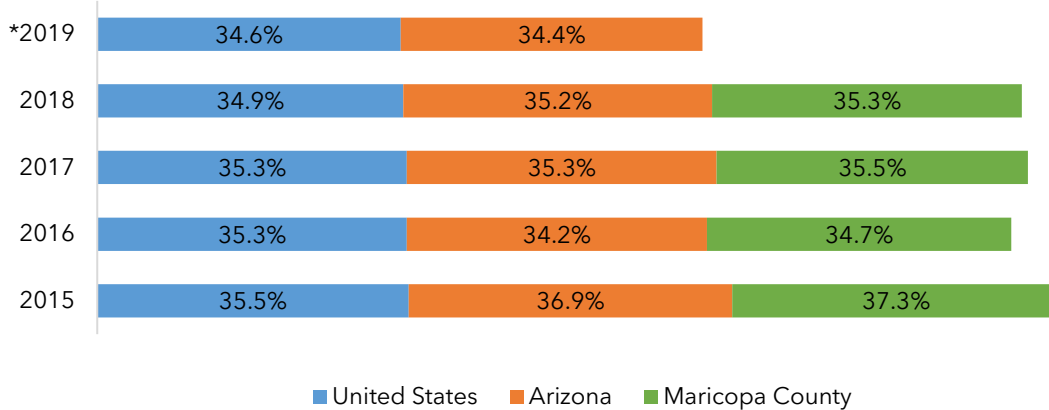
High Blood Pressure & Cholesterol

High blood pressure increases the risk for heart disease and stroke, two leading causes of death for Americans. Tens of millions of adults in the United States have high blood pressure, and many do not have it under control.[19] About 38% of American adults have high cholesterol (total blood cholesterol >200 mg/dL). Excessive cholesterol also places you at risk for heart disease and stroke.[20] Both high blood pressure and high cholesterol do not have signs and symptoms, so the only way to know if you have it is to get your blood pressure measured and cholesterol checked.[19,20]
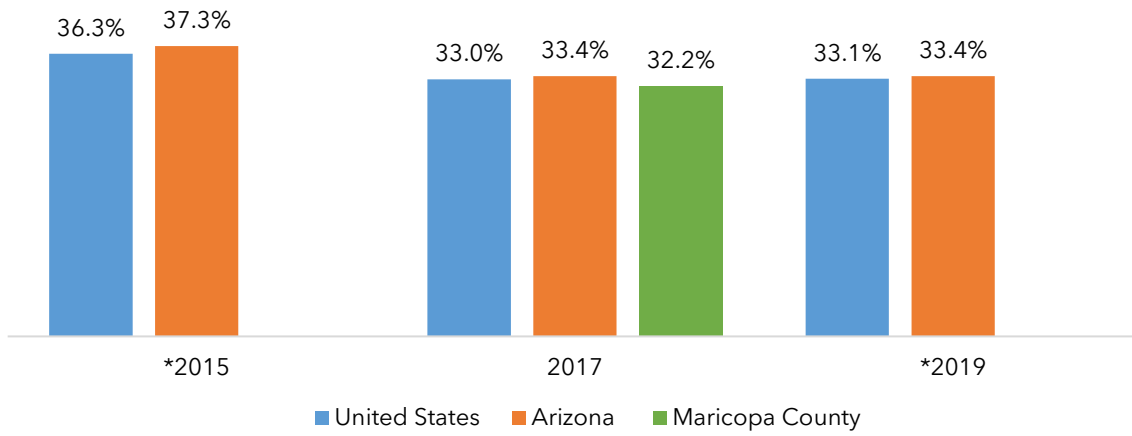
Maricopa County has a lower percentage of adults who have been told they have high blood pressure compared to **Arizona** and the **United States**.

	United States	Arizona	Maricopa County
2015	30.9%	30.8%	29.8%
2017	32.2%	30.7%	28.6%
*2019	32.3%	32.5%	

■ United States ■ Arizona ■ Maricopa County

*County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

Arizona has a higher percentage of adults with high total cholesterol compared to **Maricopa County** and the **United States**.
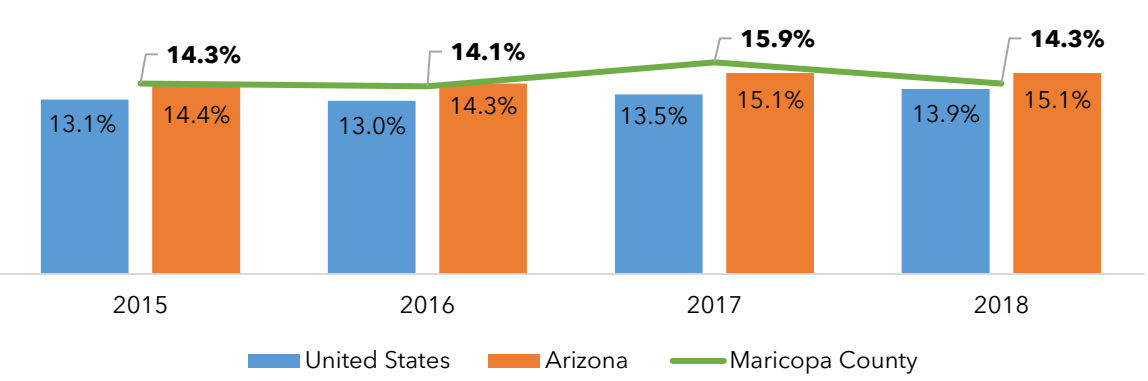
	*2015		2017			*2019	
United States	36.3%		33.0%			33.1%	
Arizona		37.3%		33.4%			33.4%
Maricopa County					32.2%		

Legend: ■ United States ■ Arizona ■ Maricopa County

County level data for 2015 and 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

Asthma

According to the Centers for Disease Control and Prevention, asthma is a chronic disease that affects adults and children of all ages. Asthma is characterized by repeated episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. We don't know all the things that can cause asthma, but we do know that genetic, environmental, and occupational factors have been linked to developing asthma. Asthma can be controlled by taking medication and avoiding the triggers that can cause an attack.[21]

The percentage of adults who have been told by a healthcare provider that they have asthma is increasing in the **United States**, remaining steady in **Arizona** and decreasing in **Maricopa County**.

	2015	2016	2017	2018
United States	13.1%	13.0%	13.5%	13.9%
Arizona	14.4%	14.3%	15.1%	15.1%
Maricopa County	14.3%	14.1%	15.9%	14.3%

Legend: ■ United States ■ Arizona — Maricopa County

Source: https://www.cdc.gov/asthma/brfss/default.htm, https://www.maricopa.gov/Archive.aspx?AMID=101

Asthma-Related Hospitalization Rates

	Arizona (per 1,000)	Maricopa County (per 1,000)
2015	3.4	3.1
2016	1.3	1.3
2017	1.2	1.3
2018	1.0	1.0

Source: *https://pub.azdhs.gov/health-stats/hip/index.php?pg=asthma*

Tuberculosis

	United States (per 100,000)	Arizona (per 100,000)	Maricopa County (per 100,000)
2015	3.0	2.9	2.3
2016	2.9	2.7	2.2
2017	2.8	2.7	2.2
2018	2.8	2.5	2.2

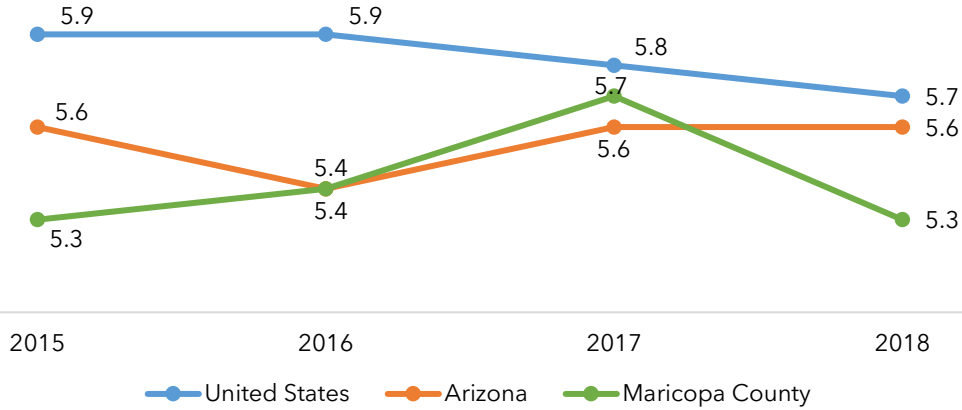Source: *https://gis.cdc.gov/grasp/nchhstpatlas/tables.html*

Premature Mortality & Infant Mortality

Infant mortality is the death of an infant before his or her first birthday. The infant mortality rate is the number of infant deaths for every 1,000 births. In addition to giving us key information about maternal and infant health, the infant mortality rate is an important marker of the overall health of a society. In 2018, the infant mortality rate in the United States was 5.7 deaths per 1,000 live births. In 2018, over 21,000 infants died in the United Sates.[22] The five leading causes of infant death in 2018 were as follows:

- Birth defects
- Preterm birth and low birth weight
- Maternal pregnancy complications
- Sudden infant death syndrome
- Injuries (e.g. suffocation)

The graph below is a comparison of infant mortality at the national, state and local level (2015-2018). The data shows that infant mortality rates are decreasing in the United States and Maricopa County.

The **United States** has the highest infant mortality rate (per 1,000 live births) when compared to **Arizona** and **Maricopa County**.
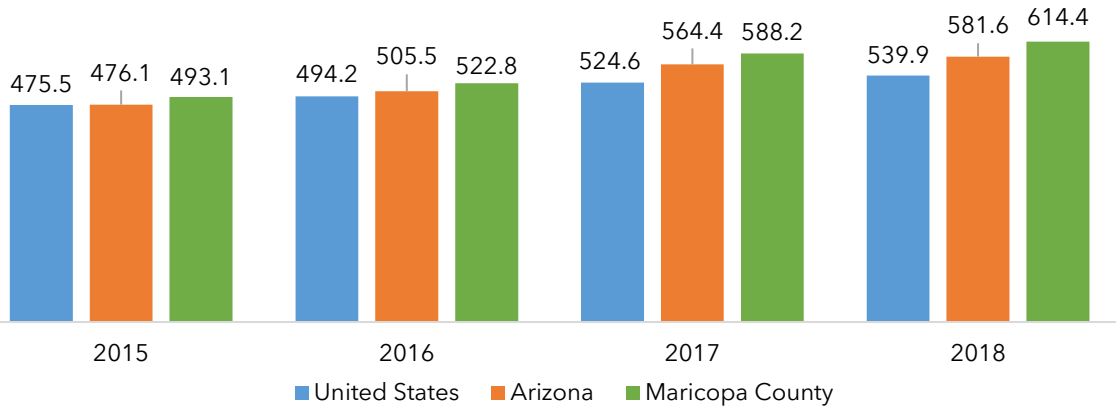

Source: https://www.cdc.gov/nchs/data/nvsr/nvsr69/NVSR-69-7-508.pdf, https://pub.azdhs.gov/health-stats/report/ahs/ahs2018/pdf/5e17.pdf

Sexually transmitted diseases

Chlamydia

Chlamydia is the most frequently reported bacterial sexually transmitted infection in the United States. In 2018, 1,758,668 cases of chlamydia were reported to CDC from 50 states and the District of Columbia, but an estimated 2.86 million infections occur annually. Almost two-thirds of new chlamydia infections occur among youth aged 15-24.[23] The graph below shows the prevalence rate of chlamydia cases between 2015 and 2018. In Maricopa County, the number of chlamydia cases exceed the national rate followed by the state of Arizona.

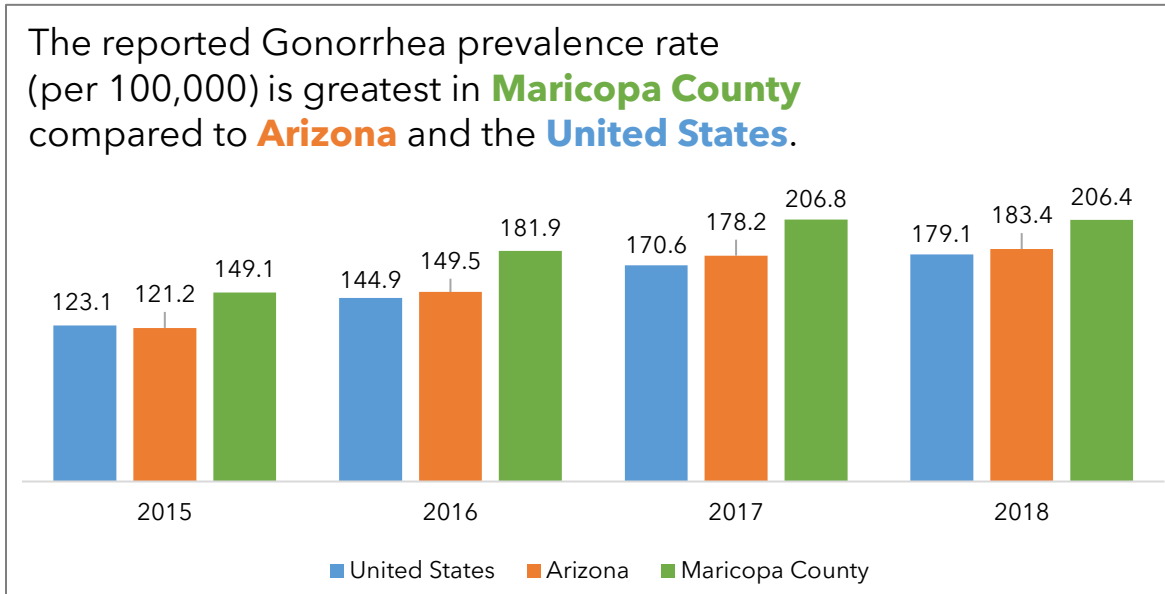**Maricopa County** has the highest reported Chlamydia prevalence rate (per 100,000) compared to **Arizona** and the **United States**.

Source: https://gis.cdc.gov/grasp/nchhstpatlas/tables.html

2019 Maricopa County Community Health Status Report

Gonorrhea

Gonorrhea is the second most reported notifiable disease in the United States. In 2018, a total of 583,405 cases of gonorrhea were reported in the United States, yielding a rate of 179.1 cases per 100,000 population. During 2017-2018, the rate of reported gonorrhea cases increased 5.0% and increased 82.6% since the historic low in 2009.[24] The graph below shows prevalence rates of gonorrhea cases between 2015 and 2018. In Maricopa County, the prevalence of chlamydia cases reached the highest in 2017 and 2018.

The reported Gonorrhea prevalence rate (per 100,000) is greatest in **Maricopa County** compared to **Arizona** and the **United States**.

	2015	2016	2017	2018
United States	123.1	144.9	170.6	179.1
Arizona	121.2	149.5	178.2	183.4
Maricopa County	149.1	181.9	206.8	206.4

Source: https://gis.cdc.gov/grasp/nchhstpatlas/tables.html

Syphilis

Syphilis is a sexually transmitted disease caused by the bacterium *Treponema pallidum*. Syphilis can cause serious health conditions if not adequately treated. During 2018, there were 115,045 reported new diagnoses of syphilis (all stages), compared to 38,739 estimated new diagnoses of HIV infection in 2017 and 583,405 cases of gonorrhea in 2018. Of syphilis cases, 35,063 were primary and secondary (P&S) syphilis, the earliest and most transmissible stages of syphilis.[25]

The graph below shows the prevalence rates of syphilis cases between 2015 and 2018. Within Maricopa County, the prevalence of syphilis has almost doubled since 2015 and continues to increase over time. The number of syphilis cases in Maricopa County exceeds both the state of Arizona followed by the United States.

The reported Syphillis prevalence rate (per 100,000) is greatest in **Maricopa County** and has almost doubled since 2015.


Source: https://gis.cdc.gov/grasp/nchhstpatlas/tables.html
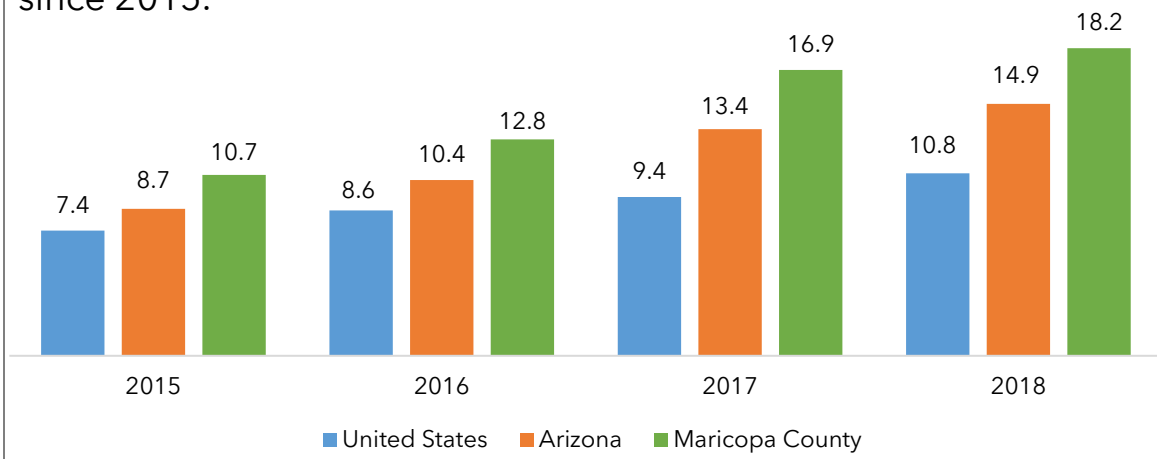
HIV and AIDS

The human immunodeficiency virus (HIV) targets the immune system and weakens people's defense against many infections and some types of cancer. HIV continues to be a major public health concern, having claimed almost 33 million lives so far. At the end of 2019, there were an estimated 38.0 million people living with HIV. Due to the gaps in HIV services, 690,000 people died from HIV-related causes in 2019 and 1.7 million people were newly infected with the virus. There is no cure for HIV, however effective prevention interventions are available: preventing mother-to-child transmission, male and female condom use, harm reduction interventions, pre-exposure prophylaxis, etc. The most advanced stage of HIV infection is acquired immunodeficiency syndrome (AIDS). AIDS is defined by the development of certain cancers, infections or other severe long-term clinical manifestations.[26] The graphs below shows the prevalence rates of HIV and AIDS at the national, state and local level between 2015 and 2018.

The reported HIV prevalence rate (per 100,000) is greatest in the **United States** followed by **Maricopa County**.
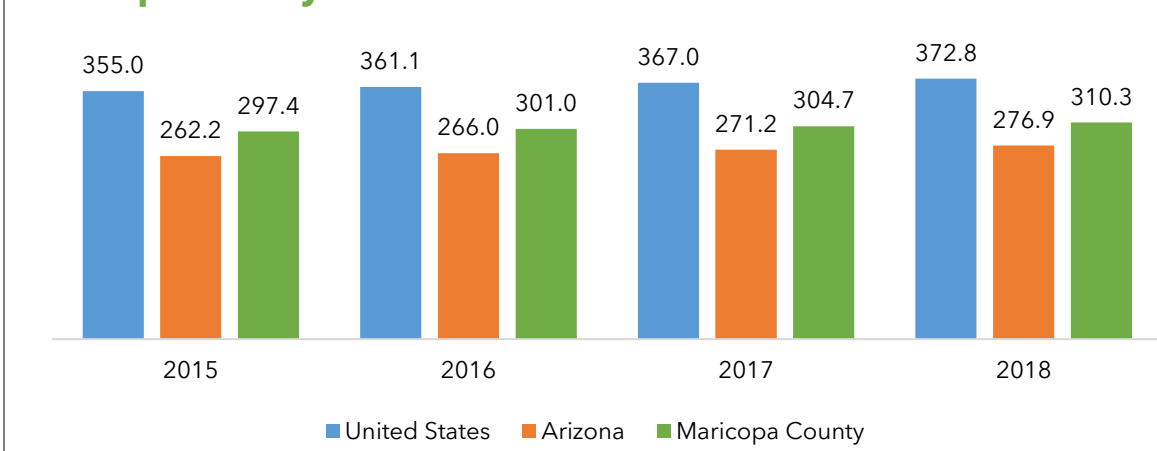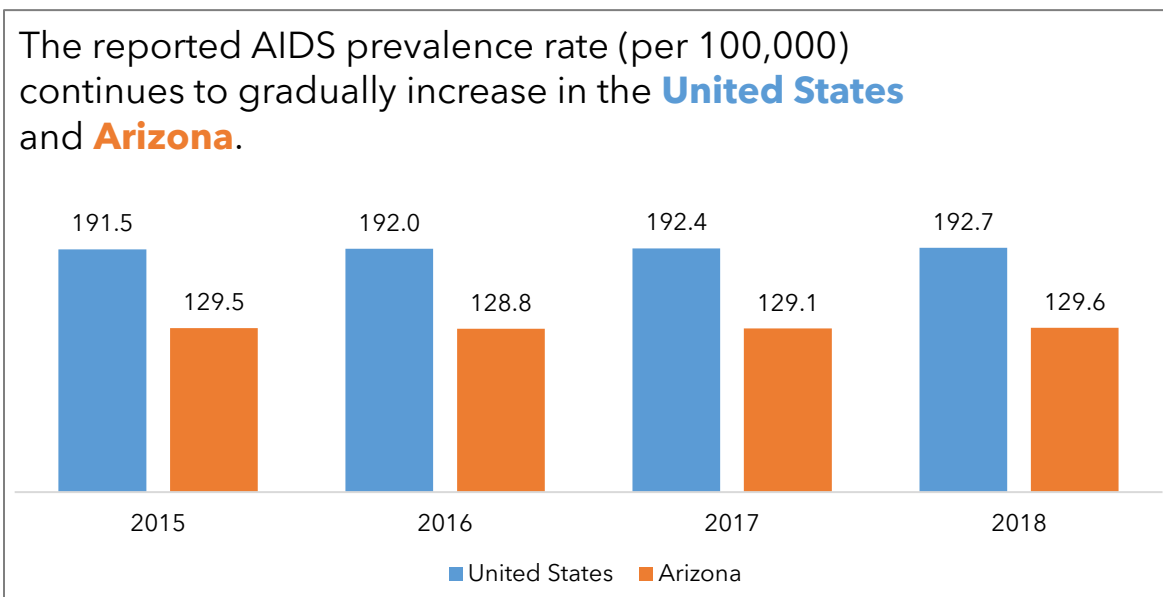
HIV Incidence

	United States (per 100,000)	Arizona (per 100,000)
2015	14.3	12.8
2016	14.2	13.4
2017	13.6	13.6
2018	13.3	14.2

The reported AIDS prevalence rate (per 100,000) continues to gradually increase in the **United States** and **Arizona**.

	2015	2016	2017	2018
United States	191.5	192.0	192.4	192.7
Arizona	129.5	128.8	129.1	129.6

In Maricopa County, the reported HIV/AIDS prevalence rate (per 100,000) is greatest among the **black** population followed by **American Indians**.
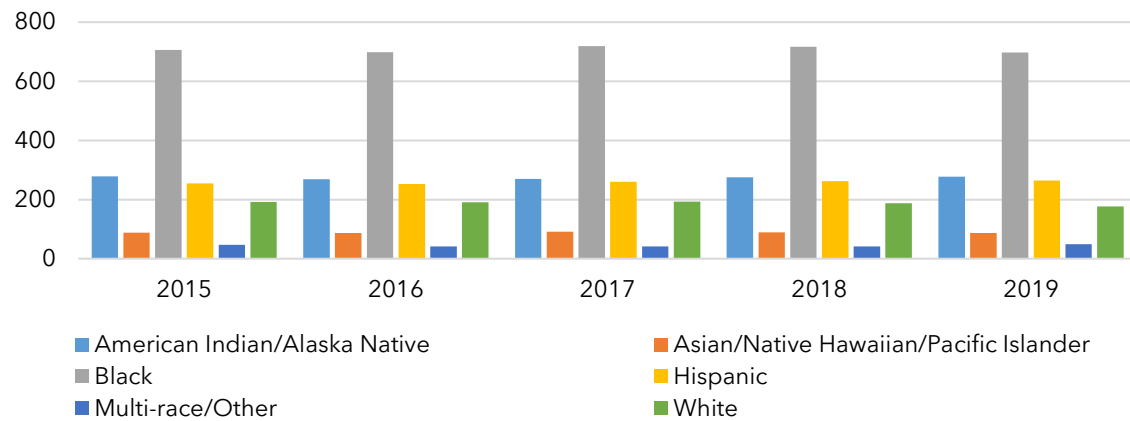
Source: Analysis by MCDPH Office of Epidemiology

HIV/AIDS Prevalence (per 100,000) in Maricopa County by Age

	2-19	20-24	25-34	35-44	45-54	55-64	65+
2015	8.3	126.8	306.3	460.3	763.3	554.6	143.4
2016	8.0	123.3	302.8	451.0	750.6	560.5	144.6
2017	8.4	116.1	323.4	453.9	722.6	610.0	160.9
2018	7.8	109.5	334.7	450.4	669.9	634.7	170.3
2019	7.0	107.0	339.8	436.1	615.0	617.7	187.6

In Maricopa County, the prevalence of HIV/AIDS is greatest among **males** when compared to **females**.

In Maricopa county, the reported HIV/AIDS incidence rate (per 100,000) is greatest among the **black** population followed by **Hispanics**.
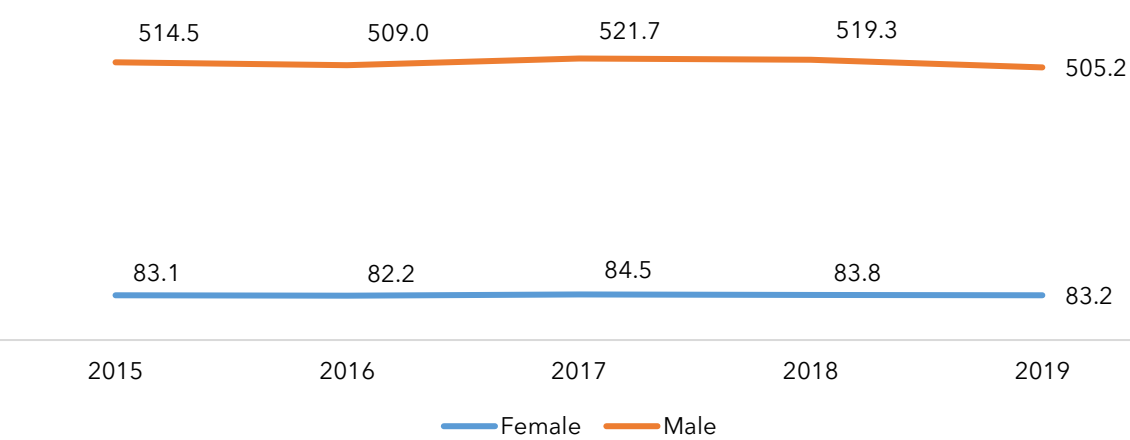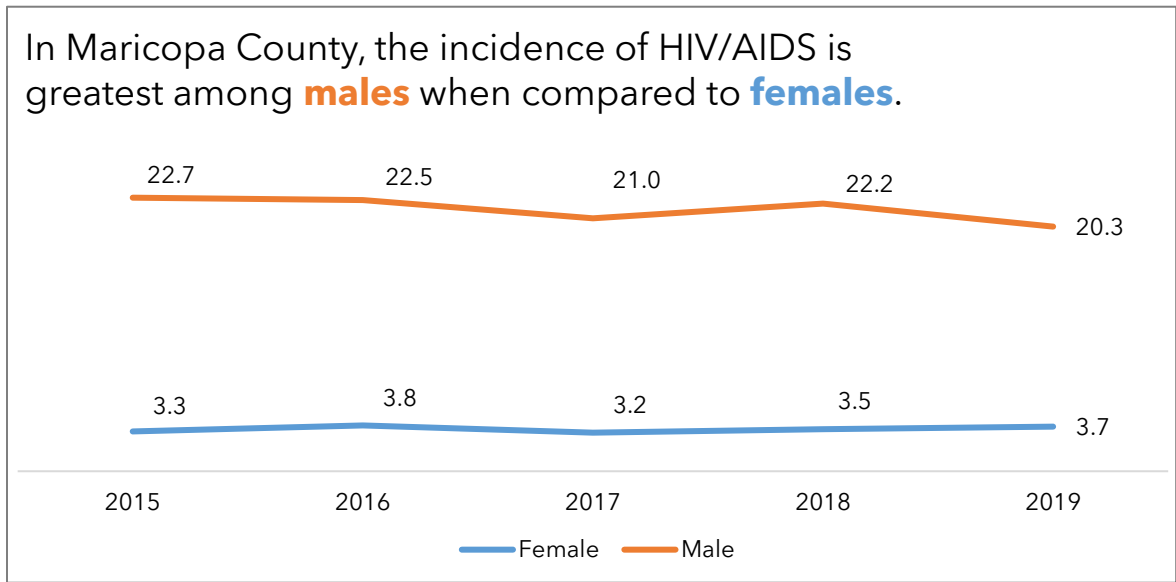

Legend:
- American Indian/Alaska Native
- Asian/Native Hawaiian/Pacific Islander
- Black
- Hispanic
- Multi-race/Other
- White
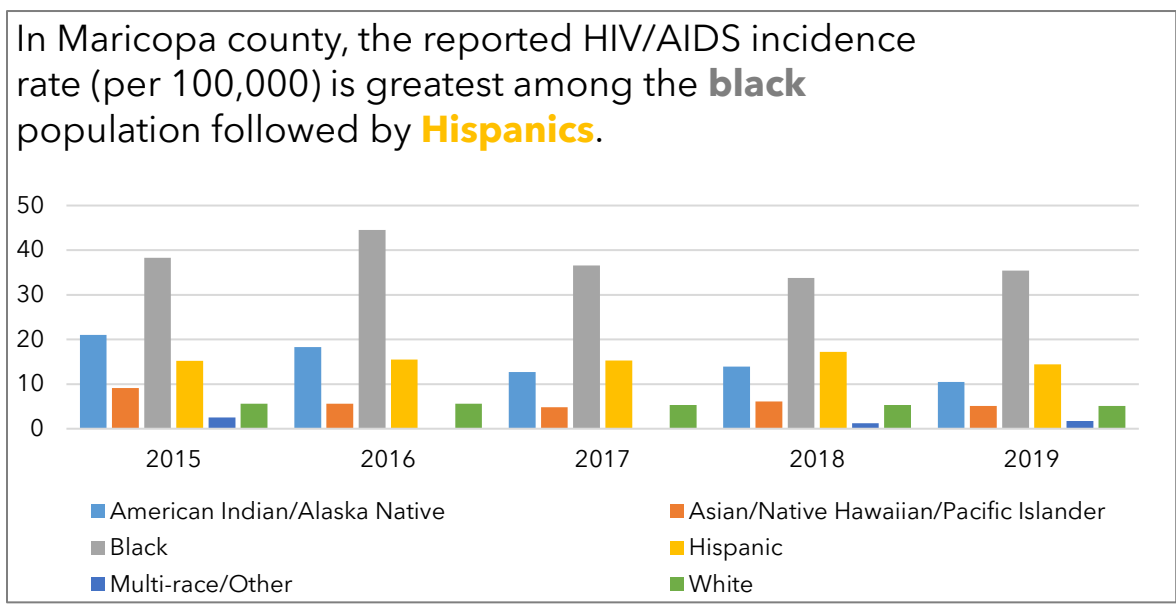
Source: Analysis by MCDPH Office of Epidemiology

HIV/AIDS Incidence (per 100,000) in Maricopa County by Age

In Maricopa County, the incidence of HIV/AIDS is greatest among **males** when compared to **females**.

	13-19	20-24	25-34	35-44	45-54	55-64	65+
2015	6.9	33.2	32.5	18.5	15.9	7.0	1.3
2016	6.1	36.5	27.8	21.8	15.7	8.2	2.1
2017	6.7	26.3	29.5	18.8	14.0	8.6	1.9
2018	6.2	28.8	33.6	19.6	14.2	8.1	1.0
2019	6.2	31.1	30.3	16.8	12.4	7.9	2.0

Beginning Prenatal Care in First Trimester of Pregnancy

Having a healthy pregnancy is one of the best ways to promote a healthy birth. Receiving early and regular prenatal care improves the chances of a healthy pregnancy. Pre-pregnancy and prenatal care can help prevent complications and inform women about important steps they can take to protect their infant and ensure a healthy pregnancy.[27] In 2018, 77.5% of women received prenatal care in their first trimester of pregnancy.[28] The graph below shows the percentage of those who began prenatal care in the first trimester in pregnancy between 2016 and 2018. The percentages are greatest in the United States followed closely by Maricopa County.

Only about 3 out of 4 women in **Maricopa County** began prenatal care in their first trimester of pregnancy.

	2016	2017	2018
United States	77.1%	77.3%	77.5%
Maricopa County	75.8%	74.8%	75.4%
Arizona	73.2%	72.6%	72.5%
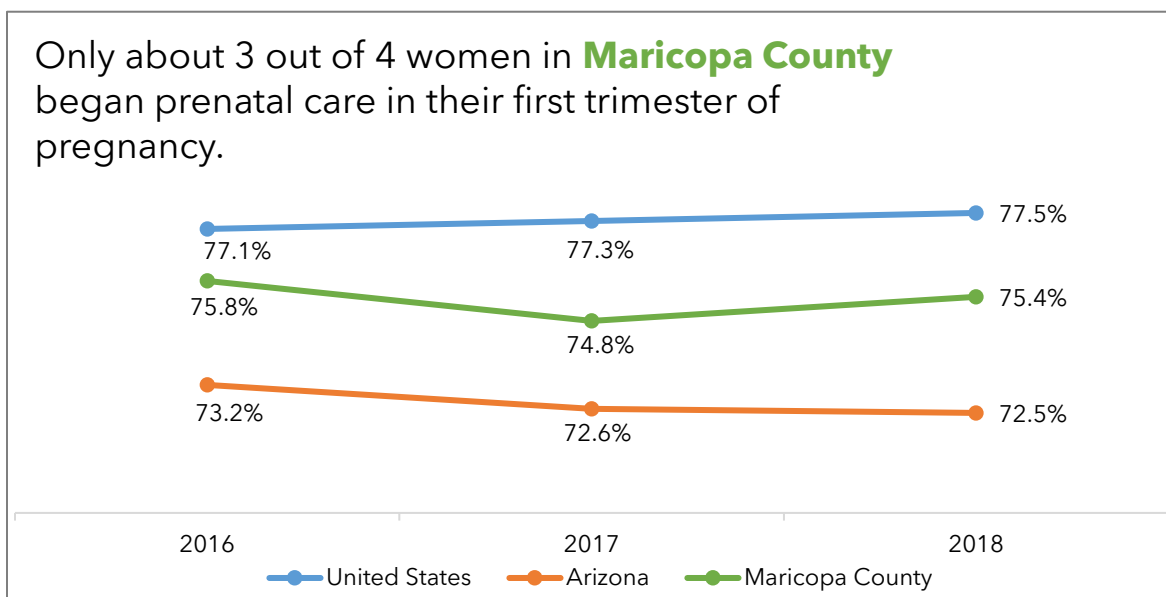
Source: https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_01.pdf,
https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_08-508.pdf,
https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_13-508.pdf,
https://www.marchofdimes.org/Peristats/ViewSubtopic.aspx?reg=04&top=5&stop=21&lev=1&slev=4&obj=1

Health Behaviors

Health behaviors shape health and well-being in individuals and populations. These behaviors are actions taken by individuals that affect health or mortality. Actions that can be classified as health behaviors are many; examples include smoking, substance abuse, diet, physical activity, sleep, risky sexual activities and health care seeking behaviors. Addressing the social determinants of health helps us recognize that overall health and health disparities are shaped significantly by nonmedical factors. While these nonmedical factors include individual characteristics such as education, income, and health beliefs many others derive from an individual's social and physical contexts – families, schools, workplaces and neighborhoods – "upstream" factors that further enable or constrain health.[29]

Fruit & Vegetable intake
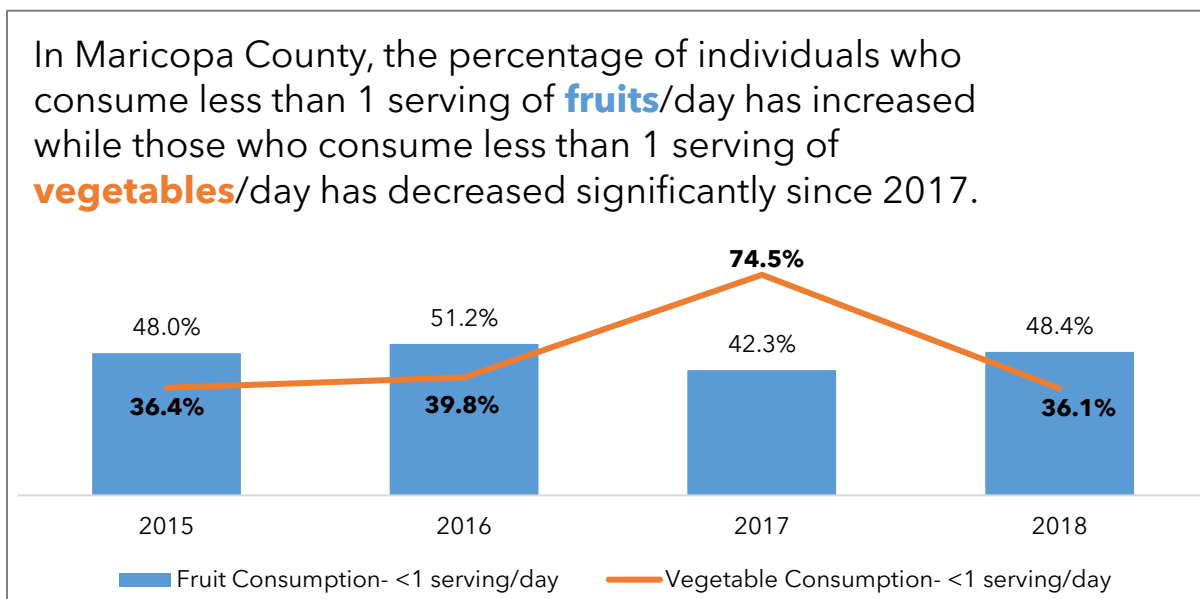
Fruit Consumption- Less than 1 time per day

	United States	Arizona
2015	39.7%	39.7%
2017	36.6%	37.0%
2019	39.3%	38.3%

Source: https://www.cdc.gov/brfss/brfssprevalence/

Vegetable Consumption- Less than 1 time per day

	United States	Arizona
2015	22.1%	20.5%
2017	18.1%	20.6%
2019	20.3%	21.6%

Source: https://www.cdc.gov/brfss/brfssprevalence/

In Maricopa County, the percentage of individuals who consume less than 1 serving of **fruits**/day has increased while those who consume less than 1 serving of **vegetables**/day has decreased significantly since 2017.
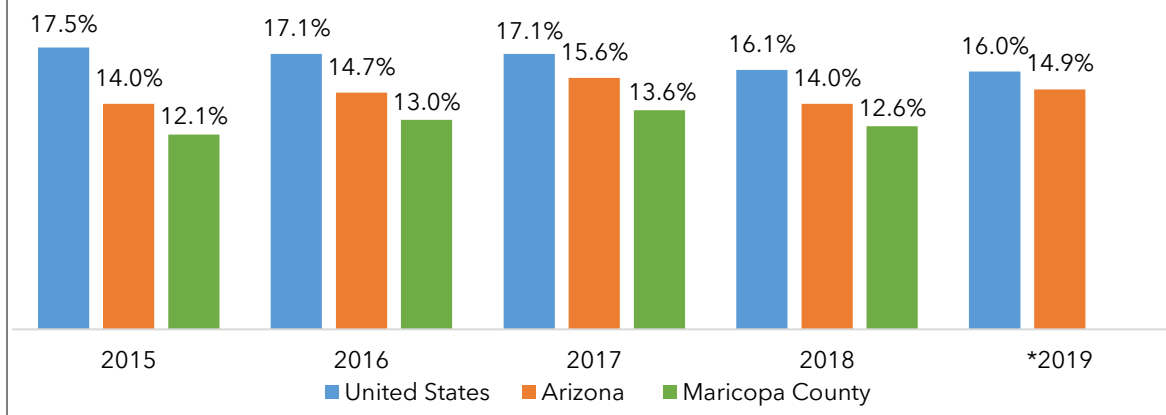

Source: CDC Annual BRFSS, Maricopa County Report 2015-2018

Smokers

Maricopa County has the lowest percentage of adults who are current smokers compared to **Arizona** and the **United States**.
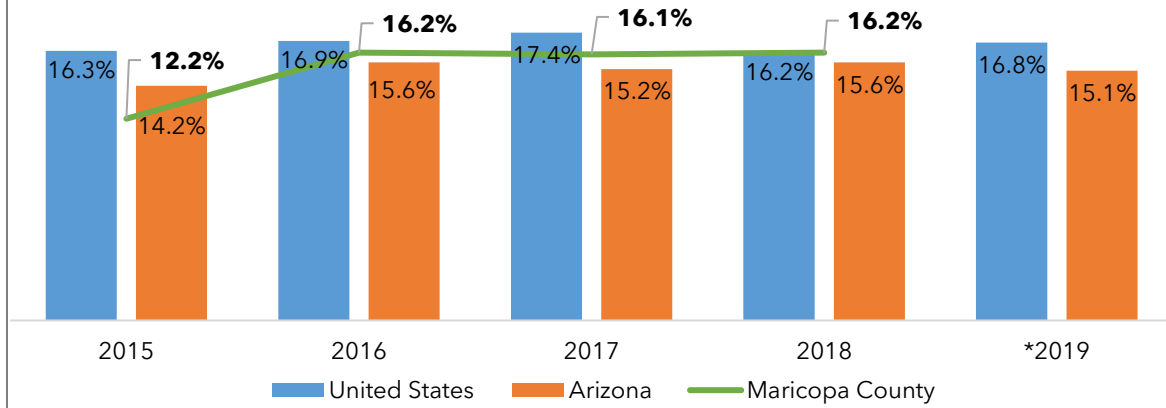

	2015	2016	2017	2018	*2019
United States	17.5%	17.1%	17.1%	16.1%	16.0%
Arizona	14.0%	14.7%	15.6%	14.0%	14.9%
Maricopa County	12.1%	13.0%	13.6%	12.6%	

County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

Binge drinkers

The **United States** and **Maricopa County** both have a higher percentage of adults who are binge drinkers compared to **Arizona**.


	2015	2016	2017	2018	*2019
United States	16.3%	16.9%	17.4%	16.2%	16.8%
Arizona	14.2%	15.6%	15.2%	15.6%	15.1%
Maricopa County	12.2%	16.2%	16.1%	16.2%	

County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101
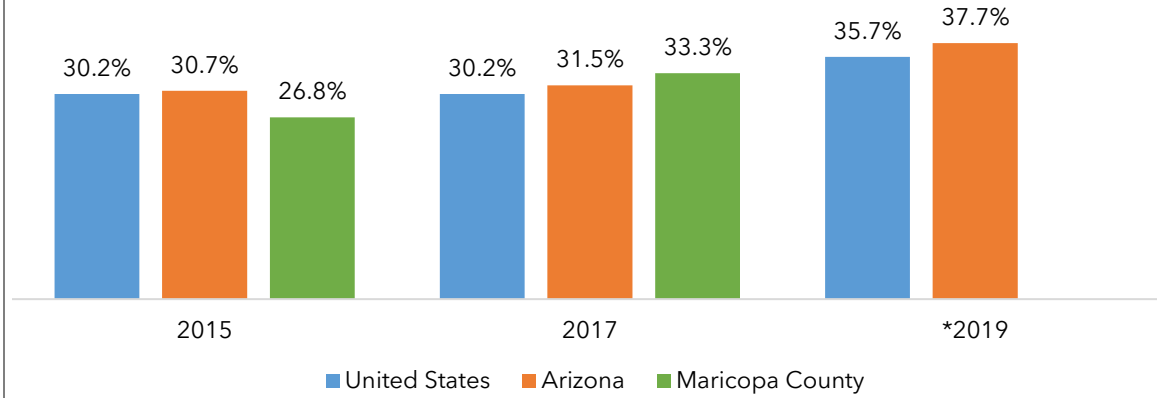
Exercise guidelines

Arizona has the highest percentage of adults who participated in 150 minutes or more of aerobic physical activity per week compared to the **United States** and **Maricopa County**.
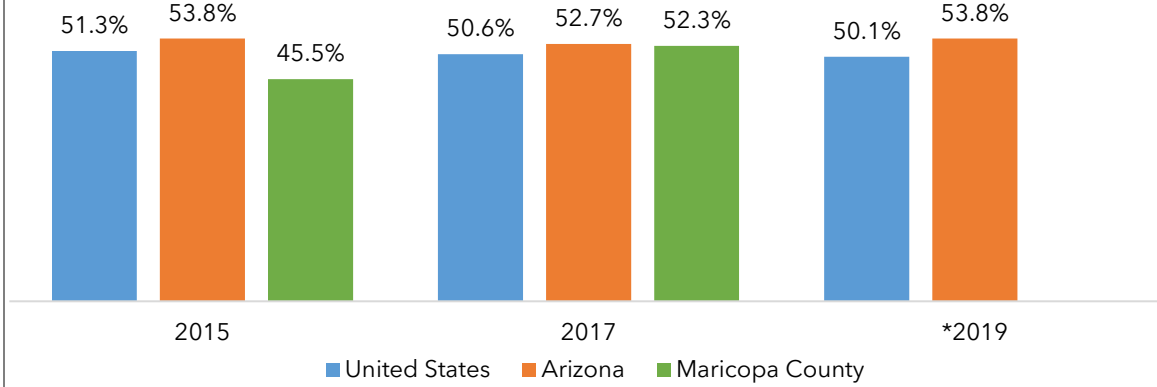
51.3% 53.8% 45.5%	50.6% 52.7% 52.3%	50.1% 53.8%
2015	2017	*2019

■ United States   ■ Arizona   ■ Maricopa County

County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

Arizona has the highest percentage of adults who participated in muscle strengthening exercise two or more times per week compared to **Maricopa County** and the **United States**.

30.2% 30.7% 26.8%	30.2% 31.5% 33.3%	35.7% 37.7%
2015	2017	*2019

■ United States   ■ Arizona   ■ Maricopa County

County level data for 2019 was unavailable to report out
Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

PSA Test

The percentage of men aged 40+ who have had a PSA test within the past two years has decreased in the United States, Arizona and Maricopa County.

	United States	Arizona	Maricopa County
2016	39.5%	40.6%	52.3%
2018	33.2%	34.5%	34.4%

Source: https://www.cdc.gov/brfss/brfssprevalence/, https://www.maricopa.gov/Archive.aspx?AMID=101

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Mammogram

The percentage of women aged 50-74 who have had a mammogram within the past two years has increased in the United States and Maricopa County.

	United States	Arizona	Maricopa County
2016	77.6%	76.2%	64.6%
2018	78.3%	73.1%	67.9%

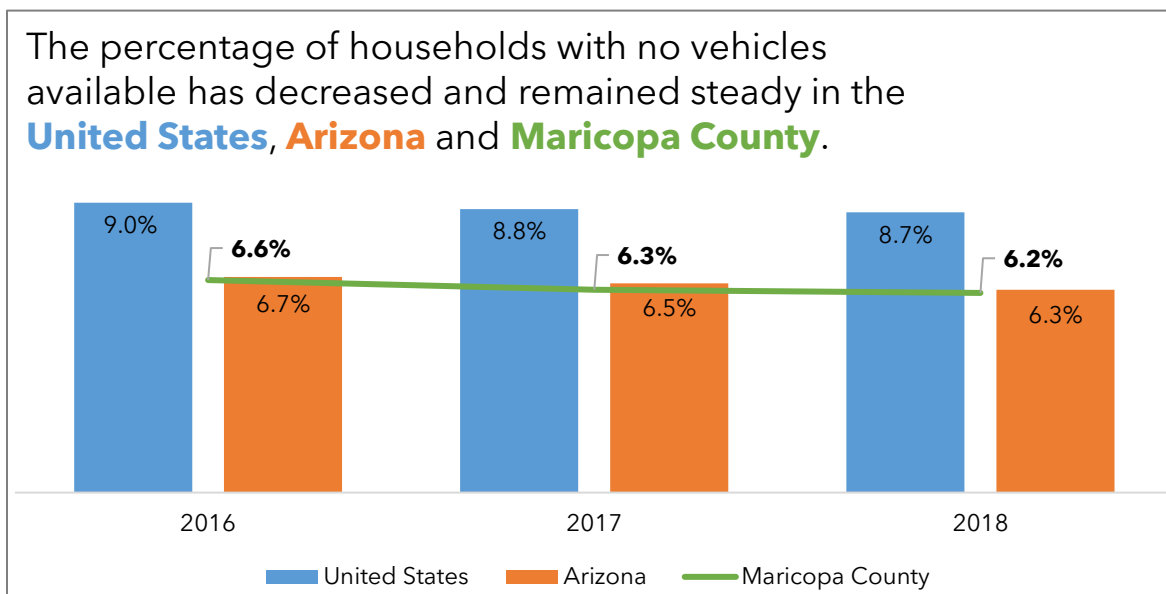*Source: https://www.cdc.gov/brfss/brfssprevalence/index.html, https://www.maricopa.gov/Archive.aspx?AMID=101*

Physical Environment

Environmental interactions occur constantly, and these interactions affect quality of life, years of healthy life lived, and health disparities. Maintaining a healthy environment is central to increasing quality of life and years of healthy life. Features of the built environment like transportation and parks and recreation appear to impact human health, influencing behaviors, physical activity patterns, social networks and access to resources.[30]

Transportation

Each year, 3.6 million people in the United States do not obtain medical care due to transportation issues. Transportation issues include lack of vehicle access, inadequate infrastructure, long distances and lengthy times to reach needed services, transportation costs and adverse policies that affect travel. Transportation challenges affect rural and urban communities. Since transportation touches many aspects of a person's life, adequate and reliable transportation services are fundamental to healthy communities. The lack of transportation can affect a person's access to health care services and may result in issues like missed or delayed health care appointments, increased health expenditures, and overall poorer health outcomes.[31]

The percentage of households with no vehicles available has decreased and remained steady in the **United States**, **Arizona** and **Maricopa County**.

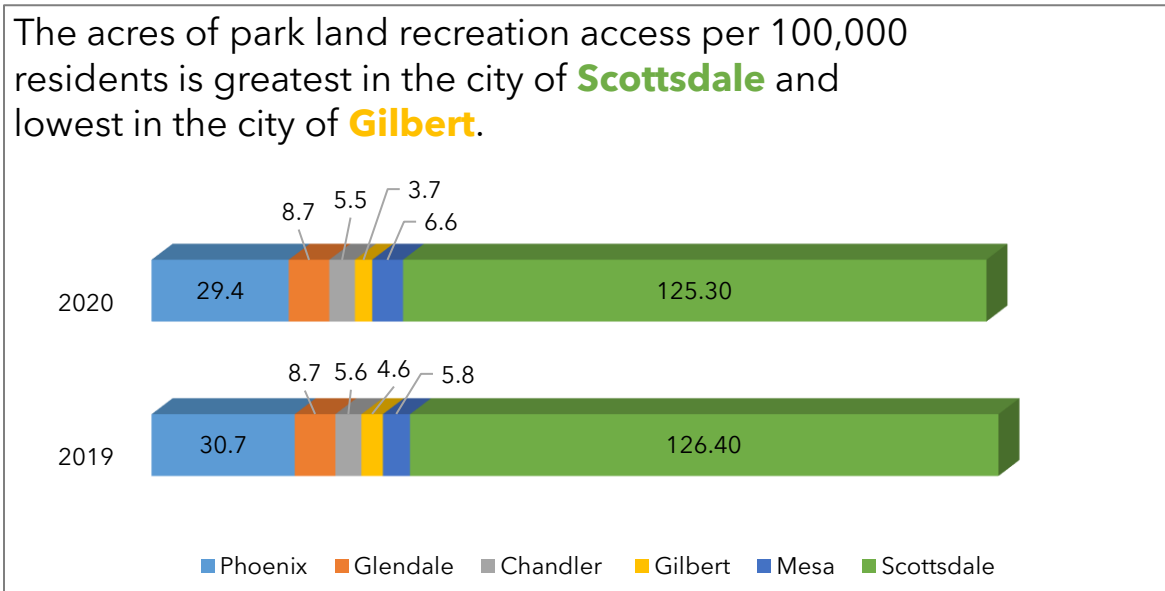|	2016	2017	2018
United States	9.0%	8.8%	8.7%
Arizona	6.7%	6.5%	6.3%
Maricopa County	6.6%	6.3%	6.2%

Source: https://data.census.gov/cedsci/table?g=0100000US_0400000US04_0500000US04013&d=ACS%205-Year%20Estimates%20Data%20Profiles&tid=ACSDP5Y2018.DP04

Parks and Recreation

Public park and recreation agencies create healthy communities and play a fundamental role in enhancing the physical environments in which we live. Parks and recreation foster change by helping to reduce obesity and incidence of chronic disease by providing opportunities to increase rigorous physical activity in a variety of forms, providing a connection to nature which studies demonstrate relieves stress levels, tightens interpersonal relationships and improves mental health, and fostering overall wellness and healthful habits such as becoming tobacco-free and engaging in enrichment opportunities that add balance to life. Public parks and recreation are the gateways to a healthier country, and they ensure that communities are truly livable.[32]

Median Parkland per 1,000 Residents

	All U.S. Cities
2019	13.3
2020	13.0

The acres of park land recreation access per 100,000 residents is greatest in the city of **Scottsdale** and lowest in the city of **Gilbert**.

*Source: https://www.tpl.org/search/site/city%20park%20facts*

Youth Data

Food insecurity

Food insecurity has the potential to be harmful to individuals of any age, but it can be especially devasting to children. The USDA estimates that nearly 13 million children in the United Sates live in food-insecure households as of 2016. That means 1 in 6 children (18%) may not have consistent access to enough food for an active, healthy life. In all 50 states and Washington D.C., the estimated rate of child food insecurity is higher than the rate of overall food insecurity. Inadequate nutrition can permanently alter children's brain architecture and stunt their intellectual capacity, affecting children's learning, social interaction and productivity.[33]

The graph below compares the percentage of food insecure children in the United States, Arizona and Maricopa County from 2015 and 2018. Results demonstrate that food insecurity has decreased consistently across the board.

The percentage of food insecure children has decreased slightly in the **United States**, **Arizona** and **Maricopa County,** although about 1 out of every 7 children are still food insecure.
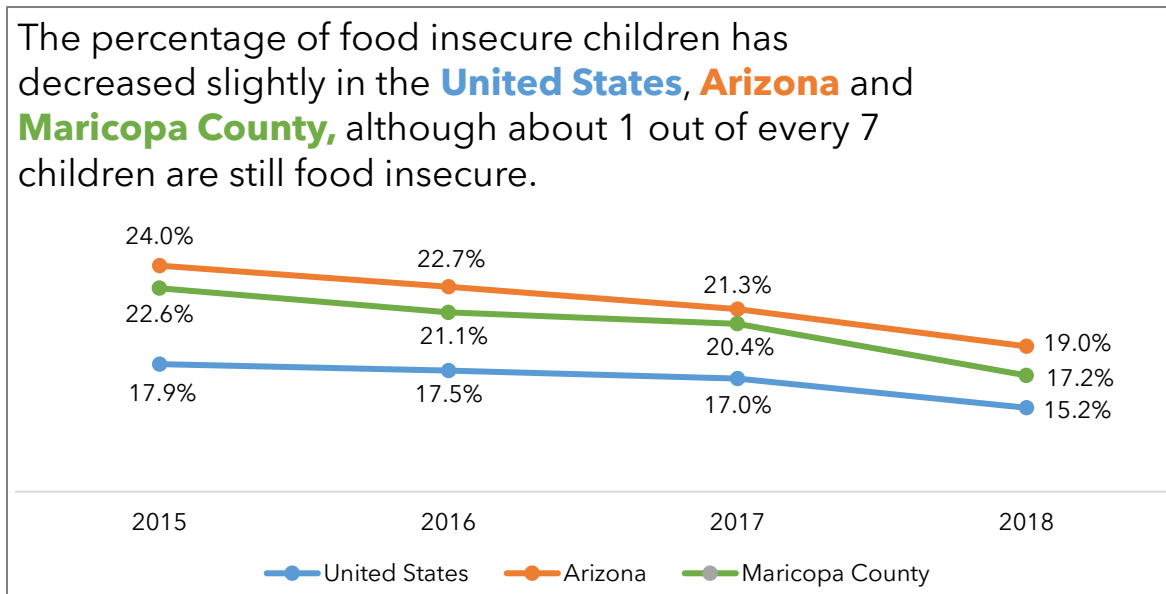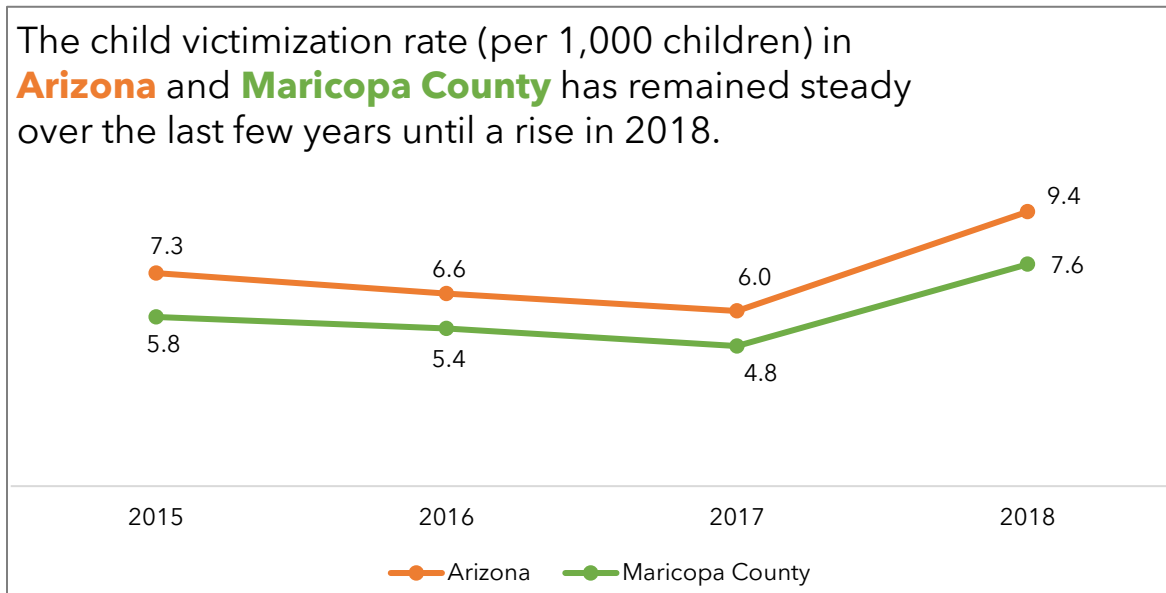
Child abuse

The Federal Child Abuse Prevention and Treatment Act (CAPTA) defines child abuse and neglect as, at a minimum, "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation. Most states recognize four major types of maltreatment: physical abuse, neglect, sexual abuse, and emotional abuse. Child abuse and neglect can have lifelong implications for victims, including their well-being. While the physical wounds may heal, there are many long-term consequences of experiencing the trauma of abuse or neglect. Children who are maltreated may be at risk of experiencing cognitive delays and emotional difficulties, among other issues, which can affect many aspects of their lives, including their academic outcomes and social skills development.[34]

Child Victimization Rate per 1,000 Children

	United States
2015	9.2
2016	9.1
2017	9.1
2018	9.2

Source: https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment

The child victimization rate (per 1,000 children) in **Arizona** and **Maricopa County** has remained steady over the last few years until a rise in 2018.

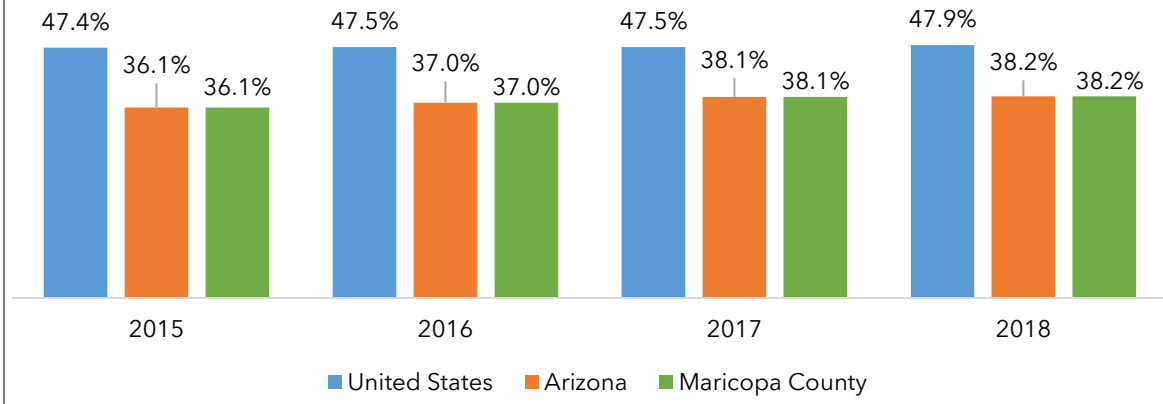|	2015	2016	2017	2018
Arizona	7.3	6.6	6.0	9.4
Maricopa County	5.8	5.4	4.8	7.6

Source: https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment
NCANDS Data- Analysis by MCDPH Office of Epidemiology

Preschool Enrollment

Most children in the United States attend early care and education (ECE) such as public or private preschool, childcare centers, or Head Start before entering kindergarten. In preschool, children have the opportunity to learn to strengthen their social and emotional development. Preschool provides an environment for children to explore, gain a sense of self, play with peers, and build self-confidence. A quality early childhood education provides children with cognitive, behavioral, and social skills that they don't learn at home.[35] The graph below demonstrates the percentage of three and four-year olds enrolled in preschool in the United States and Maricopa County from 2015 to 2018.

Both **Arizona** and **Maricopa County** have a smaller percentage of 3 and 4 year olds enrolled in preschool compared to the **United States**.
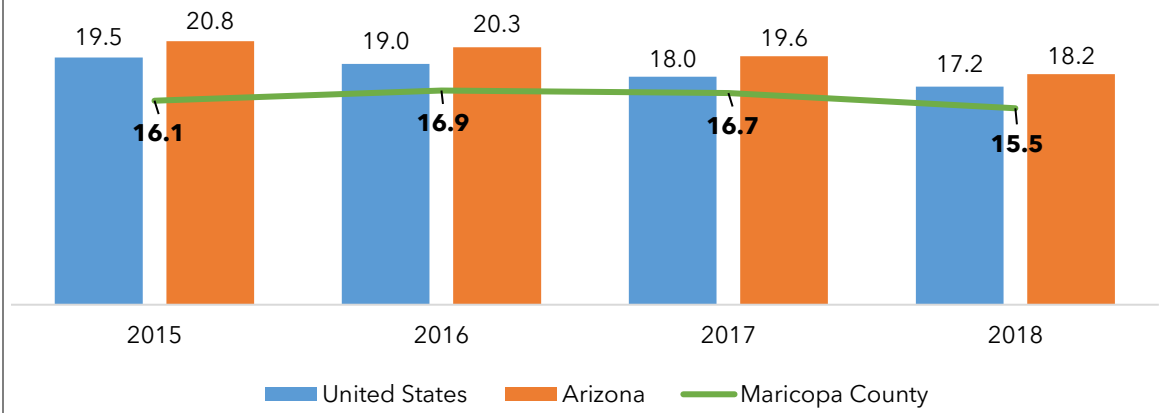

	2015	2016	2017	2018
United States	47.4%	47.5%	47.5%	47.9%
Arizona	36.1%	37.0%	38.1%	38.2%
Maricopa County	36.1%	37.0%	38.1%	38.2%

Source: https://data.census.gov/cedsci/table?q=S1401&tid=ACSST5Y2013.S1401

Preschool Poverty Gap

The American Academy of Pediatrics (AAP) reported that children born into poverty have greater odds of not being ready for school than children not born into poverty. Children growing up in household poverty often have a home environment that is less supportive of school readiness. The reasons for less support in the environment could be that mothers living in household poverty are more likely to experience increased drug/alcohol use, low maternal education, and social isolation.[36]
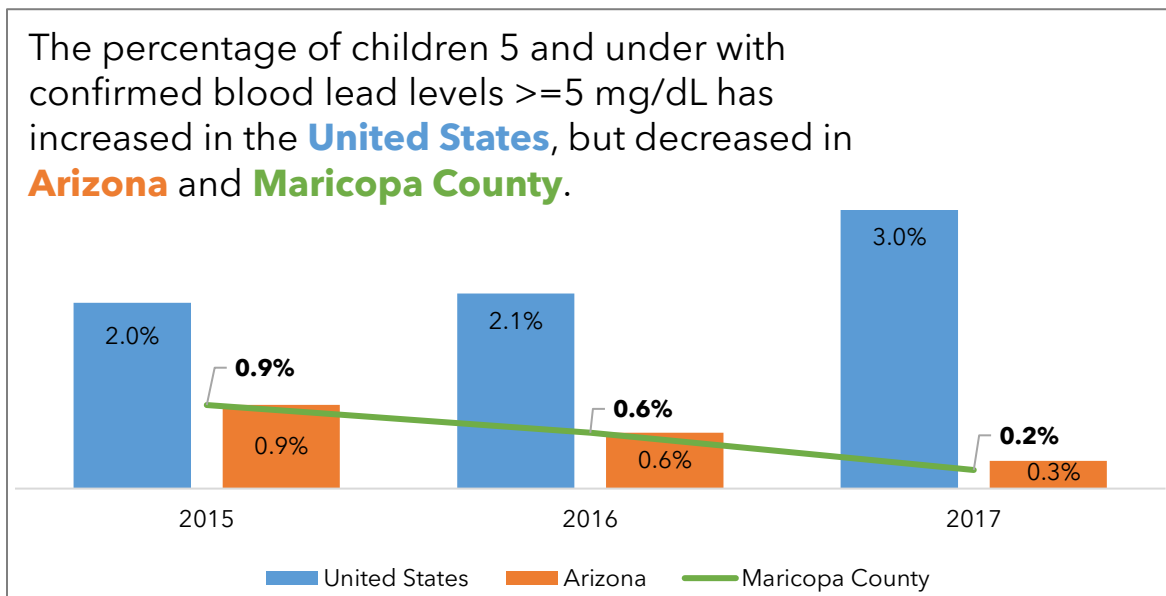
Arizona has the greatest preschool poverty gap for population three years and over, but overall the gap is decreasing across the board.

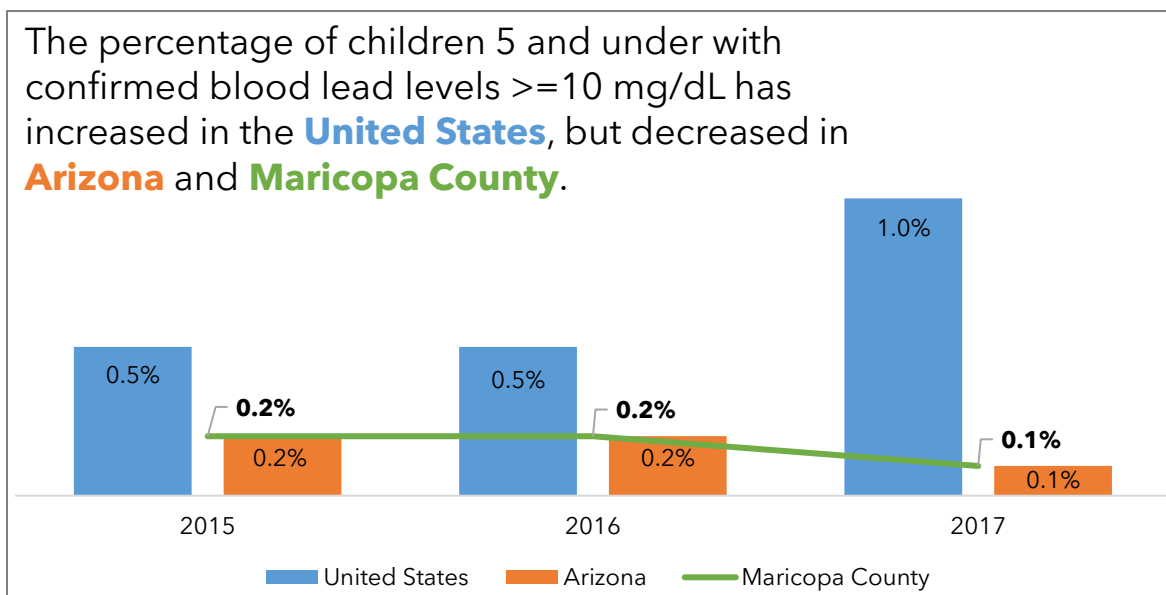|	2015	2016	2017	2018
United States	19.5	19.0	18.0	17.2
Arizona	20.8	20.3	19.6	18.2
Maricopa County	16.1	16.9	16.7	15.5

Source:https://data.census.gov/cedsci/table?q=B14006&g=0400000US04_0500000US04013&tid=ACSDT1Y2019.B14006&hidePreview=false

Lead Exposure

In many places across the United States, significant numbers of children are still exposed to lead. Children who live in households at or below the federal poverty level and those who live in housing built before 1978 are at the greatest risk of lead exposure. Additionally, children less than six years old are at an increased risk of lead exposure because their bodies are still developing, and they are growing so rapidly.[37] Exposure to lead can critically harm a child's health, including damage to the brain and nervous system, slowed growth and development, learning and behavior problems, and hearing and speech problems. No safe blood lead level in children has been identified.[38] The graphs below show the percentage of children under five with confirmed blood levels greater than five and ten mg/dL in the United States, Arizona and Maricopa County between 2015 and 2018.

The percentage of children 5 and under with confirmed blood lead levels >=5 mg/dL has increased in the **United States**, but decreased in **Arizona** and **Maricopa County**.

Source: https://www.cdc.gov/nceh/lead/data/national.htm, https://www.cdc.gov/nceh/lead/data/state/azdata.htm

The percentage of children 5 and under with confirmed blood lead levels >=10 mg/dL has increased in the **United States**, but decreased in **Arizona** and **Maricopa County**.

Source: https://www.cdc.gov/nceh/lead/data/national.htm, https://www.cdc.gov/nceh/lead/data/state/azdata.htm

Next Steps

The findings from this report, along with the other sections of the MAPP assessments, will be utilized to select priority strategic issues for the 2021-2023 Community Health Improvement Plan. Due to the 2020 COVID-19 pandemic, CHA and CHIP timelines and plans have been modified and will include a supplemental assessment that will focus specifically on the impact COVID-19 has had on our community. This supplemental will further inform the CHA 3.0 and set the stage for the CHA 4.0 as we move towards helping our communities recover from this pandemic. Our goal is to use all of these data points to not only determine priorities moving forward for our CHA/CHIP efforts, but also for our overall public health strategic plan and help our hospital and healthcare partners make informed decisions, work collaboratively with us and each other to drive community health and recovery efforts. The chosen priority strategic issues will be included in the updated Community Health Improvement Plan 4.0 (CHIP) and the data findings and results will be shared through the Maricopa Health Matters website, Synapse coalition, HIPMC collaborative meetings, mySidewalk platform, traditional and social media outlets, public forums and community hearing sessions.

Appendix A

Maricopa County Community Health Assessment for Population Health Improvement: Recommended Health Metrics

Health Outcome Metrics		Health Determinants and Correlated Metrics				
Mortality	*Morbidity*	*Access to Healthcare*	*Health Behaviors*	*Demographics*	*Social Environment*	*Physical and Built Environment*
Leading Causes of Death	Obesity	Health Insurance Coverage	Fruit & Vegetable Intake	Total Population	Domestic Violence and Child Abuse	Transportation
Infant Mortality	Cancer Rates	Quality of Care	Alcohol & Tobacco Use	Gender	Early Childhood Development	Parks and Recreation Access
Injury-related Mortality	Infectious Diseases	Prenatal Care	Physical Activity	Race/Ethnicity	Education System	Food Insecurity
Intentional Self-Harm	Chronic Diseases		Preventative Healthcare Utilization	Age Group		Lead Exposure
Homicide	Sexually Transmitted Diseases		Crime	Income		Housing Cost Burden
Chronic Disease Mortality	Mental Health					
Substance Use/Abuse Mortality						

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