



Community Health Assessment Coconino County, AZ

December 2020



Dear Community Member,

Coconino County Health and Human Services (CCHHS) is pleased to present the 2020 Community Health Assessment (CHA). This assessment reflects a three-year process. When this process began in 2018, CCHHS was known as the Public Health Services District. Today, we are Health and Human Services, an integrated department committed to working toward improved population health; addressing the social determinants of health and the complex interactions that shape health outcomes and disparities within our community.

The 2020 CHA contains the most recent health data and information to provide an understanding of our county's health status. Utilizing community input and data analysis, this report presents a broad picture of the health of our community. The CCHHS Community Health Assessment is a tool to identify the areas where the community excels as well as areas where increased focus is necessary. It presents an opportunity to take a fresh look at the health of our community, identify emerging health issues, and to select community priorities.

Due to the timing of the 2020 Community Health Assessment, data related to the COVID-19 pandemic and its health impacts are not included. The possible community health issues resulting from this situation are not yet known. The CHA will continue to be revised to incorporate newly identified concerns moving forward.

The CHA will serve as the foundation for a process to create our next Community Health Improvement Plan (CHIP). The CHIP will be developed over the next year and will focus on a few selected community health priorities identified through the CHA. The CHIP will create a blueprint for the community to make improvements on the selected issues in a collaborative and coordinated manner.

Our sincere thanks to the many community members and organizations who contributed to this project. We hope the 2020 CHA serves as a valuable resource and a point of connection for community members and agencies who are working together to improve the health of Coconino County.

A handwritten signature in black ink that reads "Kim Musselman".

Kim Musselman
Interim Department Director

A handwritten signature in black ink that reads "Mike Oxtoby".

Mike Oxtoby
Chief Health Officer

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Overview

Every five years, Coconino County Health and Human Services conducts a countywide Community Health Assessment (CHA). The purpose of a CHA is to learn about the community: the health of the population, factors that contribute to increased health risks or poorer health outcomes, and available community resources. The overall goal of the CHA is to use multiple sources of data, local knowledge, and community stories to assess the health of Coconino County.

The 2020 CHA reflects a three-year process that included the selection and analysis of health indicators, multiple community focus groups, community surveys, and the engagement of an advisory group representative of broad community health partners. This provided information about strengths and challenges, assets, and the capacity of the public health and health care systems to address the health challenges in our community.

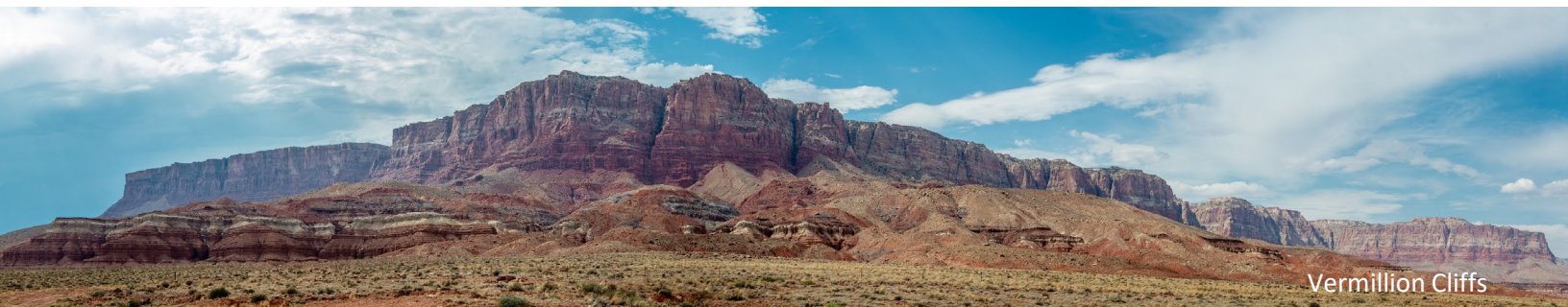
Theoretical Framework



This assessment process is based on the national Mobilizing for Action through Planning and Partnerships (MAPP) model, an evidence-based community-wide strategic planning process for improving community health. Two of the four MAPP assessments were completed as a part of this CHA: Community Health Status Assessment and Community Themes and Strengths Assessment.

The Community Health Status Assessment (CHSA) explores population-level health data to define the health status of the county and draws comparisons between Coconino County and Arizona. The CHA Workgroup obtained data from many primary and secondary sources at the local, state, and national level. Significant secondary data sources include American Community Survey, Behavioral Risk Factor Surveillance System, and Arizona Department of Health Services. Significant primary data was obtained from the Coconino County Health and Human Services Medical Examiner's Office.

The Community Themes and Strengths Assessment (CTSA) focuses on the identification of current community issues, perceptions about quality of life, and community assets through feedback from stakeholders and community members. Community surveys and focus groups provided primary data for the CTSA.



Key Findings



The **Community Health Status Assessment (CHSA)** key findings:

- The Leading Causes of Death in Coconino County (2018):
 - Cancer
 - Heart Disease
 - Accident (motor vehicle, drug or alcohol accident, other)
 - Suicide
 - Chronic Liver Disease and Cirrhosis
- Coconino County experienced higher rates of mortality for accidents, suicides, and chronic liver disease/cirrhosis than Arizona and the US
- Median Housing Costs for both Mortgage and Rent exceed those of the state of Arizona
- Coconino County has one of the highest ratios of healthcare professionals to residents in Arizona, although this ratio is still below the US benchmark
- Nearly all regions of Coconino County qualify as a Mental Health Professional Shortage Area
- Teen birth rates are lower than all other Arizona counties, although the rate of chlamydia infection for all ages is significantly higher than the overall rates in Arizona and the US
- Native American residents have disproportionately lower levels of educational attainment than all other races.
- 14.% percent of Coconino County residents are food insecure
- 1 in 5 children in Coconino County are living below the federal poverty level

The **Community Themes and Strengths Assessment (CTSA)** key findings:

- The things that we like most about living here are access to nature, the diversity and sense of community, access to higher education, and access to health care
- The things we like the least about living here are the cost of living, the sense of losing a small-town feel, and language barriers in health care and community services
- Things that make a community healthy are adequate and affordable medical care, access to good education, and affordability of housing
- The most important health issues in our community are alcoholism, mental health, and obesity
- The social-environmental circumstances most responsible for these issues are lack of affordable housing, poverty, and health care costs
- The risky behaviors that have the greatest impact on overall community health are alcohol abuse, drug abuse, and poor nutrition and eating habits

Health Priorities

The key findings of the two assessments, Community Health Status and Community Themes and Strengths, were presented to the community, the governing body, and the advisory committee. The groups were asked to rank the findings in order of importance. This information was then utilized to form the following top Health Priorities:

Poverty and Food Insecurity
Mental Health
Housing Affordability

These top three health priorities will be included in the Community Health Improvement Plan, as described in the next section. The remaining priorities that were part of the Key Findings, although not part of the next formal step, will also be addressed over the next five years through the work of public health and the larger public health system.

Next Steps

The Community Health Assessment informs community decision making about the prioritization of health problems and the development of a plan to address these priorities. This Assessment serves as the foundation for a process to create our next Community Health Improvement Plan (CHIP). The CHIP will focus on a few selected community health priorities identified through the CHA; priorities which will be further refined to serve as blueprint for the community to collaboratively make improvements on the selected issues.

Advisory Committee Membership





Population Overview

Coconino County makes up 18,618.9 square miles of Northern Arizona. Taking up 16.4% of Arizona’s land mass, it is the second largest county by size in the contiguous United States. Although large by mass, the population was estimated to be 138,639 in 2017. This is projected to increase to over 148,000 by 2020.

Population centers in Coconino County include cities of Flagstaff, Fredonia, Page, Sedona, Tusayan, Williams, and largely in the unincorporated areas of the county.

Communities that make up the unincorporated areas of Coconino County include Tuba City, Doney Park, Grand Canyon Village, Moenkopi, Leupp and several other small towns and villages.

The majority of Coconino County is composed of Tribal land (39.1%) and Forest Service (27.2%). Coconino County is home to a large portion of Navajo Nation, Hopi, Havasupai, and Hualapai Reservations. Kaibab, Coconino, and Apache-Sitgreaves National Forests are found within this county. Several of Arizona's state and national parks can be found in Coconino County, including Riordan Mansion State Historical Park, Slide Rock State Park, Glen Canyon National Recreation Area, Grand Canyon National Park, Sunset Crater Volcano National Monument, Walnut Canyon National Monument, and Wupatki National Monument.

Coconino County population, 2017:

Flagstaff	69,903
Page	7,515
Williams	3,114
Sedona (within Coconino County)	2,926
Fredonia	1,331
Tusayan	558
Unincorporated Areas:	55,328
Tuba City	9,022
Doney Park	5,522
Kachina Village	3,013
Kaibito	1,712
Parks	1,652
Grand Canyon Village	1,438
Leupp	1,295
Mountaineer	1,273
Fort Valley	1,195
Cameron	1,178
Moenkopi	993
Munds Park	726
Tonalea	335
Valle	185

COCONINO COUNTY POPULATION TREND



The population of Coconino County has grown 3.1% since 2010 and is estimated to continue to increase through 2020 at a rate of (4.1%).

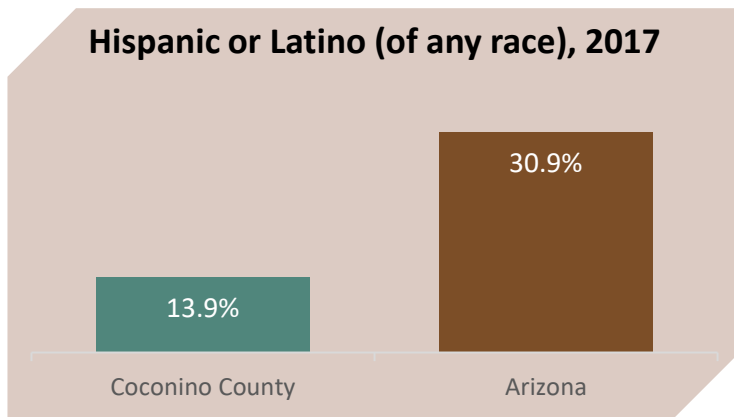
1- US Census Bureau
 2- American Community Survey, US Census Bureau 5-year estimates
 3- Arizona Office of Economic Opportunity
 4- Coconino County GIS



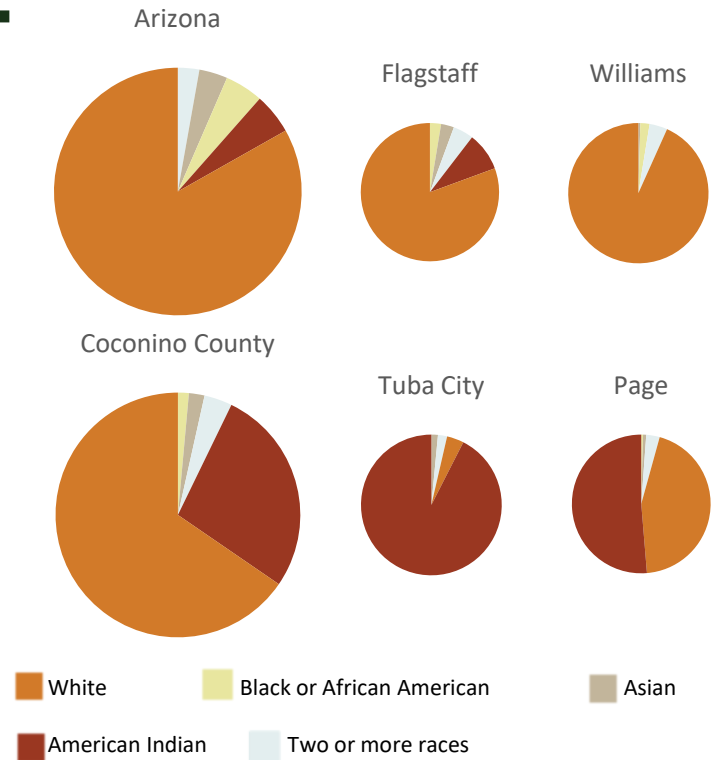
Race and Ethnicity

Coconino County's population is made up of 63.6 % White residents, 26.6% Native American residents, 1.4% Black or African American residents, 2% Asian, Native Hawaiian or other Pacific Islander residents, and 6.4% residents of two or more races. The proportion of race and ethnicity in Coconino County differs from Arizona, and widely throughout the county. Proportions of non-white races are higher in regions such as Tuba City and Page.

In 2017, the ratio of Hispanic/Latino persons to Non-Hispanic/Latino persons is lower in Coconino County (13.9%) than Arizona as a whole (30.9%).

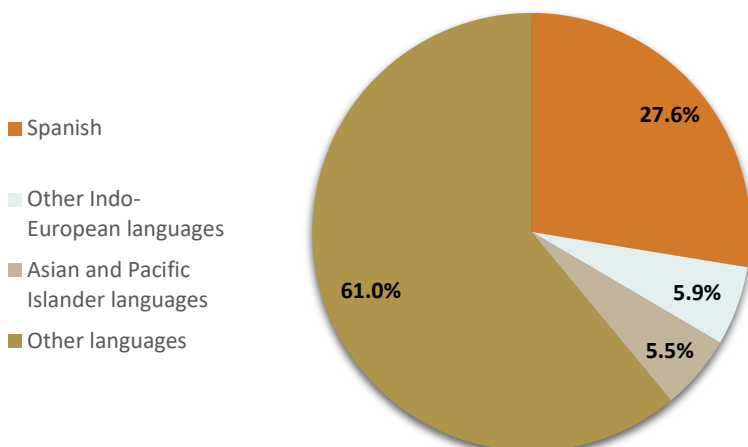


Race Proportion Comparisons, 2017



The proportion of race and ethnicity in Coconino County differs from Arizona, and widely throughout the county.

Languages Spoken Other Than English In Coconino County, 2017



Language

An estimated 76.1% of Coconino County residents speak English at home, while 23.9% of Coconino County residents speak a language other than English. Of these, 27.6% speak Spanish and 61.0% speak a language other than Spanish, Asian and Pacific Islander languages. Approximately 10.7% of residents report speaking English less than "very well".

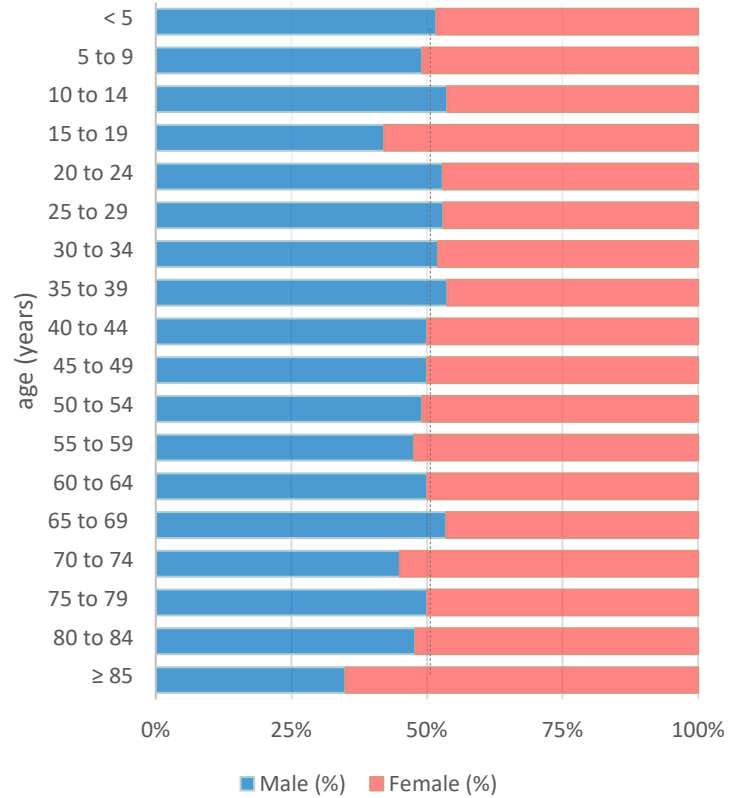


Age and Gender



Age groups from 15 to 24 years make up 31.2% of Coconino County's population in 2017

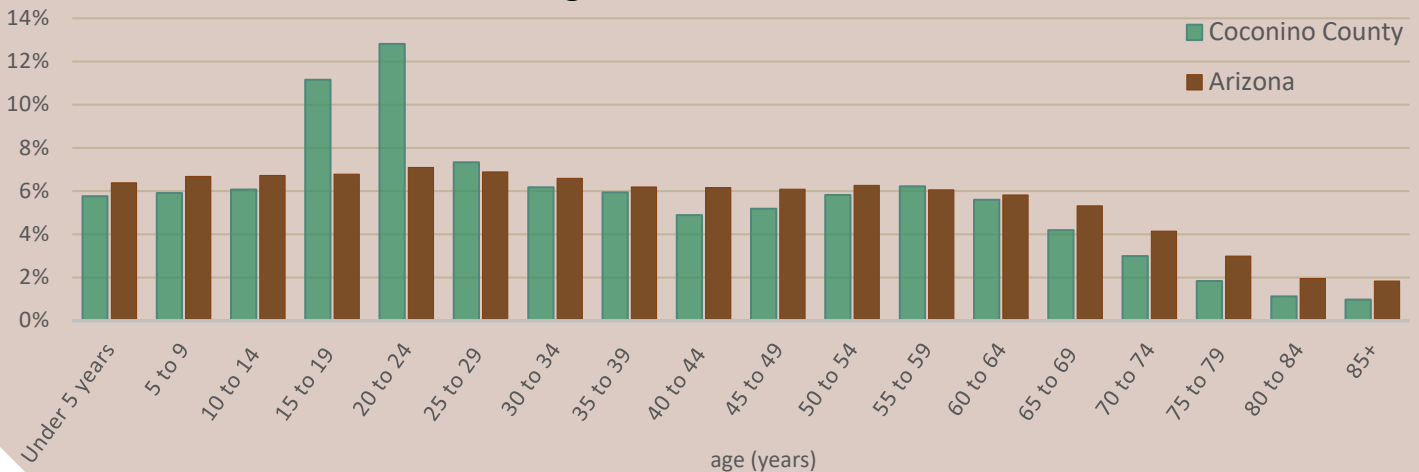
Ratio of Gender by Age for Coconino County, 2017



In Coconino County, females outnumber males overall. Most age groups include more women than men, especially age groups 15 to 19 and over 85 years. Males outnumber females in seven age groups, with the highest 65-69 years.

Compared to statewide population distributions, Coconino County's population consists of relatively smaller proportions in all age groupings except in the age groups 15 to 19, 20 to 24, and 25 to 29, which constitute a significantly higher proportion of the population than Arizona as a whole.

Age Distribution, 2017



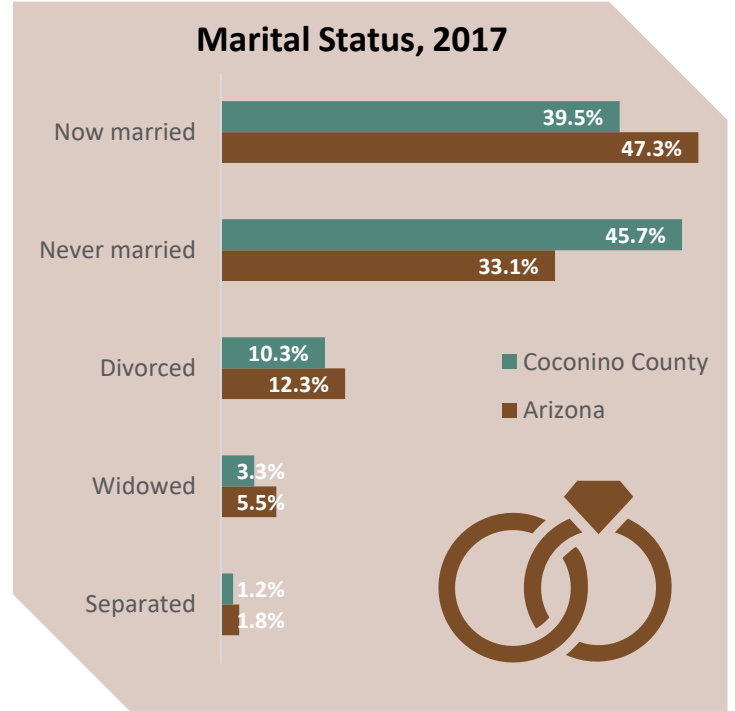


Families

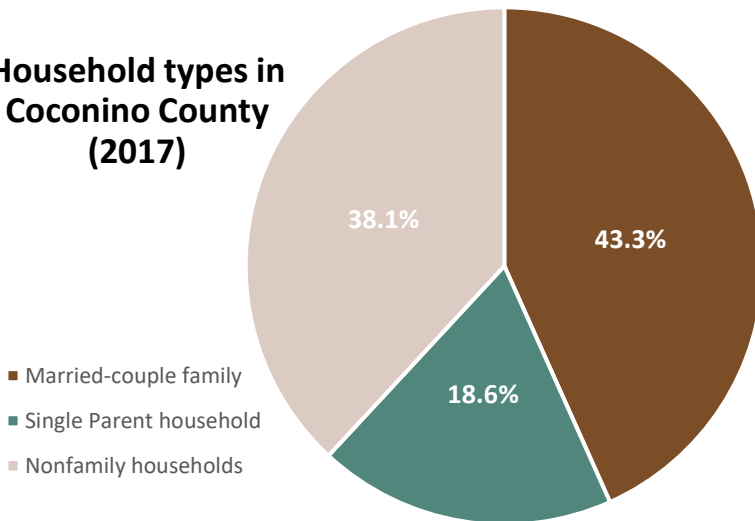
The majority of Coconino County residents in 2017 were never married (47.3%). The non-married population in Coconino County comprised a higher proportion of the population than that of Arizona (33.1%). The percent of those with a status of currently married in 2017 was only 39.5% in Coconino County, compared to 47.3% throughout Arizona. This could be attributed to the larger proportion of younger residents living in Coconino County compared to the whole state.

The proportion of residents that in 2017 were divorced, widowed, or separated was similar between the County and State.

Nearly half of Coconino County residents in 2017 have never been married



Household types in Coconino County (2017)



The average household and family size were similar between Arizona and Coconino County. In 2017, Arizona had an average household size of 2.68 people and an average family size of 3.29 people, whereas Coconino's averages were 3.23 and 2.65 people, respectively.

In Coconino County in 2017, married-couple family households dominated household types at approximately 43.3%. This was followed by non-family households at 38.1%, and then single-parent households at 18.6%.



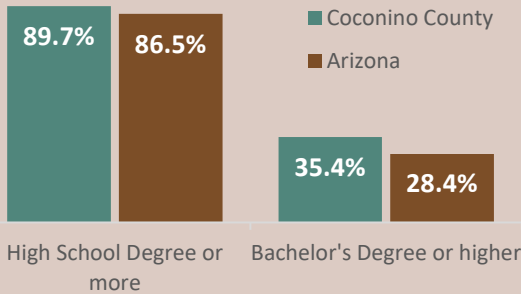


Education

Coconino County residents have overall more education than Arizona as a whole



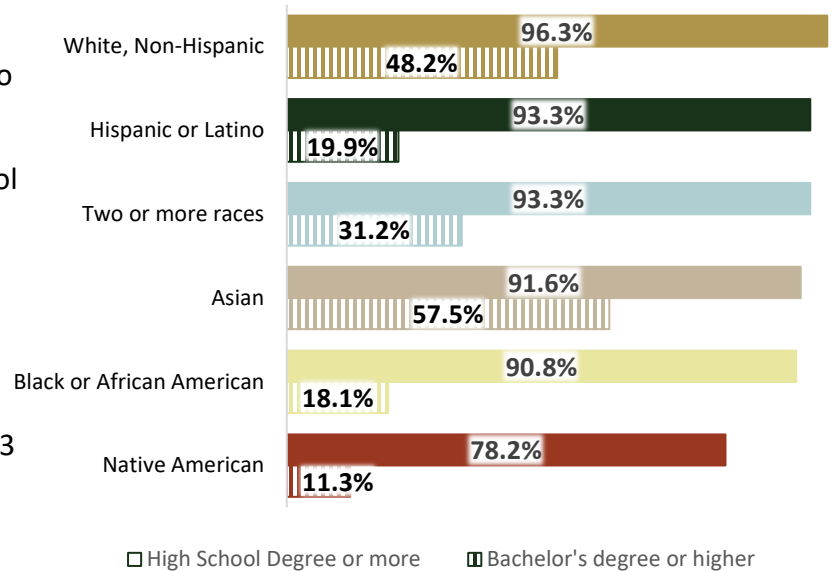
Educational attainment, 2017



In Coconino County in 2017, an estimated 90% of residents had obtained at least a high school diploma, and over one-third of residents had obtained a bachelor's degree or more. Both of these are higher than Arizona as a whole.

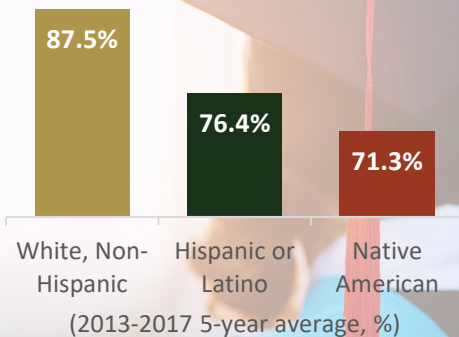
Native Americans in Coconino County are estimated to have the lowest attainment of education with 78.2% having completed a minimum of high school. At least ninety percent of all other races achieved a high school education. Asian residents have the highest rate of a bachelor's degree or higher (57.5%), followed by White, Non-Hispanic residents (48.2%). Native Americans and Black/African American of Coconino County have the lowest rates of higher education, at 11.3 percent and 18.1 percent, respectively.

Educational Attainment by Race, Ethnicity, 2017



The average graduation rate of students between 2013 and 2017 was the highest in White, Non-Hispanic students (87.5%). About three in every four Hispanic/Latino and Native American students graduated high school in that time period.

High school graduation rates in Coconino County students



The higher the formal educational attainment in the population, the better the health is likely to be in that population. Preventing dropout and encouraging formal education, concentrating on low-income and racial minorities, would help residents foster social support and mitigate stressors boosting health benefits. More formal education has a positive effect on one's health associating with factors such as lower death rates, lower levels of risky behaviors, and increased income. This means that residents with higher education levels are less likely to smoke, be obese, or have a low level of physical activity, consequently evading chronic disease and infectious diseases. It is arguable that education level is the strongest predictor of health.

1- American Community Survey, US Census Bureau 5-year estimates

2- Arizona Department of Education

3- Freudenberg N, Ruglis J. Reframing school dropout as a public health issue. *Prev Chronic Dis* 2007;4(4). http://www.cdc.gov/pccd/issues/2007/oct/07_0063.htm. Accessed [Oct 16, 2019].

Leading Causes of Death



The top ten leading causes of death accounted for 75% of all deaths in Coconino County in 2018.

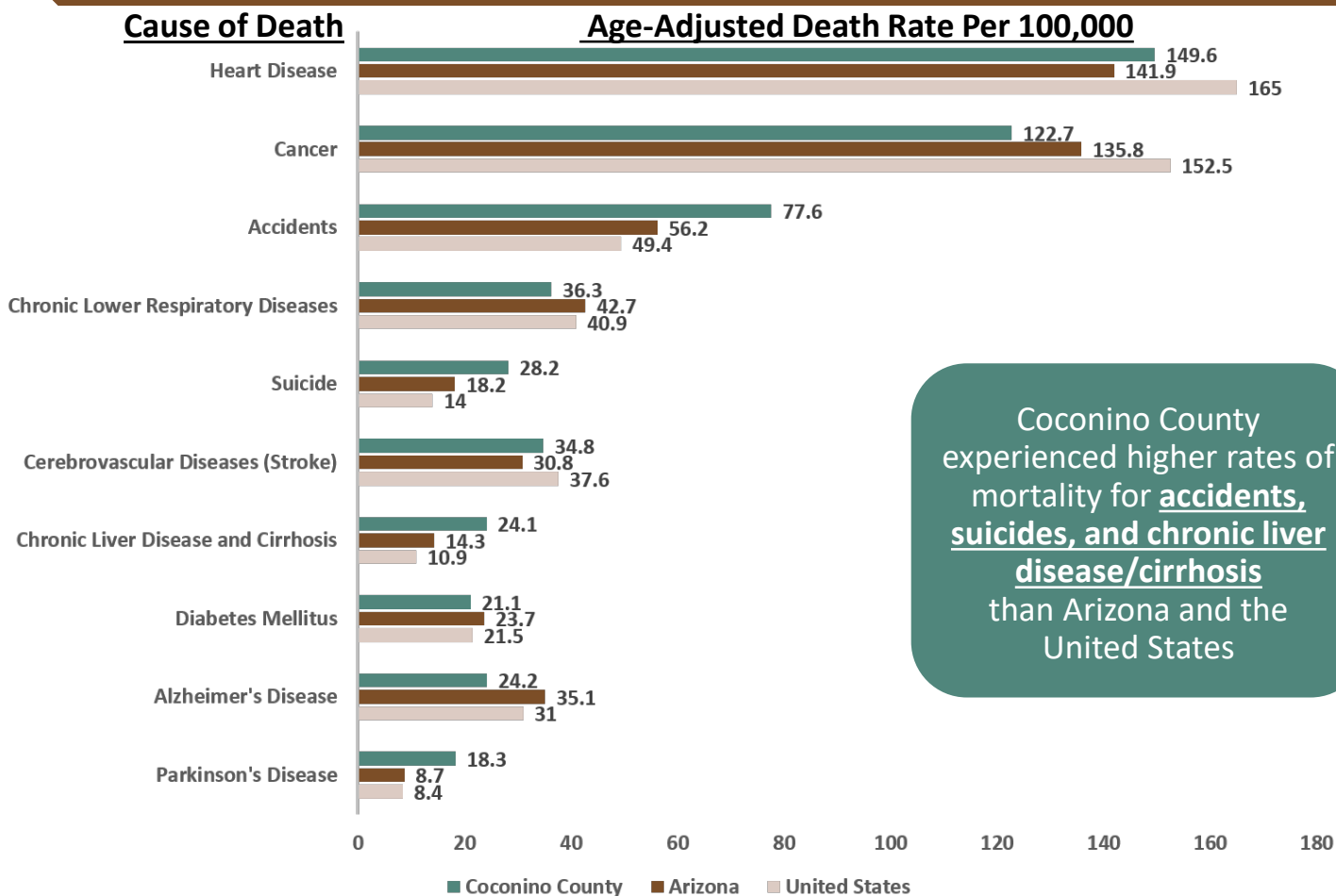
From 2014-2018, the top three causes of death have been heart disease, cancer, and accidents. The biggest ranking changes were death by suicide (6th to 4th) and chronic liver disease/cirrhosis (9th to 5th). Causes of death are ranked according to the number of deaths each year.

Leading Causes of Death in Coconino County (2018)

- ↑ Rate increased from 2017
- ↓ Rate decreased from 2017

1. ↑ Cancer
2. ↓ Heart Disease
3. ↓ Accident
4. ↑ Suicide
5. ↑ Chronic Liver Disease & Cirrhosis
6. ↓ Chronic Lower Respiratory Diseases
7. ↓ Stroke
8. ↑ Alzheimer's Disease
9. ↑ Diabetes
10. ↑ Kidney Diseases

Leading Causes of Death in Coconino County (2017)



Coconino County experienced higher rates of mortality for accidents, suicides, and chronic liver disease/cirrhosis than Arizona and the United States

Leading Causes of Death



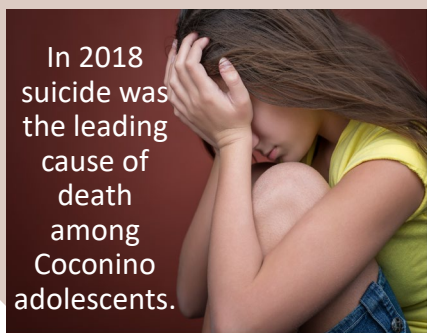
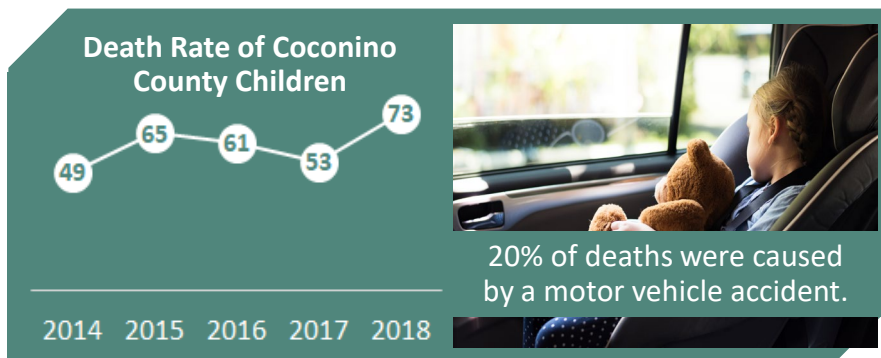
Coconino County has the youngest median age of any county in Arizona

In order to support Coconino County residents at every stage of their lives, analysis of mortality by residents' age highlights the need for age-specific targeted interventions. Of interest are the health risks impacting Coconino County's youth due to high rates of preventable deaths coupled with high number of years of potential lives lost (YPLL). Additionally, with a median age of 30.6 years-old, 42% of Coconino County residents are less than 25 years-old. Thus, interventions designed to impact these populations may not produce high-yielding results but would impact a large portion of the population. The following highlights the leading causes of death of residents at five life stages: children (0 to 14 years-old), adolescents (15 to 19 years-old), young adults (20 to 44 years-old), middle-aged adults (45 to 64 years-old), and the elderly (65 years and older).

Mortality by Age

Children (0-14 years)

In 2017, the death rate of children in Coconino County was 1.5% higher than Arizona and the United States. Children less than 1-year-old accounted for 59% of Coconino County children deaths from 2014-2018. These deaths were primarily caused by conditions originating in the perinatal period. For children aged 1-14 years-old, the leading cause of death was motor vehicle accidents.



In 2018 suicide was the leading cause of death among Coconino adolescents.

Death Rate of Coconino Adolescents (2017)

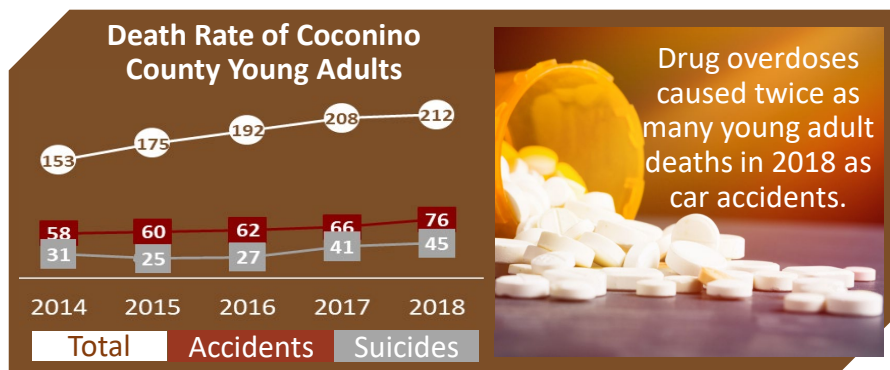


Adolescents (15-19 years)

In 2017, the death rate of adolescents in Coconino County was 37% higher than Arizona, reflecting a statewide trend of increased adolescent mortality in rural communities. From 2013 to 2018, 69% of deaths were caused either by an intentional or unintentional injury. Although motor vehicle accidents were the leading cause of death between 2013-2016, starting in 2017, suicide became the leading cause of death among adolescents.

Young Adults (20-44 years)

From 2014 to 2018, the death rate of Coconino County young adults increased by 38%. While most deaths were caused by accidents (36%) in 2018, the rate of death by suicide increased the most since 2014. The third and fourth leading causes of death were liver disease/cirrhosis and assault, respectively. In 2017, the death rate of young adults in Coconino County was 32% higher than Arizona and 40% higher than the U.S.



1- Murphy SL, Xu JQ, Kochanek KD, Arias E. Mortality in the United States, 2017. NCHS Data Brief, no 328. Hyattsville, MD: National Center for Health Statistics. 2018.

2- Coconino County Health and Human Services Medical Examiner's Office

3- Centers for Disease Control and Prevention National Vital Statistics Report

4- Arizona Department of Health Services Advanced Vital Statistics Report

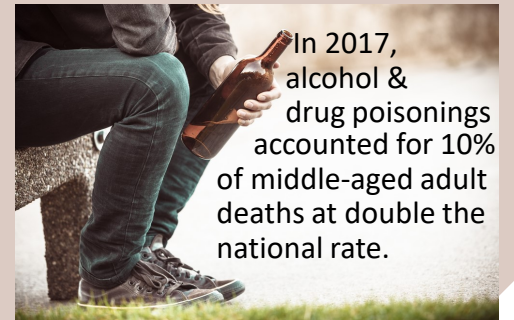
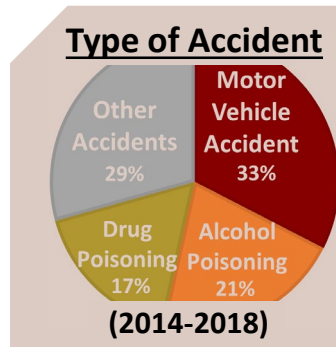
Leading Causes of Death



Mortality by Age

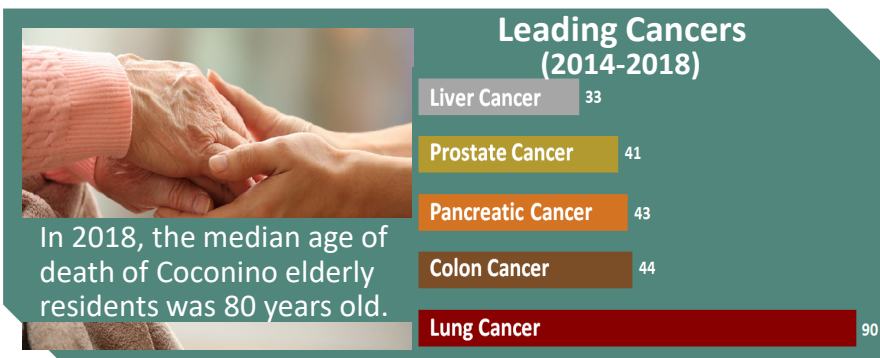
Middle-Aged Adults (45-64 years)

In 2018, the leading cause of death among middle-aged adults in Coconino County was cancer, followed by accidents, heart disease, liver disease, and diabetes. Although the death rate in 2017 among Coconino County middle-aged adults was 11.5% less than the national rate and 9.3% less than the Arizona rate, Coconino County residents died from accidents and liver disease at nearly double the national rate. From 2014 to 2018, the Coconino County middle-aged adult death rate increased 13.8%.



In 2017, alcohol & drug poisonings accounted for 10% of middle-aged adult deaths at double the national rate.

Elderly (65+ years)



In 2018, the median age of death of Coconino elderly residents was 80 years old.

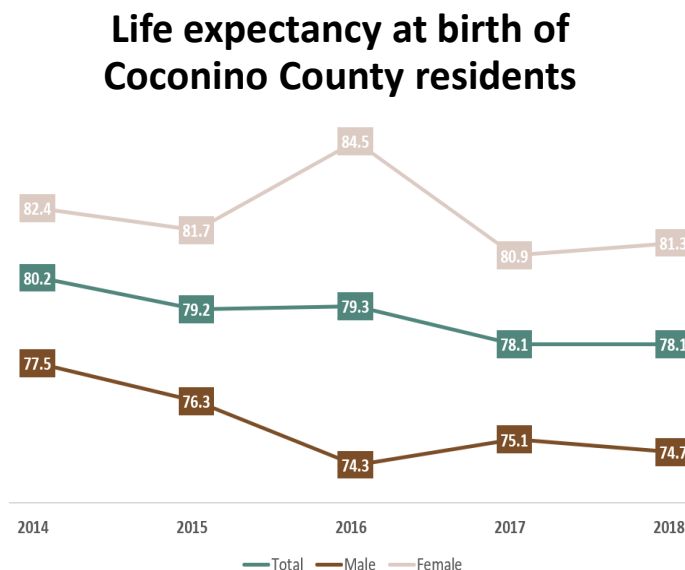
From 2014 to 2018, the death rate of elderly Coconino County residents increased 13.5%, primarily due to a 43% increase in cancer deaths. However, the median age of death of this group remained around 80 years old. In 2018, the top five leading causes of death were: cancer, heart disease, Alzheimer's disease, stroke, and chronic lower respiratory disease. Although the rankings have changed places over the past five years, the top five causes have remained the same.

Mortality by Sex

Female Leading Causes of Death (2018)

1. Cancer
2. Heart Disease
3. Alzheimer's Disease
4. Stroke
5. Chronic Lower Respiratory Disease

Median age of death is 76



Male Leading Causes of Death (2018)

1. Cancer
2. Accidents
3. Heart Disease
4. Suicide
5. Liver Disease/Cirrhosis

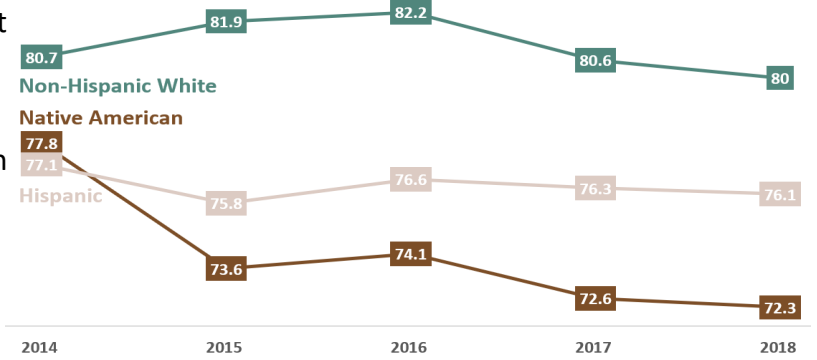
Median age of death is 65

Leading Causes of Death



Improving the health of racial and ethnic minorities is a continued public health priority and crucial in the pursuit of health equity. By examining disparities in causes and rates of death among the three largest racial/ethnic communities in Coconino County (**non-Hispanic whites**, **Hispanics**, and **Native Americans**), specific inequities can be identified for future interventions.

Life Expectancy at Birth



Median Age of Death (2018)

Non-Hispanic White	Hispanic	Native American
73	73	62

Mortality by Race/Ethnicity

Native American

In 2017, the age-adjusted death rate of Native Americans was 6% higher than non-Hispanic whites in the U.S. and 47% higher in Arizona. Comparatively, Native Americans in Coconino County died at a rate 50% higher than non-Hispanic white residents and 27% higher than the national Native American death rate. From 2014 to 2018, the death rate for this community has increased 38% (736 to 1018 per 100,000). In this timeframe, accidents have remained the leading cause of death.

Leading Causes of Death (2018)

- | Leading Cause | Change Since 2014 |
|------------------------------------|-------------------|
| 1. Accidents | ↑ 13% |
| 2. Cancer | ↑ 144% |
| 3. Heart Disease | ↑ 15% |
| 4. Chronic Liver Disease/Cirrhosis | ↑ 189% |
| 5. Suicide | ↑ 138% |



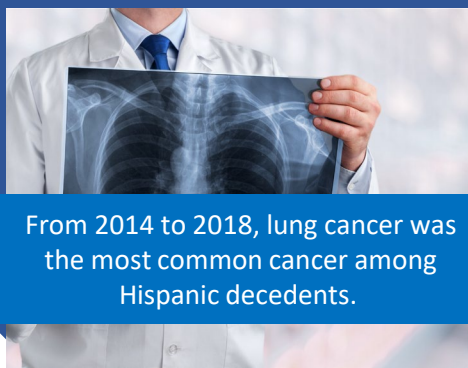
Among accidental deaths, motor vehicles accounted for 33% and alcohol poisoning accounted for 22%.

Hispanic

From 2014 to 2018, the death rate among Hispanic residents increased 51% (475 to 717 per 100,000). Although changing positions, the top three leading causes of death have remained the same, with cancer and heart disease driving the large increase. Both the national and state death rates among Hispanics have decreased over the past 5 years. In 2017, the death rate of Hispanic residents was 28% higher than the national rate and 14% higher than the Arizona rate.

Leading Causes of Death (2018)

- | Leading Cause | Change Since 2014 |
|------------------------------------|-------------------|
| 1. Cancer | ↑ 122% |
| 2. Heart Disease | ↑ 100% |
| 3. Accidents | ↓ 25% |
| 4. Diabetes | ↑ 150% |
| 5. Chronic Liver Disease/Cirrhosis | ↑ 33% |



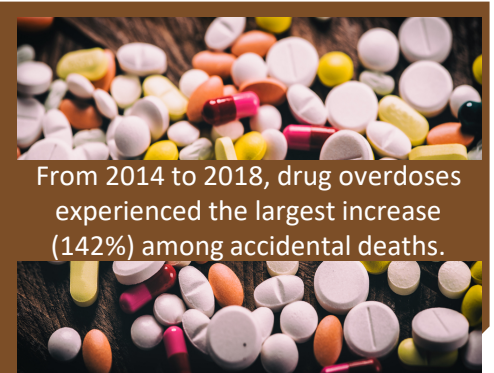
From 2014 to 2018, lung cancer was the most common cancer among Hispanic decedents.

Non-Hispanic White

From 2014 to 2018, the death rate of non-Hispanic white residents increased 7% (624 to 669 per 100,000). The causes that had the largest increase were Alzheimer's Disease, suicide, and stroke. Although at different positions, the top five leading causes of death in 2018 were the same as 2014. In 2017, non-Hispanic white residents had a death rate approximately the same as Arizona and 10% lower than the national rate.

Leading Causes of Death (2018)

- | Leading Cause | Change Since 2014 |
|--------------------------------------|-------------------|
| 1. Cancer | ↑ 20% |
| 2. Heart Disease | ↓ 10% |
| 3. Accidents | ↑ 41% |
| 4. Chronic Lower Respiratory Disease | ↑ 15% |
| 5. Alzheimer's | ↑ 87% |

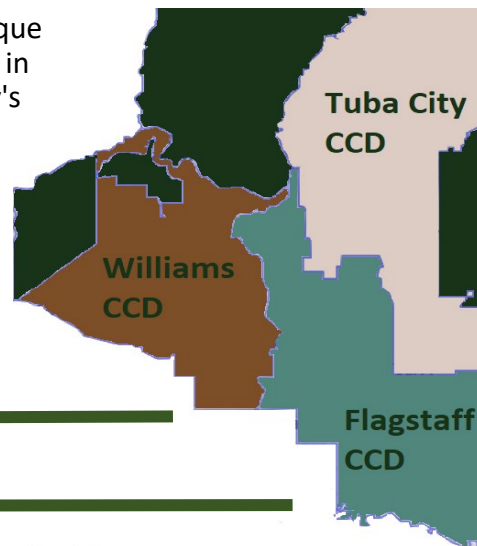


From 2014 to 2018, drug overdoses experienced the largest increase (142%) among accidental deaths.

Leading Causes of Death



Due to the geographic expanse of Coconino County, each community has unique dynamics, resources, and needs. These differences can translate to inequities in health outcomes as well as the resources available to address the community's needs. By examining disparities in causes and rates of death among the three largest Census County Divisions (CCD) in Coconino County (**Flagstaff**, **Tuba City**, and **Williams**), specific inequities can be identified for future interventions.



2018 Death Rate

Flagstaff CCD	Tuba City CCD	Williams CCD
529	746	884

Mortality by Residency

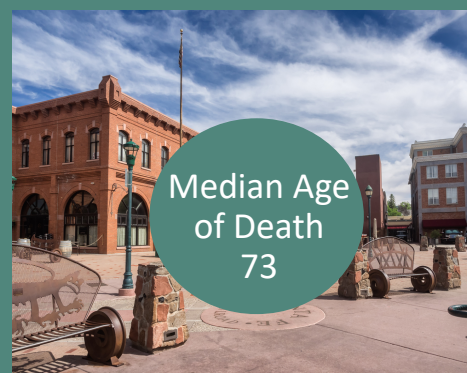
Flagstaff CCD

The Flagstaff CCD includes the Coconino County's most populous city, Flagstaff, where 50% of the county's population lives. It has the lowest median resident age of the three CCDs, 29.1 years, and the highest percentage of residents with a high school diploma or higher. (93.5%). Approximately, 18.2% of residents are living below federal poverty level and the annual income per capita is \$28,857. From 2014 to 2018, the death rate increased 17%, with suicide being the primary driver, growing 121%.

Leading Causes of Death (2018)

Rate per 100,000

1. Cancer	119
2. Heart Disease	92
3. Accidents	42
4. Suicide	33
5. Cerebrovascular Disease (Stroke)	30



Median Age of Death
73

Leading Causes of Death (2018)

Rate per 100,000

1. Accidents	140
2. Cancer	107
3. Heart Disease	91
4. Chronic Liver Disease/Cirrhosis	52
5. Diabetes	33



Median Age of Death
65.5

Tuba City CCD

The Tuba City CCD is home to 24% of county residents and contains Coconino County's second and third most populated cities, Tuba City and Page. The annual per capita income is lowest of the three CCDs, at \$15,632, and approximately 29.2% of residents live below the federal poverty line. A majority of the land is within the Navajo Nation, and 84% of residents are Native American. From 2014 to 2018, the death rate increased 21%. Chronic liver disease/cirrhosis experienced the largest mortality increase, growing 183% over 5 years.

Leading Causes of Death (2018)

Rate per 100,000

1. Cancer	284
2. Heart Disease	120
3. Accidents	76
4. Chronic Lower Respiratory Disease	66
5. Alzheimer's	55



Median Age of Death
69

Williams CCD

Containing both the Kaibab National Forest and portions of the Grand Canyon National Park, the Williams CCD has the smallest population of the three geographic regions. With 6% of the population and 21% of the land, the population density is 2.3 residents per square mile. The median age of Williams CCD residents is 52.3 years, and approximately 17.9% live below the federal poverty line. From 2014 to 2018, the death rate grew 9%, primarily driven by the 100% increase in cancer mortality.

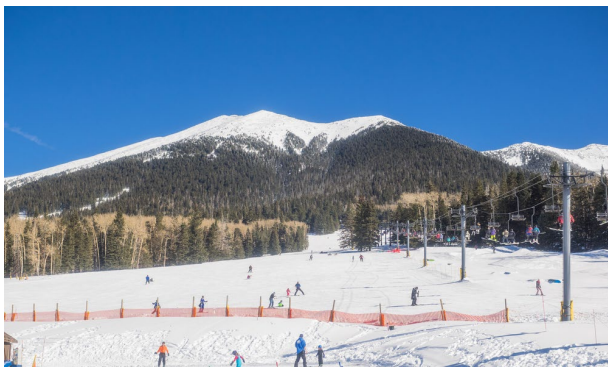
Unique Populations



Tourism

In 2017, it was reported that tourism provided \$403 million to Coconino County and 13,200 jobs. Popular sites and the estimated visitors for January through June in 2017 and 2018 can be viewed in the table below. Other attractions in Coconino County that entice tourists include local breweries and restaurants, hiking trails, holiday spectaculars like the Polar Express in Williams, AZ or Flagstaff's 4th of July Parade, historic downtowns, and the famous stops along Route 66.

State Parks	2017	2018	National Parks	2017	2018
Riordan Mansion SHP	10,010	9,559	Glen Canyon NRA	1,729,179	1,668,484
Slide Rock	226,333	227,823	Grand Canyon NP	2,882,164	2,928,118
Airports			Sunset Crater Volcano NM	52,833	55,173
Flagstaff Pulliam Airport	65,887	69,401	Walnut Canyon NM	80,928	93,437
			Wutpatki NM	106,091	102,373



Tourism to Coconino County in 2017 provided \$403 million and 13,200 jobs



Between Sept 2017 and Aug 2018, visitors to the county seat, Flagstaff, were surveyed on their travel plans for Flagstaff and Coconino County. In-state visitors to Flagstaff made up 29.8% of surveyed visitors, 57% were from out of state (California, Texas, Illinois and others) and 13% were international visitors (from locations such as Canada, UK, and Australia). Many in-state

travelers were from Maricopa and Pima counties. Surveyed visitors were almost split on number of times they had visited Flagstaff, with 49% being repeat visitors. The top reason for the visit was leisure (72%), followed by passing through (13%). Smaller amounts indicated that their purpose of travel was for business or to visit a second home.

Primary destinations for visitors were Grand Canyon National Park (30.6%), Phoenix (14.0%), Sedona (11.4%), or no particular destination (7.3%). Around two-thirds of visitors stayed overnight, while the others were there for a day trip. When asked about lodging plans, most stayed at a hotel or motel, but a growing number of visitors utilized short-term rentals such as Airbnb and VRBO. In a 2018 report, Coconino County had 1,735 short-term rental sites, ranking number 3 in Arizona. Top reasons for visiting Coconino County and the Flagstaff area include the Grand Canyon National Park, museums and observatories, a Route 66 experience, and to experience the area's outdoors offerings, climate, and food establishments.

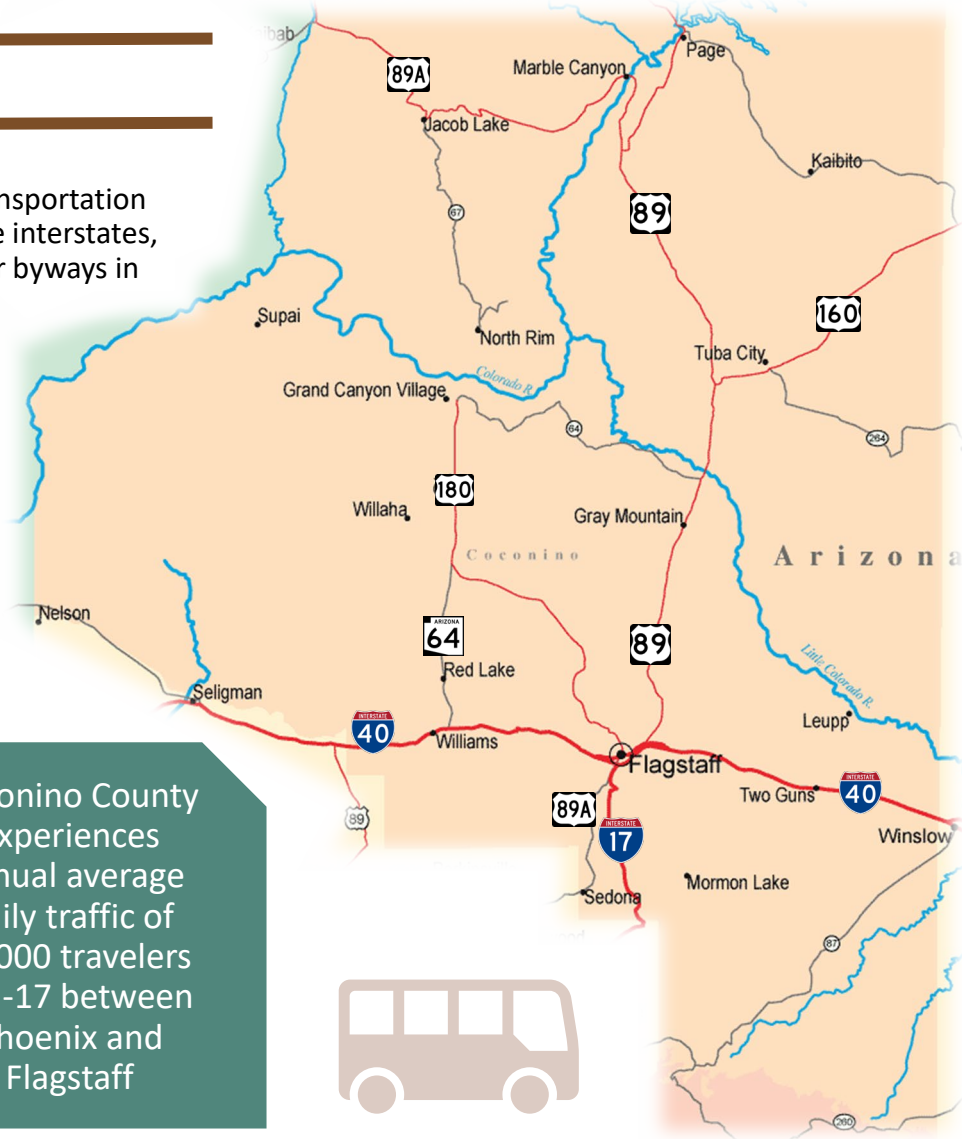
In 2018, Coconino County had 1,735 AirBNB and VRBO sites, ten percent of the short-term rentals in Arizona

Unique Populations



Interstate Travelers

A 2017 report by the Arizona Department of Transportation estimated the annual average daily traffic for the interstates, State Routes and US highways for Arizona. Major byways in Coconino County include I-40, I-17, US-89, US-89A, US-160, US-180, and SR-64. Interstate 40 travels through Arizona between Needles, CA to Gallup, NM, passing through cities like Flagstaff and Williams within Coconino County. Annually, over 15,000 travelers drive along I-40 through Coconino County daily. Between Flagstaff and Page runs US-89, which connects Utah to I40, I-17 (beginning in Phoenix), and US-160 (to Colorado); this area experiences an annual average daily traffic of 10,000 travelers.



Coconino County experiences annual average daily traffic of 19,000 travelers on I-17 between Phoenix and Flagstaff

The US-89A that branches from US-89 to through Fredonia to the Utah border has 2,000 annual average daily travelers. South, SR-89A between Sedona and Flagstaff experiences an annual average daily traffic of 9,000 drivers. Many residents and travellers journey between Tuba City and the rest of Coconino County; the US-160 experiences an annual average daily traffic of 6,000 drivers between US-89 and Tuba City. Between Flagstaff and the gateway to the Grand Canyon (Valle), US-180 sustains an annual average daily traffic of 6,000 drivers. Alternately, SR 64 between Williams and Grand Canyon National Park experiences a daily annual average of 6,000 drivers. I-17 connects the Phoenix Metropolitan area with Coconino County and is frequented by tourists and commuters. Within Coconino County, I-17 from the county border to I-40 in Flagstaff experiences an annual daily average of 19,000 drivers.



1- Arizona Department of Transportation
2- 2017-2018 Flagstaff Visitor Study

Unique Populations

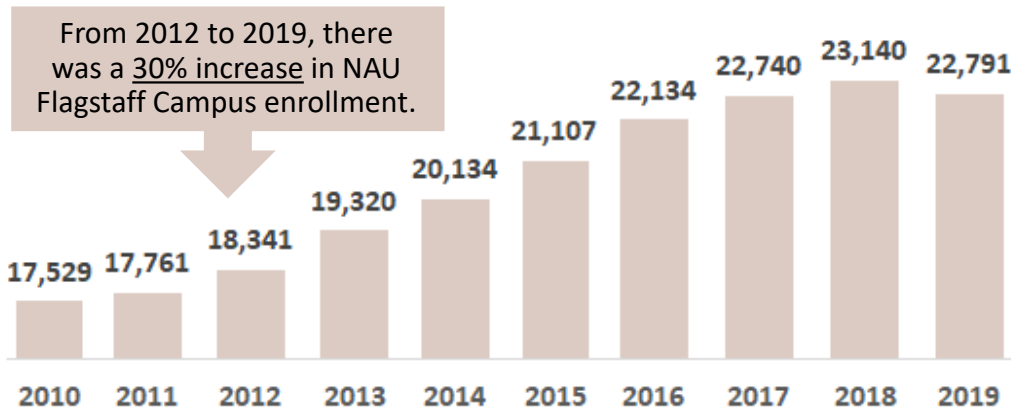


Higher Education

Coconino County has a large proportion of young adults enrolled in a college or graduate school. **68% of residents aged 18-24 years old are college students.** The largest higher education institutions in Coconino County are Northern Arizona University and Coconino County Community College.

Northern Arizona University (NAU), founded in 1899, is located in Flagstaff and has various satellite locations throughout the county and the state. NAU offers 95 undergraduate programs, 47 undergraduate certificates, 76 graduate degree programs, and 30 graduate certificates. In the 2019 Fall Semester, NAU had 30,736 students enrolled across all its campuses.

NAU Flagstaff Campus Fall Semester Student Enrollment



NAU Student Characteristics (Fall Semester 2019)

62%
Female

78%
Full-Time
Students

55%
Non-Hispanic
White

65%
Arizona
Residents

As reported by the 2017/2018 Arizona COG/MPO Employer Database, NAU employs 3,500 people, making it the largest employer in Coconino County. In fiscal year 2019, NAU had a total positive net position of \$259.6 million, a \$16.8 million increase from the prior year. The campus is 683 acres and the average cost estimated for an on-campus Undergraduate Arizona Resident for two semesters in 2019-2020 was \$28,150.

Coconino Community College (CCC) is also located in Flagstaff with an instructional site in Page. CCC offers 27 associates degrees and 21 certificates. On average CCC serves 8,500 students annually across its three sites as well as through online and interactive television classes. Founded in 1991, CCC has a diverse student population. Approximately 70% of CCC students are employed while they are taking classes and 17% are

single parents. CCC also contributes to one of the leading industries in Coconino County, healthcare, with 80% of their nursing graduates working in Coconino County and 90% of Coconino County firefighters and first responders receiving training at CCC.



Degrees offered by NAU and CCC encourage an increase in local workforce for professions such as nurses, teachers, and dental hygienists. Additionally, education is the fourth largest industry in Coconino County, employing 7,280 people based on 2017 estimates.



Story of the Havasupai



People of the Blue Green Water

Havasupai means “people of the blue green water”. The Havasupai people have dwelt in the Grand Canyon for over 1,000 years, practicing summertime irrigated farming in the canyons and wintertime hunting on the rims of the Grand Canyon.

The Havasupai Tribe Reservation consists of 167,000 acres of canyon lands and broken plateaus of the Grand Canyon’s south rim. The reservation was established in 1880 and substantially enlarged in 1975 through the Grand Canyon Enlargement Act. The tribe is known for its location, traditional cultural life, and beautiful arts and crafts.



Beaver Falls

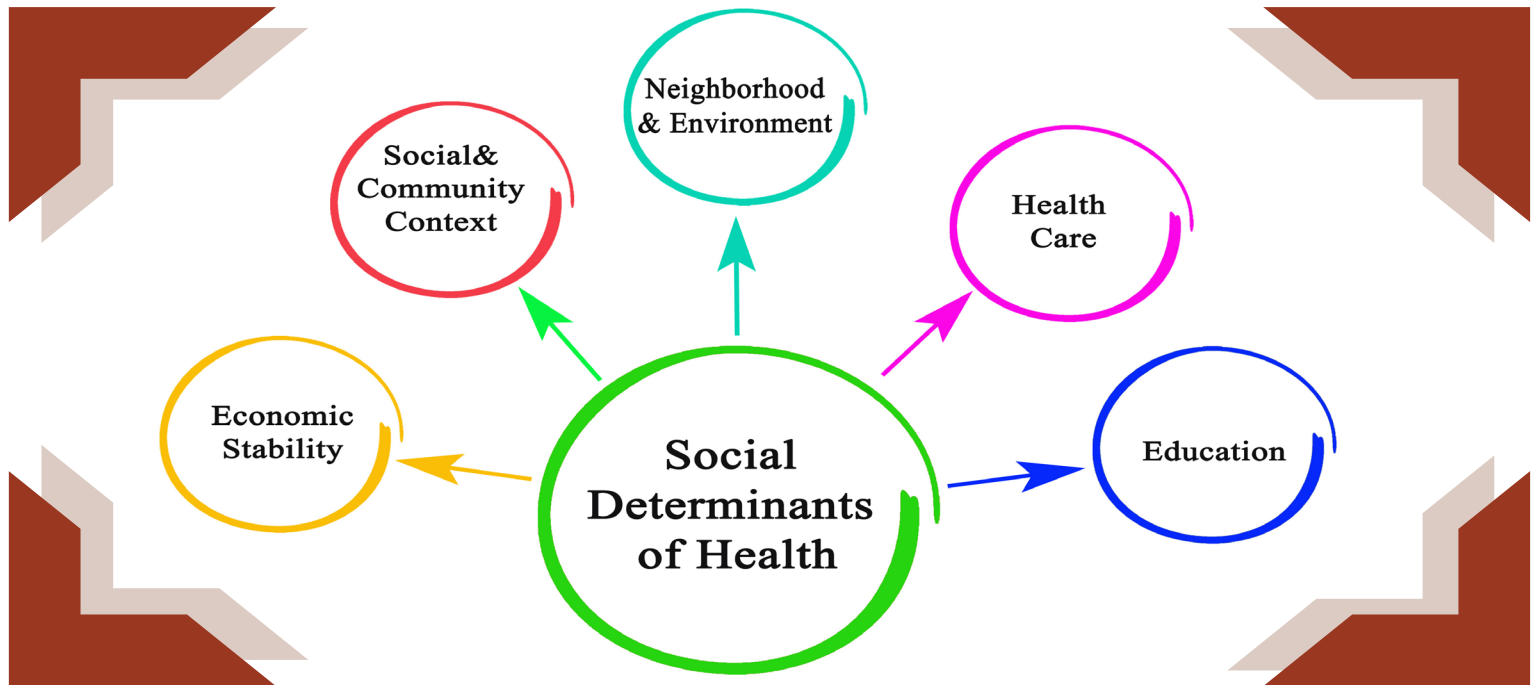


Currently, the Havasupai Tribe consists of about 730 members, of which about 400 live on the reservation. Supai is the capital of the Havasupai Indian Reservation, located at the bottom of the Grand Canyon which can be accessed via an 8-mile trail.

What Influences Our Health?



When examining the health of a community it is important to look beyond morbidity and mortality trends and consider what is at the root of these observed health trends. The social determinants of health are conditions in which people live that impact their health outcomes. They are typically separated into five categories: economic stability, social/community context, neighborhood/environment, health care, and education. These determinants work together to influence a person's quality of life and impact life expectancy.



Among counties in Arizona, Coconino had the 9th lowest life expectancy and the 8th highest percentage of people living in poverty.



"The **richest 1%** of Americans can expect to live as many as **14 years longer** than the **poorest 1%** of Americans."



– Journal of the American Medical Association

Beyond professional recognition of the social determinants of health, Coconino County residents also recognize the role the social determinants of health play in their community. In the 2019 Community Health Survey administered by the Coconino County Health and Human Services, respondents stated that the top three socio-environmental circumstances most responsible for health issues in the community were: lack of affordable housing, poverty, and health care costs.

The following section will explore the community and environment that surround Coconino residents. This will include an examination of poverty rates, income, employment, education, health insurance coverage, and household characteristics. By exploring these features, the Coconino County Community Health Assessment will provide some context to the health trends and outcomes impacting its residents.

1 in 5 Coconino County **children** are living below the federal **poverty** line.

1- American Community Survey, US Census Bureau 5-year estimates

2- Community Health Survey. Coconino County Health and Human Services. 2019

3- Journal of the American Medical Association

4- Krisberg, K. (2016). News From The Nation's Health. *American Journal of Public Health*, 106(12), 2088-2088. doi:10.2105/ajph.2016.303495



Income and Employment

The median household income in 2017 was similar to Arizona's as a whole. Income does vary between cities and regions.

Generally, median income is on the rise for all locations since 2014. The median income in Williams and Tuba City declined between 2014-2016 before increasing again in 2017.

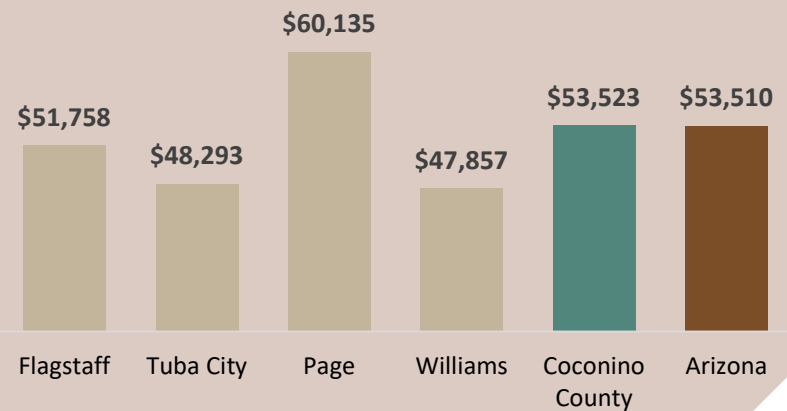
Unemployment in Coconino County has declined since 2013, reported to be less than 6% by the end of 2017. Trends from 2013 to 2017 show that the unemployment rate in Arizona was generally lower than that in Coconino County, but the Flagstaff metropolitan area boasted an unemployment rate lower than both.

Compared to other counties in Arizona, Coconino County ranked 9th in lowest unemployment rate at the end of 2017.

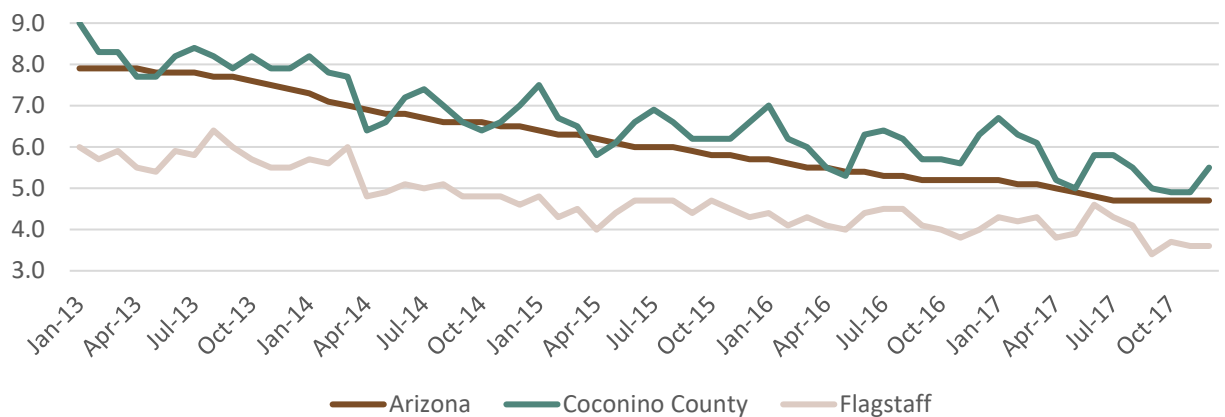
According to the CDC, unemployed adults are three times more likely to experience depression than adults who are employed.

Median household income is similar between Coconino County and Arizona, but average annual income for an individual in 2017 was \$50,147 for Arizona and \$42,266 for Coconino County

Median Household Income in 2017



Unemployment Rate Trend, 2013-2017



According to a community survey that received two-hundred seventeen (217) responses, 16% of those participants **live paycheck to paycheck**. Although the unemployment rate has dropped by roughly 3% from 2013-2017, 40% of the respondents of the community survey think there are not enough **jobs available** in this community. Page participants have acknowledged and expressed appreciation of the amount of income they receive from tourism each year.

1- US Bureau of Labor Statistics
 2 -CDC [Unemployment and Depression Among Emerging Adults in 12 States, Behavioral Risk Factor Surveillance System, 2010 \(cdc.gov\)](http://www.cdc.gov)
 3- US Department of Labor
 4- American Community Survey, US Census Bureau 5-year estimates



Poverty



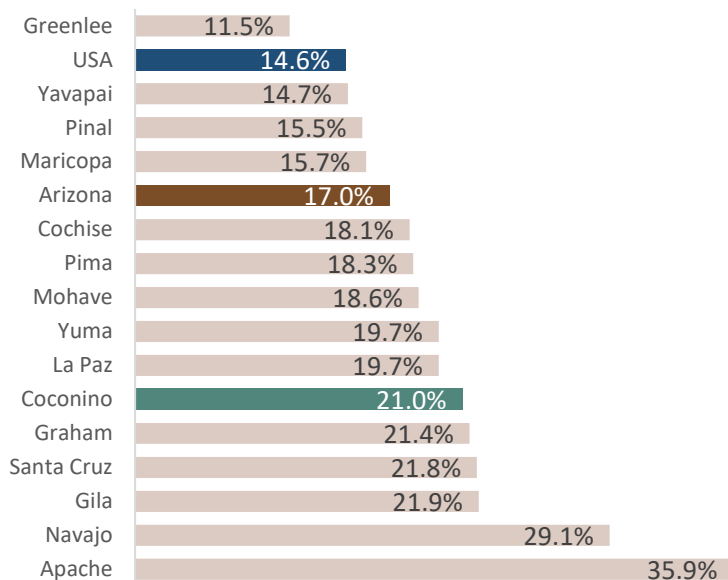
Arizona's Medicare agency, Arizona Health Care Cost Containment System (AHCCCS), offers health care programs to the state's residents who meet certain income requirements. In Coconino County (2017), approximately 29.6% of the population met the requirements to be AHCCCS eligible. Those that are AHCCCS eligible are automatically eligible for some other services, such as WIC.

In 2018, it was reported that 17,295 persons and 7,877 households were utilizing Supplemental Nutrition Assistance Program (SNAP) benefits. SNAP benefits provide supplemental healthy food products to qualifying families.

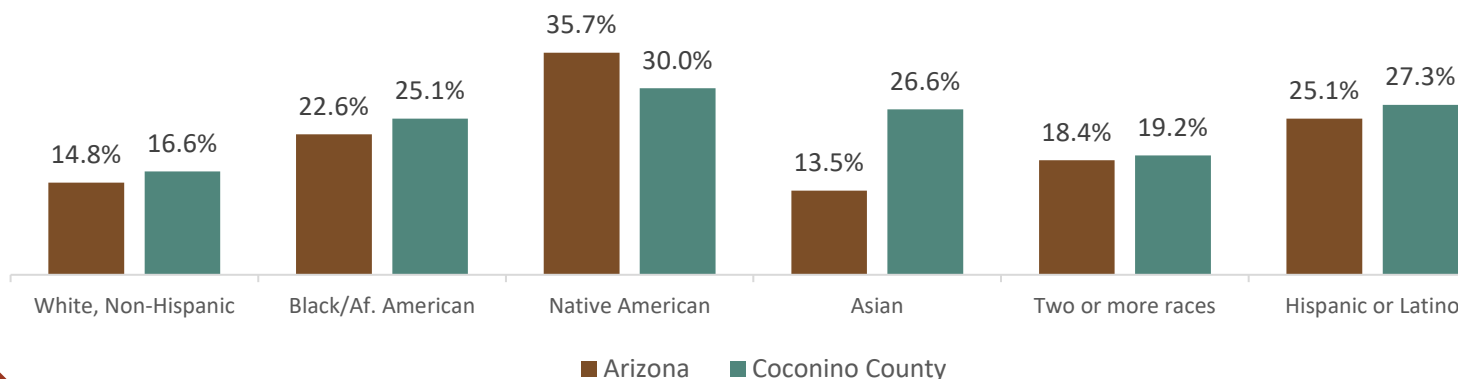
There are more people in poverty in Coconino County than in nine other Arizona counties. The population in poverty in Coconino County in 2017 was 21.0%, which was 4% higher than Arizona's population in poverty (17%).

More than one in three Native Americans in Coconino County live in poverty, higher than all other races and ethnicities, followed by Hispanic and Latino populations (27.3%). Whites have the lowest estimated percentage in poverty of any race and ethnicity in Coconino County (16.6%).

Percent of population living below the federal poverty line



Percentage of Race/Ethnicity in Poverty



Socioeconomic Characteristics



Industries

Top 5 Largest Industries in Coconino County (2017)



Manufacturing

Professional, scientific, management, administrative, waste management services

Retail

Arts, entertainment, recreation, accommodation, food service

Educational services, health care and social assistance



In Coconino County, the top 5 industries are grouped into 1) educational services, health care, and social assistance, 2) arts, entertainment, recreation, accommodation, and food services, 3) retail trade, 4) professional, scientific, management, administrative and waste management services, and 5) manufacturing.

Education, health care, and social assistance jobs make up 56.4% of jobs in Tuba City, AZ

Education, healthcare, and social assistance are the largest industries in Flagstaff, Page, and Tuba City, making up 30.1%, 21.1% and 56.4%, respectively. Flagstaff's chief employers include Northern Arizona University, Flagstaff Medical Center (Northern Arizona Healthcare), and Flagstaff United School District. The largest employers in

Page, AZ are Aramark and Page Unified School District; Navajo Generation Station was a top employer in Page prior to its closure. Tuba City Unified School District and Tuba City Regional Health Care Corporation are major employers in Tuba City.

The above figures differ from those of Williams and Fredonia where arts, entertainment, recreation, accommodation, and food services make up 22.9% and 19.9% of jobs. Both cities reside in corridors to major tourist destinations and are relied upon for meals, gasoline, and overnight stays. Offices for Kaibab National Forest are also located in Fredonia and Williams, employing hundreds of permanent and seasonal personnel.

1- American Community Survey, US Census Bureau 5-year estimates

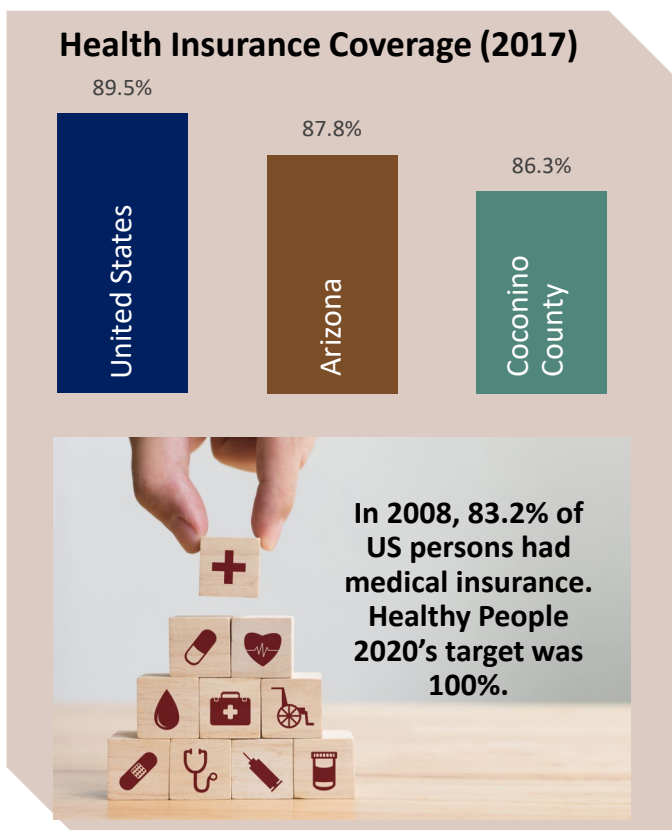
2- City of Page Comprehensive Annual Financial Report

2- Arizona Daily Sun



Health Insurance Coverage

The Healthy People 2020 goal for health insurance coverage is 100%, however all locations fall short of this target. Coconino County residents in 2017 had an 86.3% coverage rate, lower than Arizona and the United States (87.8% and 89.5%, respectively).

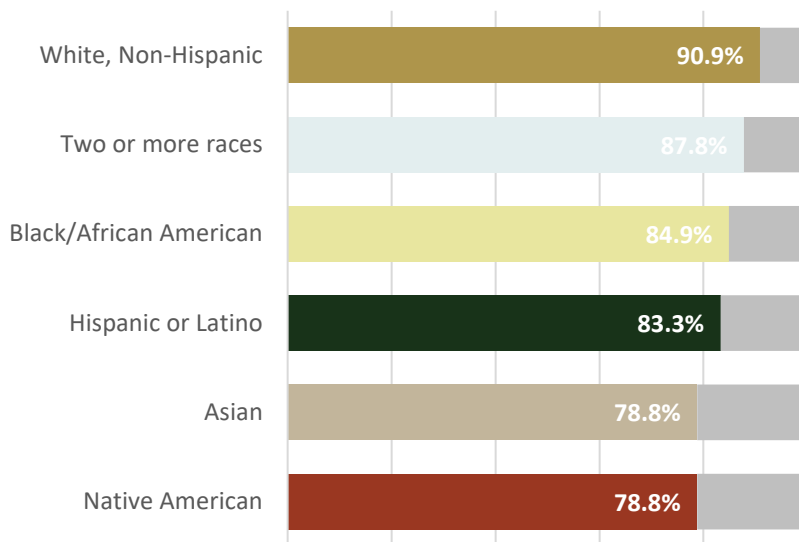


By Age Groups

In Coconino County, the age group with the highest uninsured rates was 19- to 34-year-olds at 19.8 percent without any health insurance coverage.

Those younger than 19 years had a coverage of 89.7%, 35- to 64-year-olds had a coverage of 85.2%, and those 65 and over had a coverage of 98.4%. Seniors had the largest proportion of those covered on more than one health insurance (65.3%). Those under 19 had the largest proportion of those covered under one insurance (79.5%).

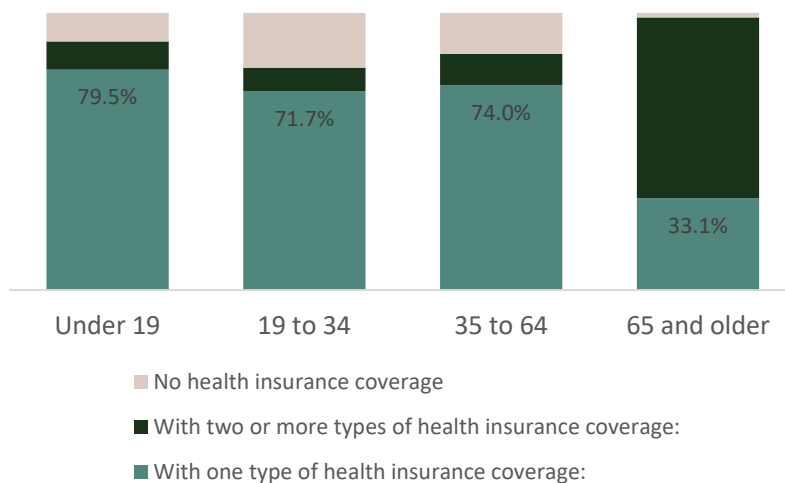
Insured in Coconino County, by Race/Ethnicity, 2017



By Race/Ethnicity

White, Non-Hispanic residents in Coconino County in 2017 had the highest rate of health insurance coverage (90.9%) while Asian and Native American residents had the lowest coverage (both 78.8%). Lack of health insurance coverage can lead to barriers in obtaining health care, exacerbating poor health outcomes in minority populations.

In Coconino County, by Age Groups, 2017

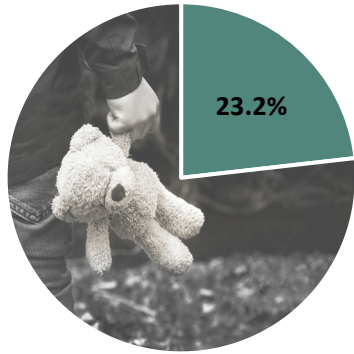


Socioeconomic Characteristics



Child Poverty

Coconino County Children Under 18 in Poverty, 2017



■ children in poverty in the last 12 months

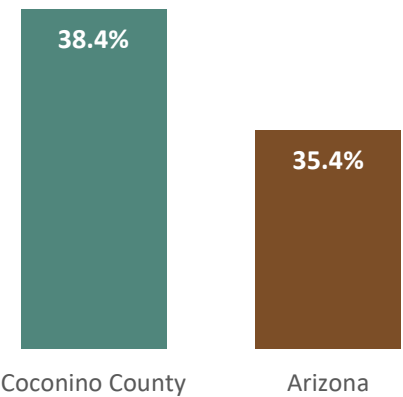
In Coconino County, almost 1 in 4 children under 18 years of age were estimated to live in poverty in 2017. This equals to about 6,783 children.

More than one third of children under 18 years of age in Coconino County live in a single-parent household (38.4%), higher than in Arizona as a whole.

Those who lived in poverty as young children are more likely to experience poor quality of life and are at-risk for leading causes of illness and death.

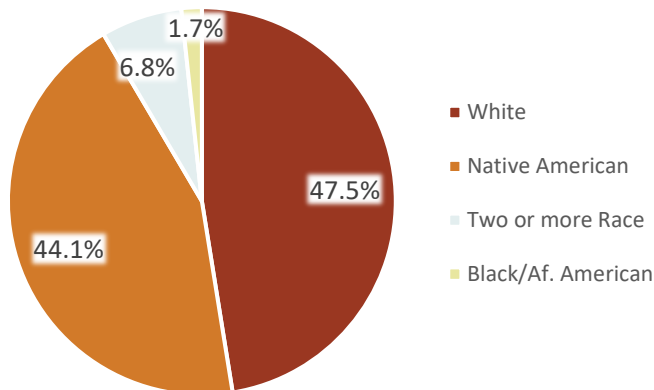
23.2% of Coconino County children live in poverty, compared to 24.0% of Arizona children

Children in single parent household, 2017



Homelessness

Proportion of People Experiencing Homelessness in Coconino County, by Race, 2018



In 2018, 45.8% of people experiencing homelessness were chronically homeless, meaning they have been homeless for 12 or more months and have at least one disabling condition OR have had four episodes of homelessness in the past three years, totaling 12 or more months.

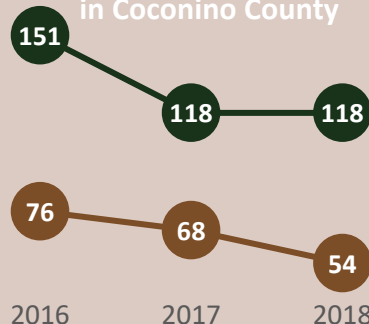
Individuals and families experiencing homelessness have decreased since 2016 in Coconino County, but housing insecurity remains a challenge exacerbated by limited substance abuse and mental health resources.

In 2018, 118 people experiencing homelessness were interviewed in Coconino County during the 2018 Point in Time survey by the Arizona Department of Housing. Of these, 56 were White, Non-Hispanic (47.5%), 52 were Native American (44.1%), 8 were two or more races (7.8%), and 2 were African American (1.7%). None of the individuals interviewed during this cycle were Hispanic or Latino.

The majority of people interviewed were between 35 and 44 years of age (30.5%). Sixteen of those interviewed were under 18 years of age (13.6%).

A combined 45.5% of those who were interviewed reported having either issues with substance abuse or a serious mental illness.

Trend of Homeless Persons in Coconino County



■ # homeless persons ■ # chronically homeless persons



The number of people experiencing homelessness has decreased since 2016

1- American Community Survey, US Census Bureau 5-year estimates
 2- 2018 Point in Time Survey, Arizona Department of Housing
 3- Centers for Disease Control and Prevention



Transportation

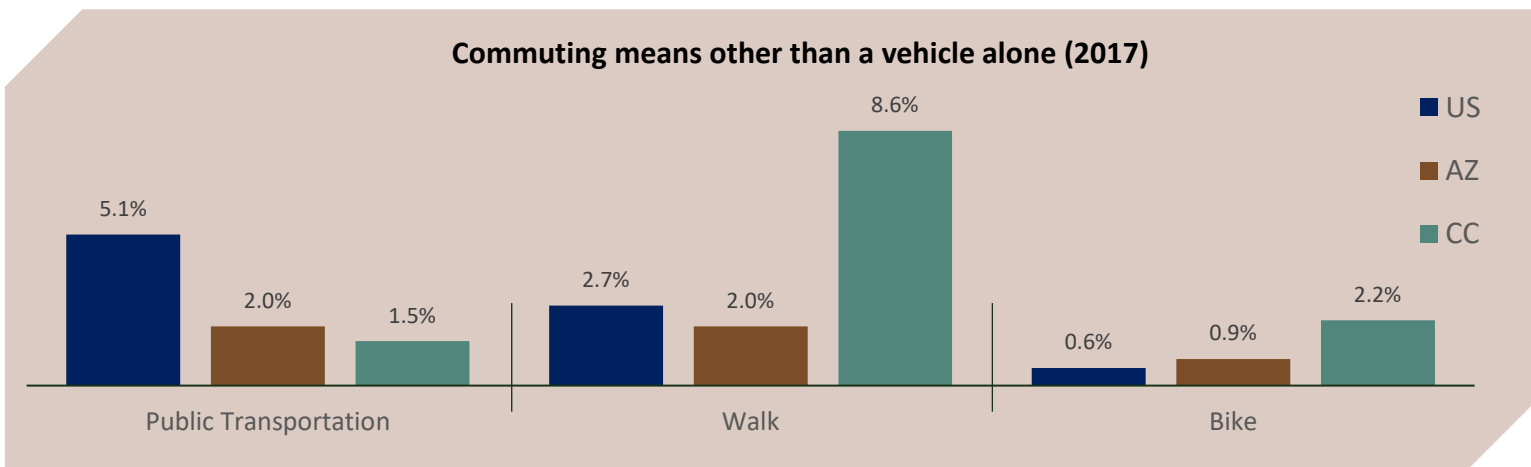
In 2017, it was estimated that the average time it took a Coconino County resident to get to work in was 18.4 minutes, compared to the average time to get to work for all of Arizona of 25.1 minutes. More than a quarter of Coconino County residents (27.8%) commute to work in less than 10 minutes.

Coconino County is slightly lower than Arizona and the United States in the percentage of residents that use a vehicle alone to commute to work (US=76.4% vs AZ=76.6% vs CC=70.0%). There are less households in Coconino County that have no vehicle available compared to Arizona and the United States (US=4.4% vs AZ=2.9% vs CC=2.6%).

Commuting using a means other than a vehicle alone includes using public transportation, walking, or biking. Walking and biking are utilized by a larger percentage of Coconino County residents than Arizona or the United States as a whole.



Walking and biking to work are practiced by a larger percentage of people in Coconino County than Arizona or the US



Amtrak route through Flagstaff, connecting Los Angeles to Chicago

The transit agency Northern Arizona Intergovernmental Public Transportation Authority (NAIPTA) operates the bus and shuttle systems in Flagstaff and Sedona. Yearly, this system has a ridership of over 2.4 million patrons from 167 bus stops.

There are Greyhound bus stops in Flagstaff and Leupp connecting Coconino County residents and tourists with the rest of the country. Amtrak, a passenger railroad service, has a daily stop in Flagstaff; this route connects Los Angeles to Chicago.

Coconino County has one major airport, located in Flagstaff. Flagstaff Pulliam Airport has planes that travel to and from Phoenix four times per day, Dallas/Fort Worth twice daily, and Denver twice daily.

1- American Community Survey, US Census Bureau 5-Year Estimates
 2- Amtrak
 3- Northern Arizona Intergovernmental Public Transportation Authority 2018 Annual Report
 4- City of Flagstaff Airline Information



Transportation

According to the Center for Economic Studies, 11.4% of Coconino County workers resided outside of the county in 2017. The Verde Valley and the Phoenix-metro area were the most frequent places of residency outside of the county for these employees.

Alternately, 15.5% of Coconino County residents were employed outside of Coconino County.

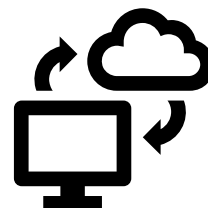
Top 10 Places Coconino Workers Reside, and Residents Work

Top 10 Places Coconino Workers Reside (2017)	# of Workers
Flagstaff	21,286
Phoenix	3,015
Doney Park	1,751
Page	1,528
Williams	1,146
Sedona	1,098
Kachina Village	842
Verde Village	719
Cottonwood	722
Mesa	818
Sub-total	32,925
Total Workers in County	55,784
Workers Residing in Top 5 Places Outside County	6,372

Top 10 Places Coconino Residents Work (2017)	# of Residents
Flagstaff	25,396
Phoenix	4,287
Page	2,075
Williams	1,054
Tempe	961
Grand Canyon Village	591
Sedona	806
St. Michaels	594
Scottsdale	702
Prescott	636
Sub-total	37,102
Total Residents Employed	51,666
Residents Working in Top 6 Places Outside County	7,986



Telecommuting
Future?



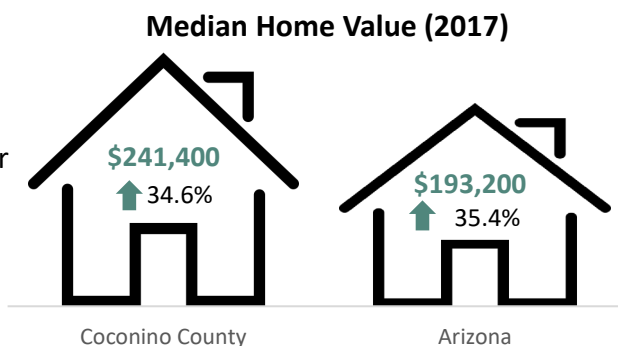


Residents are aware of the increase in home value in Coconino County. A survey participant mentioned, "Things used to be livable up here. Now it's out of control. Everyone is trying to rent to NAU students and get an exorbitant amount of money for a minimal living space." Other participants shared mutual feelings.

Although the cost of living is significantly higher in Flagstaff than the median home value of Arizona, focus group participants expressed appreciation for the accessibility of nature, education, and addiction support groups. One participant mentioned, "What I love about Flagstaff is you can raise a family from here. It's a good community to grow a family."

Housing

In Coconino County, it was estimated in 2017 there were 64,911 units (73.3% occupied); 62.2% single units, 19.0% multiple resident housing, and 13.5% mobile homes. In 2017, the median home values in Coconino County was \$241,400, higher than the median home value for Arizona of \$193,200. Between 2013 and 2017, the median home value for Coconino County increased by 34.6%. Both rent and mortgage for housing in Coconino County was higher than Arizona, but these costs varied throughout the county (2017).



Affordable housing complexes are offered to assist low-income families with housing opportunities. In Flagstaff in 2017, there were 1,793 rental units and 73 ownership units provided. Many of the ownership single-family homes and townhomes were sold through Habitat for Humanity to income qualified owners.

Monthly Housing Costs (2017)

	Median Mortgage	Median Rent
Arizona	\$1,354	\$972
Coconino County	\$1,490	\$1,079
Flagstaff	\$1,572	\$1,138
Tuba City	\$774	\$652
Williams	\$1,246	\$900
Page	\$1,299	\$920

Housing vouchers are available in the City of Flagstaff, including 333 Section 8 housing vouchers and 106 veteran supportive housing vouchers. Williams has 30 low-income apartments and will accept Section 8 housing vouchers received from Flagstaff.

In Page, rental assistance, eviction prevention, utility assistance, and foreclosure prevention assistance is provided through Coconino County Health and Human Services. There are three subsidized housing complexes in Page providing housing to low- to extremely low-income households. Section 8 housing vouchers are not available from the City of Page, but if a resident qualifies with Navajo Nation Housing Authority, they may apply these vouchers in Page.

1- American Community Survey, US Census Bureau 5-Year Estimates

2- City of Page 2018 Comprehensive Housing Study

3- Jennifer Mikelson, Housing Analyst for City of Flagstaff Housing Section

Health Resource Availability



Health resource availability refers to the manpower, facilities, revenue, equipment, and supplies to produce quality health care and services.

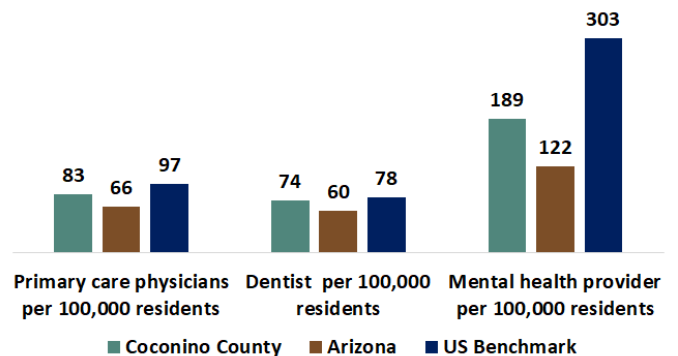


Workforce

Within Arizona, Coconino County has one of the highest ratios of healthcare professionals to residents, making them one of the most well-supplied healthcare workforces in Arizona. This includes primary care physicians, dentists, and mental healthcare providers.

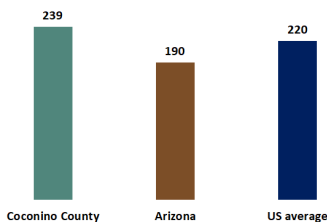
Compared to the US benchmark (the value at which only 10% of the counties in the US are above), Coconino County is slightly lower in numbers of primary care physicians and dentists, however there is a large difference in the number of mental health providers per 100,000 residents.

Health Care Providers per 100,000 residents - Coconino County, Arizona, and the US Benchmark



Capacity

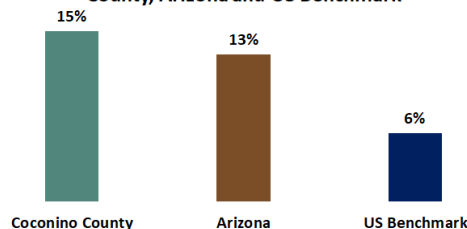
Total hospital beds per 100,000 residents - Coconino County, Arizona and US benchmark



Hospital beds are an indicator for the availability of inpatient services in an area. While there is no recommended standard for the number of hospital beds per population, Coconino County is above the state and national average for the number of hospital beds per 100,000 residents.

Insurance Coverage

Percent of Residents Uninsured - Coconino County, Arizona and US Benchmark



Insurance coverage is important because it makes health care more affordable. Unfortunately, Coconino County has a high proportion of uninsured residents, the fifth highest in the state, and more than double the US benchmark (the value at which only 10% of the counties in the US are above).

Funding

Arizona ranked 49th in the United States for Public Health funding, spending only \$50 per person. In comparison, the top funder spent \$281 per person.

In 2018, the Coconino County Public Health Services budget was \$16,009,852, which is about \$114 of public health funding per county resident.

Arizona ranked 43rd HRSA funding granted to states in FY18.

1- <https://www.countyhealthrankings.org/app/arizona/2018/rankings/coconino/county/outcomes/overall/snapshot>
 2- <https://www.urban.org/policy-centers/health-policy-center/projects/understanding-hospital-bed-capacities-nationwide-amid-covid-19>
 3- Coconino County Public Health Services District Fiscal Year 2018 Budget



Quality of life is the degree to which an individual is healthy, comfortable, and able to participate in or enjoy life events.



Sixty-eight percent (68%) of respondents on the September 2019 Community Health Assessment survey indicated that they were satisfied with the **quality of life** in this community.

Recreation

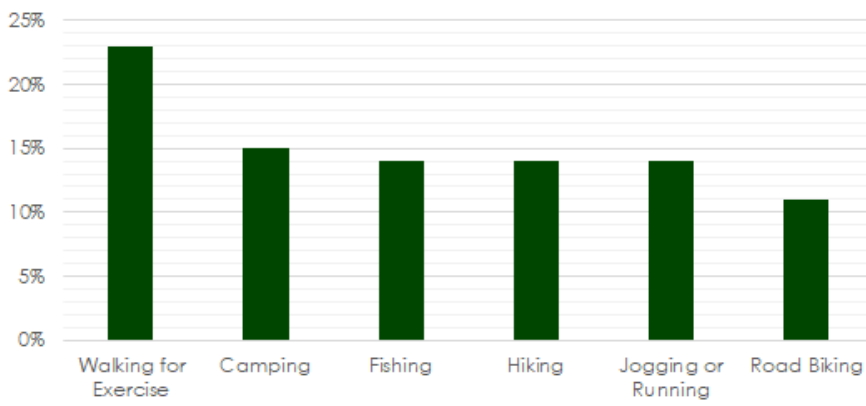
Coconino County is the second largest county by area in the US, covering a diverse landscape that is iconic and beautiful. Coconino County Parks and Recreation Department provides services to the community with the goal of enriching lives through parks and programs.



Coconino County Parks and Recreation operates:

- 3,399 acres across 9 parks and natural areas
- 28 miles of trails
- Amphitheater
- Bike Park
- Disc Golf
- Equestrian Amenities
- Fairground
- Picnic Ramadas
- Wildlife Viewing Areas
- Skate Park

Popular Activities for Coconino County Households



At focus groups conducted in various communities in Coconino County, a common response to the question "What do you like most about living in your community?" was: "The beautiful landscape and accessibility to nature."



Food Insecurity

Food insecurity refers to a lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods.

In 2018, 20,030 people in Coconino County (14.5%) were reported to be food insecure. Of the 20,030, 68% were below 185% of the Federal Poverty Level. Greater rates of insecurity were experienced by more rural communities in Coconino County, with county-wide rates ranging from 10% to 39%.



Childcare affordability and availability

during the early years are critical for healthy brain development. High-quality early care and education can promote development.

Early childhood is a time of rapid development; physical, cognitive, and social-emotional. The experiences that young children have

Childcare costs in Coconino County are less expensive than Arizona as whole. Full time childcare at a licensed center in Coconino County may cost between \$650-760 monthly, while an approved family home costs \$400.

44% of children ages 3-4 are enrolled in nursery school, preschool, or kindergarten.

(2018)	Median Family Income	Cost for Infant	Cost for child ages 1-2	Cost for child ages 3-5
Coconino County	\$67,964	13%	13%	11%
Arizona	\$63,812	16%	14%	12%

Quality First is Arizona’s Quality Improvement and Rating System for early childcare and preschool providers. A star system (1-5) is used to represent the continuum of quality. The percent of Coconino County children in a Quality Level setting (3-5 stars) is 70% (Arizona 73%).



1- Feeding America, Map the Meal Gap 2018
 2- First Things First Regional Needs and Assets Report 2020 (2018 data)
 3- Arizona Department of Economic Security



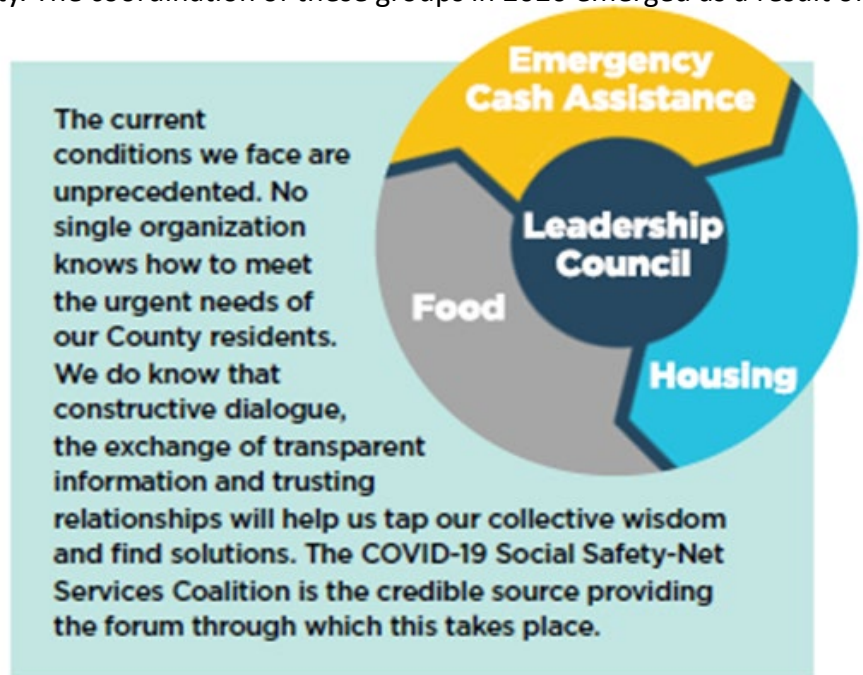
Community Engagement

Throughout Coconino County many community organizations work to improve the quality of life for residents. These work of these organizations can be seen in all aspects of the Social Determinants of Health: Economic Stability, Social and Community Context, Neighborhood and Environment, Health Care, and Education.

Several of these organizations take part in the Social Safety Net Coalition. Although the Coalition officially formed in 2020 during the COVID-19 pandemic, the community organizations participating previously provided these services independently within the community. The coordination of these groups in 2020 emerged as a result of need within the communities.

The purpose of this coalition is to:

- Fortify existing service providers to meet rapidly expanding demands for housing, food, and emergency cash assistance
- Attract and align resources to maximize impact through a coordinated and collaborative effort
- Communicate information to promote open, inclusive, timely sharing; and,
- Mobilize the delivery of emergency resources through a strategic framework that identifies service gaps and emerging issues.



Voter Registration and Participation



Coconino County provides the means for its constituents to participate in primary, general, and other special elections. In 2018, there were 75,583 registered voters for the August primary election. 35.25% of those voters cast a ballot.

There were 83,239 registered voters for the November 2018 general election. 67.21% of those voters cast a ballot.



E-cigarettes (Vapes)

E-cigarettes, or Vapes, are nicotine delivery devices that heat a liquid into an aerosol that is inhaled into the lungs. Although there is a national ban on flavored tobacco products, e-cigarette manufacturers produce a wide variety of flavors that are wildly appealing to youth. Nationally, from 2017 to 2018, current e-cigarette use—defined by use on at least one day in the past 30 days—by high school students increased from 11.7 to 20.8%.



In 2019 the Flagstaff City Council passed an Ordinance increasing the minimum age to purchase all nicotine products to 21. Later the same year, the Federal Government did the same.

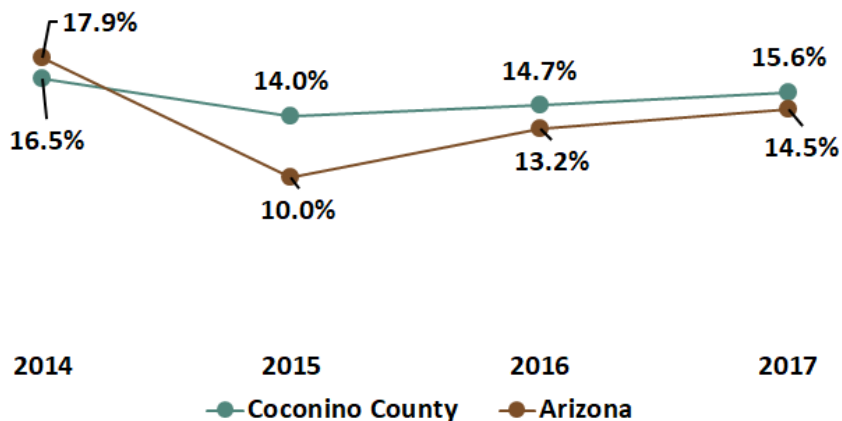
Cigarette Smoking



Although cigarette smoking rates have declined in recent years both nationally and locally, smoking related diseases are still the leading cause of preventable death in the United States.

Percentage of Arizona and Coconino County Adults that are Current Smokers, 2014-2017

BRFSS



Substance Misuse

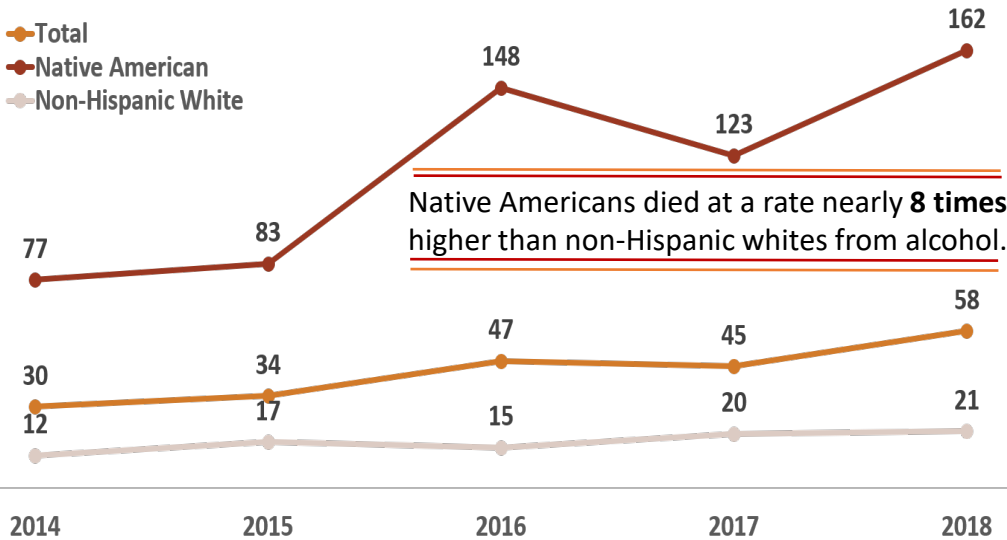


Accidental drug/alcohol poisonings surpassed motor vehicle accidents as the deadliest unintentional injury for Coconino County residents in 2018.

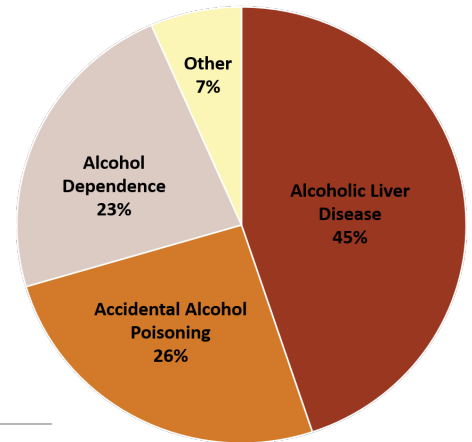
Substance misuse is the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs. It is an issue that can impact the mental and physical health of all persons; leaving no age, race, ethnicity, culture, gender, or geographic region immune. It can also lead a person to suffer economic losses, criminal consequences, social isolation, long-term health effects, and death. Beyond the individual, substance misuse can be viewed as a family disease, with the repercussions bleeding into the lives of the people surrounding individuals who use drugs.

Alcohol

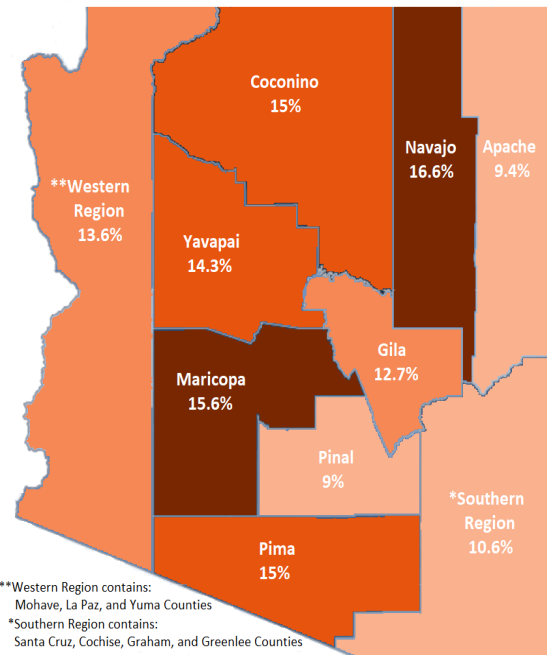
Coconino County Alcohol-Related Age-Adjusted Death Rate



Cause of Death (2014-2018)



Prevalence of Binge Drinking



From 2014-2018, alcohol was responsible for more deaths in Coconino County than all other substances combined and killed 89% more residents than motor vehicle accidents. In this five-year timeframe, the age-adjusted alcohol death rate nearly doubled, particularly impacting Native Americans (male and female) and non-Hispanic white males. Alcohol-related deaths were most prevalent among middle-aged adults (44-64 years old). In 2018, alcohol accounted for 84% of all liver disease/ cirrhosis deaths, which was the 5th leading cause of death in Coconino County.

Age-Adjusted Alcohol-Related Death Rate (2017)

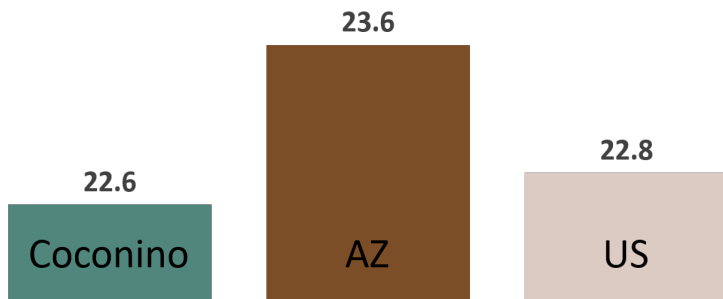


Substance Misuse



Drugs

Age-Adjusted Drug-Related Death Rate (2017)



While alcohol continues to kill more Coconino County residents than any other substance, the drug-related death rate from 2014 to 2018 increased at a rate nearly double that of alcohol-related deaths (172% to 94% respectively). In 2018, for the first time in a decade, **drug overdoses killed more residents than motor vehicle accidents**. The principal factor of this increase has been the spike of opioid overdose deaths starting in 2017 and continuing in 2018.

In 2018, three out of five accidental poisoning deaths were drug-related.

46% of drug overdose deaths involved more than one drug.

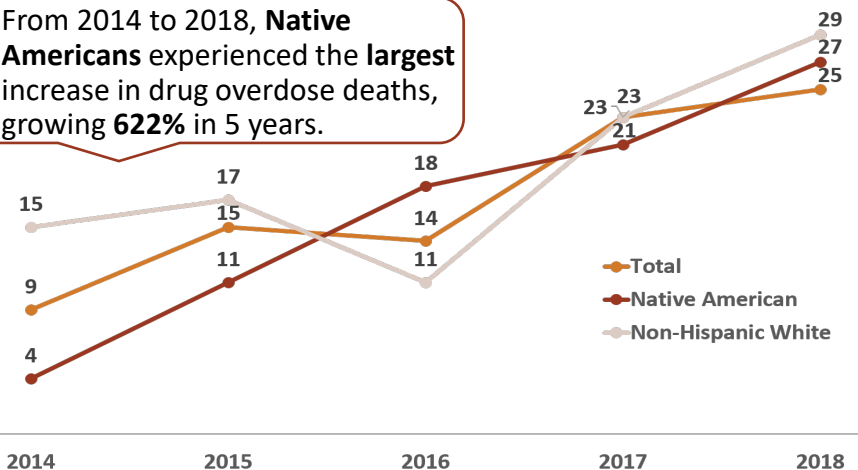
From 2014 to 2018, **3 out of 5** drug overdose deaths were **male**.



The median age of drug overdose deaths was 39 years-old.

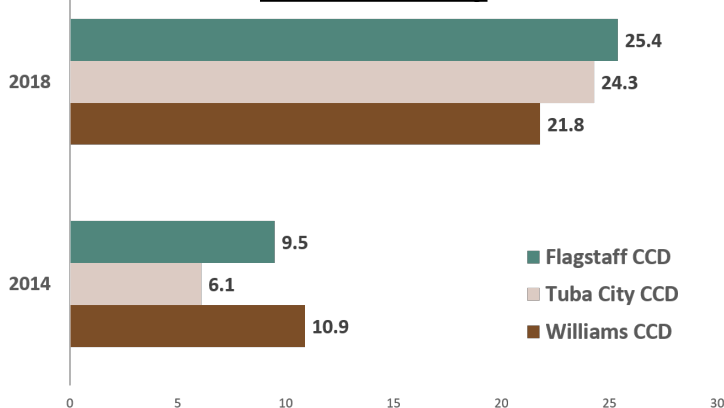
Coconino County Drug-Related Age-Adjusted Death Rate

From 2014 to 2018, **Native Americans** experienced the **largest** increase in drug overdose deaths, growing **622%** in 5 years.



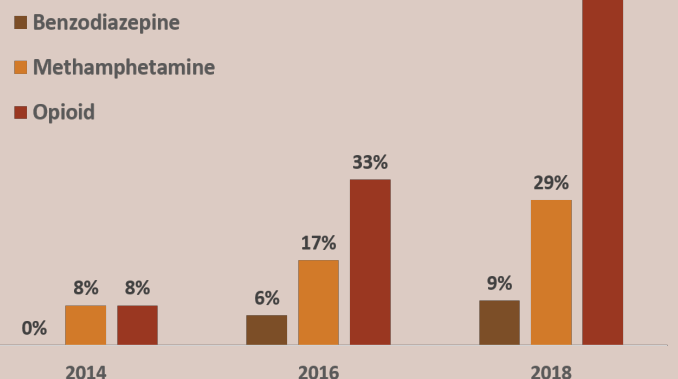
From 2017 to 2018, the number of opioid overdose deaths more than doubled.

Drug-Related Death Rate by Decedent's CCD Residency



The drug-related death rate **doubled** in all three of Coconino's largest CCDs from 2014 to 2018.

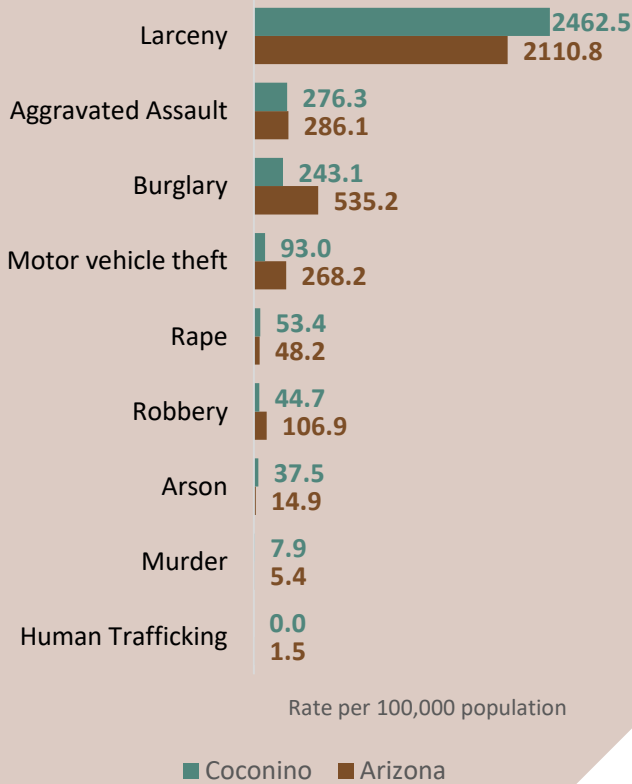
Percentage of drug overdose deaths that involved benzodiazepines, methamphetamine, or opioids





Crime

Rates of index Crimes, 2017



In 2017, the crimes that occurred most in Coconino County was larceny, the theft of personal property (without force or entering a structure). Most cases of larceny involved property valued less than \$50 and/or occurred by way of shop lifting. In 2017, the value of property stolen via larceny totaled over \$1.49 million.

Although occurring infrequently, the other offenses that occurred at a higher rate per 100,000 persons in Coconino County compared to Arizona include rape, arson, and murder. The Arizona Department of Public Safety reported 74 rapes, 51 arson incidents, and 11 murders in Coconino County in 2017; in the same year, Arizona in total was reported to have had 3,279 rapes, 1,016 arsons incidents, and 369 murders.

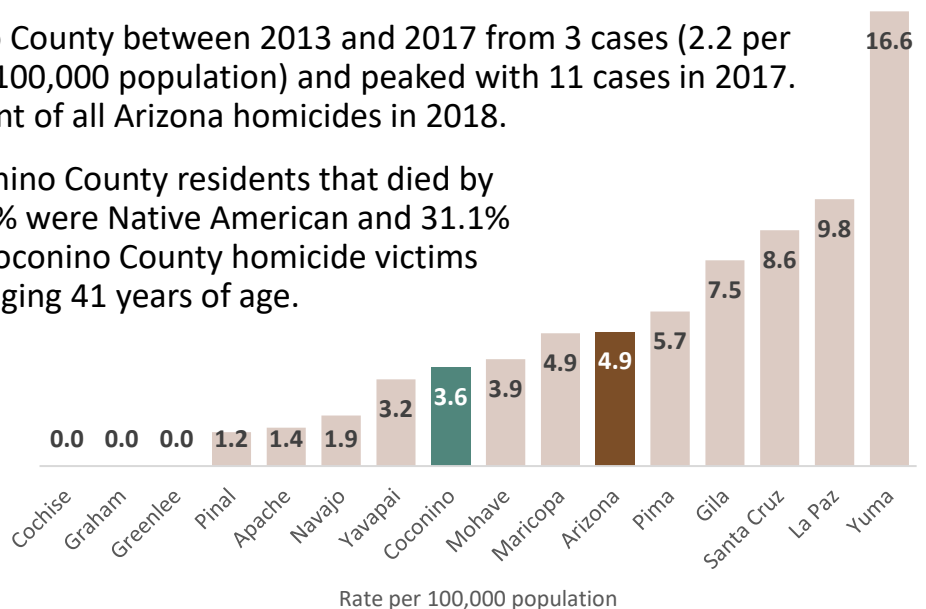
Other crimes that occur less often in Coconino County compared to the state of Arizona include aggravated assault, burglary, robbery, motor vehicle theft, and human trafficking.



Homicide

Homicides increased overall in Coconino County between 2013 and 2017 from 3 cases (2.2 per 100,000 population) to 5 cases (3.6 per 100,000 population) and peaked with 11 cases in 2017. Homicides here accounted for 1.5 percent of all Arizona homicides in 2018.

According to death records, of the Coconino County residents that died by homicide between 2013 and 2018, 52.7% were Native American and 31.1% were White, Non-Hispanic. The age of Coconino County homicide victims ranged from late teens to late 70s, averaging 41 years of age.



1- American Community Survey, US Census Bureau 5-year estimates
 2- Crime in Arizona Annual reports. Arizona Department of Public Safety



Domestic Violence

Exams performed by the Northern AZ Care and Services After Assault (NACASA) in Coconino County for domestic violence decreased from 44 to 41 between 2017 and 2018.

According to the Arizona Coalition to End Sexual and Domestic Violence, an average of 1.8 deaths occurred as a result of domestic violence between 2013 and 2018. Negative health outcomes associated with intimate partner violence in addition to physical injury include many chronic illnesses (such as cardiovascular,



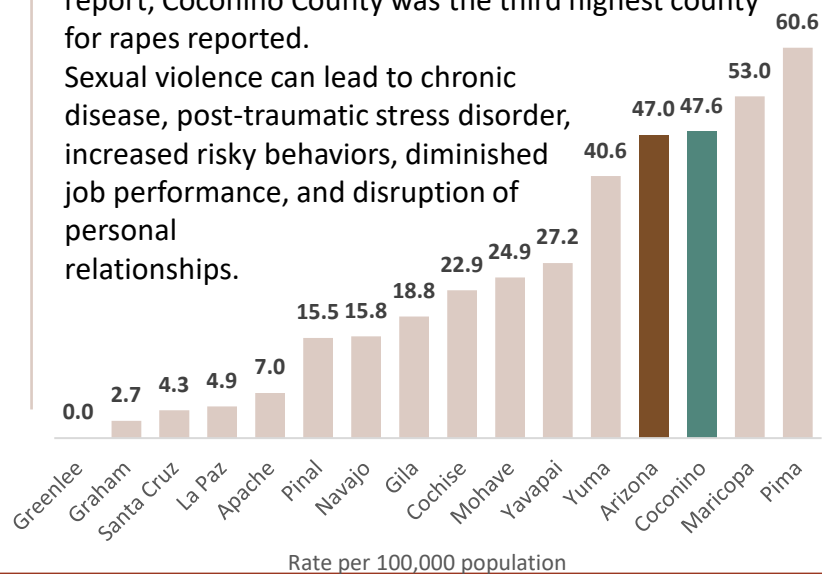
gastrointestinal, reproductive, musculoskeletal, and nervous system conditions) as well as depression and posttraumatic stress disorder. Victims of domestic violence are also at higher risk for engaging in health risk behaviors such as smoking, binge drinking, and risky sexual behaviors.

Sexual Assault

Exams performed by NACASA in Coconino County for sexual assault incidents decreased between 2017 and 2018 from 74 to 69 exams. Exams for both domestic violence and sexual assault incidents increased slightly between 2017 and 2018 from 11 to 12 exams.

Coconino County had a slightly higher rate of rape compared to Arizona, as reported by the Arizona Department of Public Safety. According to their 2018 report, Coconino County was the third highest county for rapes reported.

Sexual violence can lead to chronic disease, post-traumatic stress disorder, increased risky behaviors, diminished job performance, and disruption of personal relationships.

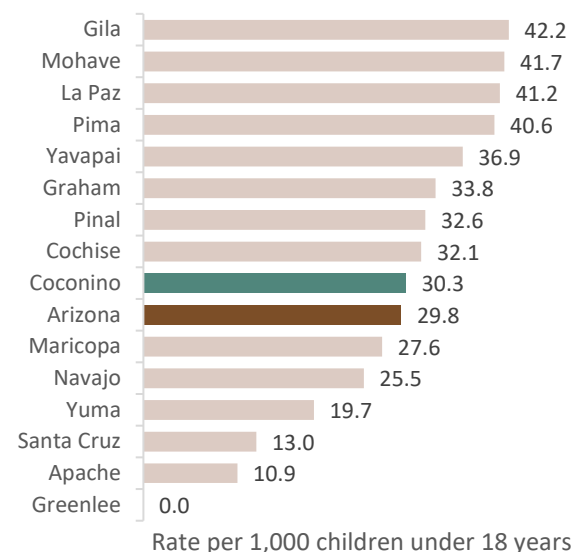


Child Abuse

Children who are abused and neglected may suffer immediate physical injuries such as cuts, bruises, or broken bones, as well as emotional and psychological problems, such as impaired socio-emotional skills or anxiety. Child abuse and neglect and other adverse childhood experiences (ACEs), if left untreated, can have tremendous impacts on broader lifelong health and wellbeing outcomes.

Exposure to violence in childhood increases the risks of injury, future violence victimization and perpetration, substance abuse, sexually transmitted infections, delayed brain development, reproductive health problems, involvement in sex trafficking, non-communicable diseases, lower educational attainment, and limited employment opportunities.

Rates of child abuse reports in 4/17-3/18



1- American Community Survey, US Census Bureau 5-year estimates

2- Brooke Fulton, NACASA Program Manager, North Country HealthCare

3- Arizona Coalition to End Sexual and Domestic Violence

4- Centers for Disease Control and Prevention

5- Child Welfare Reporting Requirements Semi-Annual Report April 2017-Sept2017, Arizona Department of Child Safety

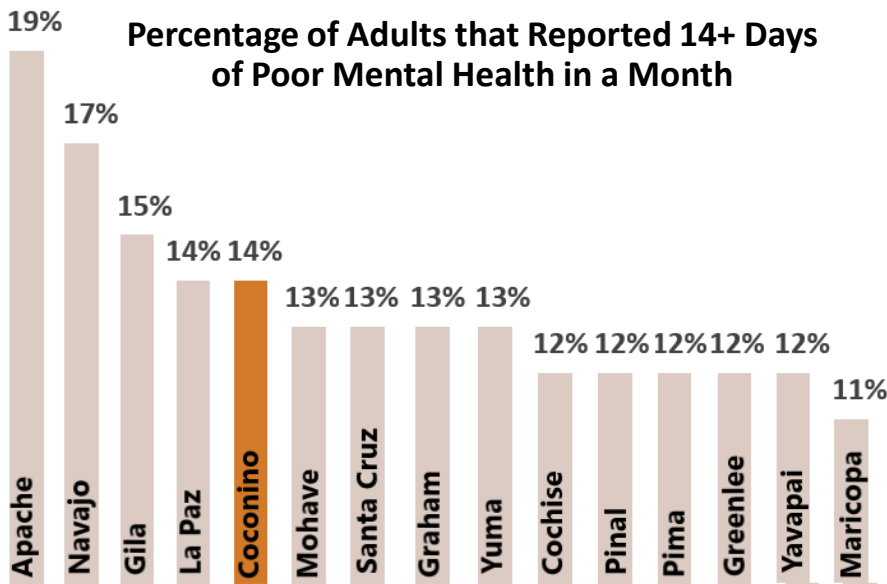
Mental Health



Mental health impacts the emotional, psychological, and social well-being of all members in the community. Important at every stage of life, mental health affects an individual's long-term health outcomes. Poor mental health and mental illness increases a person's lifetime risk of many types of physical health problems, like diabetes, heart disease, and stroke. Additionally, it can create feelings of isolation and loneliness which impact risk of suicide, alcoholism, and substance use. By monitoring mental health trends in Coconino County and highlighting community needs, populations experiencing mental health disparities can be targeted for future interventions.



Community Perceptions



Coconino County residents reported an average of **4.5 mentally unhealthy days** in a month, the fourth highest in Arizona.



In Arizona (2016), **6%** of adults had a **major depressive episode** and **4%** were living with a **serious mental illness**.



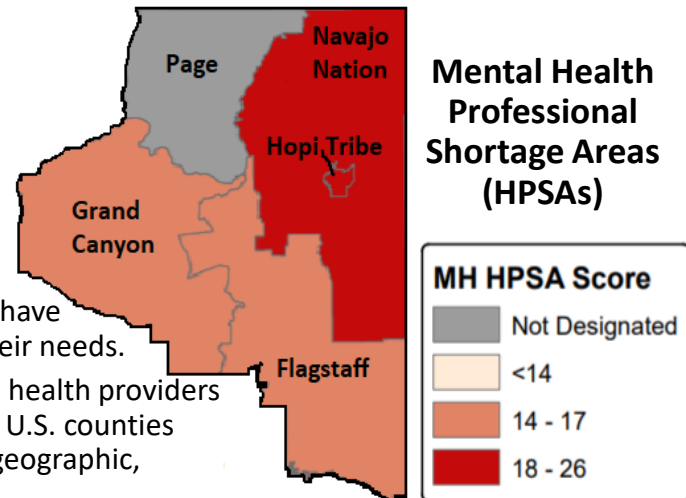
Mental Health Resources

Nearly all regions in Coconino County qualify as a Mental Health Professional Shortage Area (HPSA) as designated by the Health Resources and Services Administration (HRSA).

- Flagstaff: Low Income Population HPSA
- Grand Canyon: High Needs Geographic HPSA
- Navajo Nation: High Needs Geographic HPSA
- Hopi Tribe: High Needs Geographic HPSA

These designations indicate that residents residing in these areas have limited access to the mental health services necessary to meet their needs.

Although Coconino County has lowest ratio of residents to mental health providers (500:1) in Arizona, this ratio is still higher than the top performing U.S. counties (310:1) and does not provide adequate resources for the diverse geographic, cultural, and economic needs of this community.



1- County Health Rankings 2018, Robert Wood Johnson
 2 - Behavioral Risk Factor Surveillance System
 3- Health Resources and Services Administration



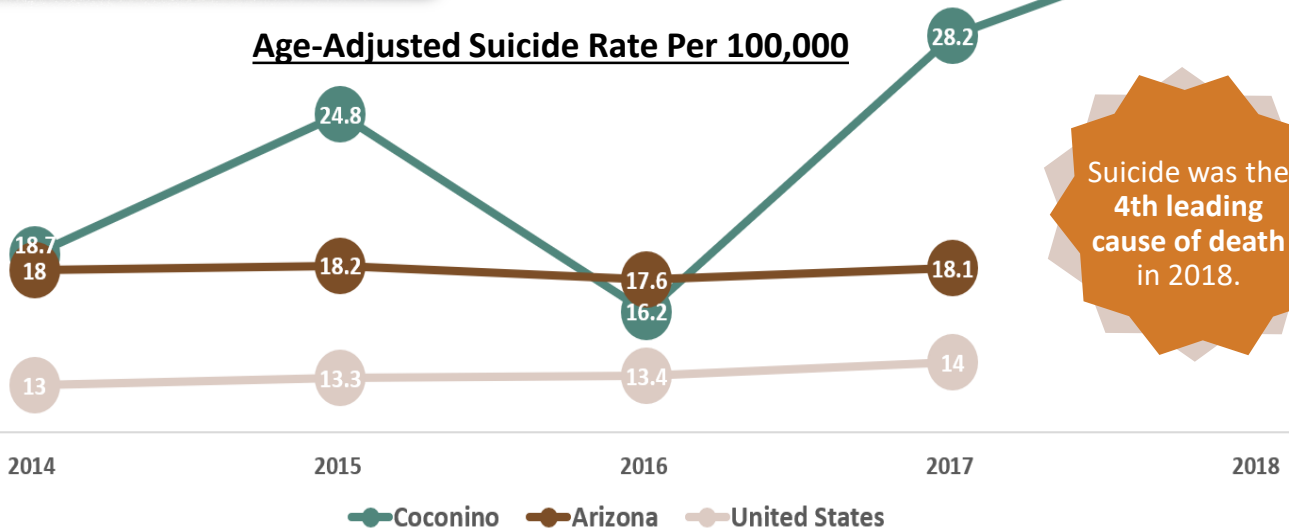
Suicide



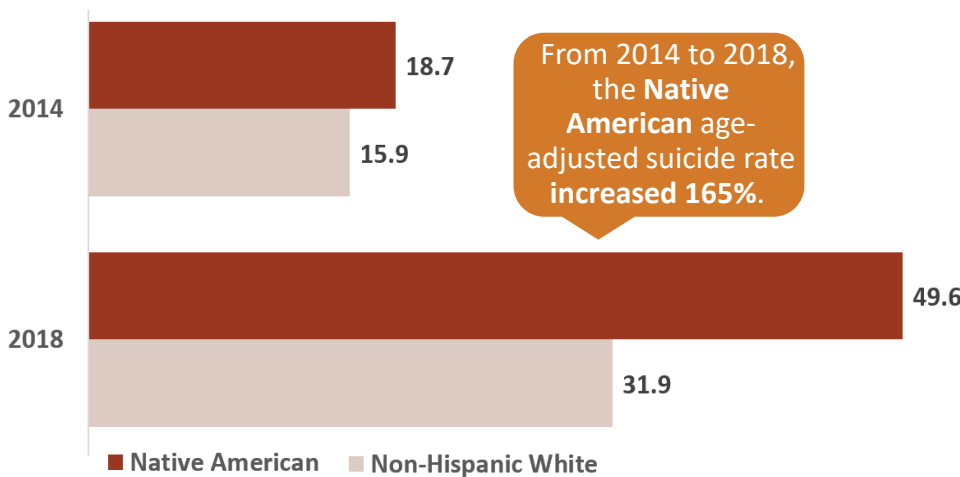
From 1999 to 2015, the annual suicide rate increase for rural counties in the U.S. was **double** that of urban counties.

Death by suicide is a growing epidemic impacting rural communities across the United States. The Centers for Disease Control and Prevention (CDC) released a study in 2017 that noted a growing gap between suicide rates in rural and urban areas. Coconino County has not been immune to this trend, with the suicide death rate increasing 77% from 2014 to 2018. Although Coconino County suicides were primarily completed with a firearm (44%) from 2014 to 2018, suicide by hanging increased 165% in this 5-year period and surpassed firearm suicides in 2018 as the primary method of suicide.

Age-Adjusted Suicide Rate Per 100,000

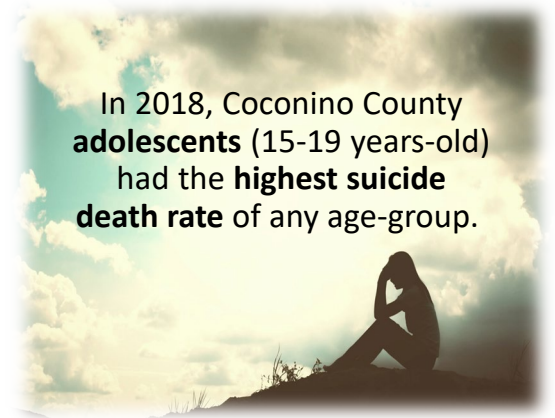


Suicide was the **4th leading cause of death** in 2018.



From 2014 to 2018, the **Native American** age-adjusted suicide rate increased **165%**.

In 2018, Coconino County **adolescents** (15-19 years-old) had the **highest suicide death rate** of any age-group.

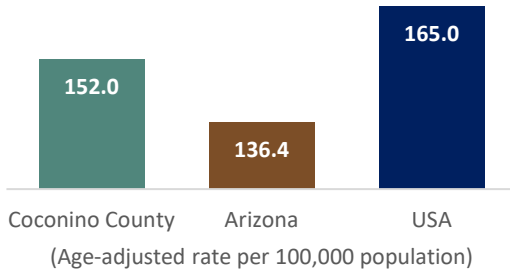


At a focus group conducted in conjunction with this report, one participant stated that "Having health resources for the community, such as: mental health programs, and a safe place for people to access help" was key to what makes a community healthy. Several other respondents expressed the significance of "support groups".



Heart Disease

Death Due To Diseases Of The Heart, 2017



In 2017, the rate of death of Coconino County residents due to major cardiovascular diseases was 152.0 deaths per 100,000 population, lower than the country, but much higher than the state's rates. White, Non-Hispanic deaths due to heart disease was highest among all races and ethnicities (96.8 deaths per 100,000 population), followed by Native American deaths due to heart disease (45.5 deaths per 100,000 population). Both of these are very low compared to the US (168.9 and 151.4 deaths per 100,000 population, respectively). Males were affected more than females with a rate of 87.1 deaths per 100,000 population, compared to 64.9 deaths per 100,000 population, both rates well below respective rates in the United States.

Heart disease is the leading cause of death among US men and women, as well as for most ethnicities. Several factors can be attributed to an increased risk of developing heart disease, including high blood pressure, smoking tobacco and alcohol intake, poor diet, physical inactivity, and having diabetes or other medical conditions.

In Coconino County, deaths due to heart disease occurs in men more than women.

Cerebrovascular Disease

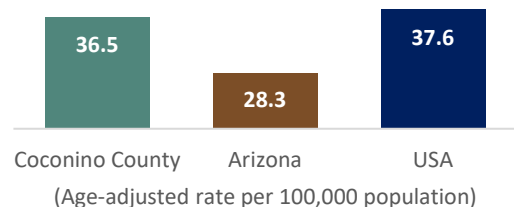


In the US, strokes kill 1 in 20 Americans. That's a death by stroke about every 40 minutes.

In 2017, the rate of death of Coconino County residents due to cerebrovascular disease, such as strokes, was 36.5 deaths per 100,000 population, which was lower compared to the US rates, but higher than Arizona's. White, Non-Hispanic deaths due to cerebrovascular disease were highest among all races and ethnicities (17.9 deaths per 100,000 population), followed by Native American deaths due to cerebrovascular disease (9.4 deaths per 100,000 population). Both of these are very low compared to the US (36.4 and 34.1 deaths per 100,000 population, respectively). Females were affected more than males with a rate of 21.9 deaths per 100,000 population, compared to 14.6 deaths per 100,000 population, both lower than the rates in the country.

In the US, strokes kill 1 in 20 Americans. Strokes are the fifth leading cause of death in the US, however risk of having a stroke affects races and ethnicities differently.

Death Due To Cerebrovascular Diseases, 2017

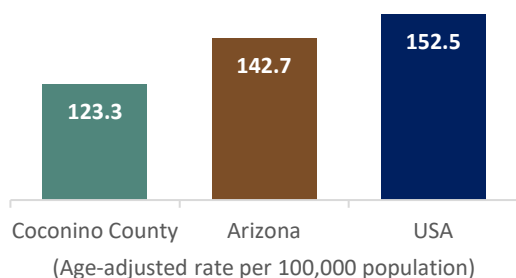




Cancer

In 2017, the rate of death due to malignant cancers of Coconino County residents was 123.3 deaths per 100,000 population, much lower compared to the state and country rates. White, Non-Hispanic deaths due to malignant cancers was highest among all races and ethnicities (83.3 deaths per 100,000 population), followed by Native American deaths due to malignant cancers (22.3 deaths per 100,000 population. Both of these are very low compared to the US (157.9 and 131.4 deaths per 100,000 population, respectively). Males were affected more than females with a rate of 65.5 deaths per 100,000 population, compared to 57.8 deaths per 100,000 population.

Death Due To Malignant Neoplasms, 2017

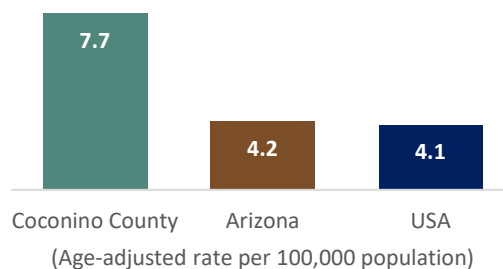


The most frequent cancers-causing death in Coconino County residents between 2014 and 2018 were due to lung, breast, pancreas and colon cancers. In the United States, most cases of lung cancers occur in people 45 years of age and older; one-third of these being diagnosed between the ages of 65 and 74 years. Environmental factors including second-hand smoke and radon exposure play a significant role, however smoking is the primary cause of lung cancers.

Breast cancer is the most frequently diagnosed cancer among women in the US. Several factors contribute to the development of breast cancers, including age, a personal and/or family history of breast cancers, long-term use of hormone-

replacement therapies, and alcohol use. Seeking regular healthcare and early diagnosis is important; Native American women are more likely to be diagnosed at a more advanced stage of breast cancer compared to White, Non-Hispanic women.

Death Due To Benign Neoplasms, 2017



In 2017, the rate of death due to benign cancers of Coconino County residents was 7.7 deaths per 100,000 population, almost twice the rate in the state and country. This primarily occurred in White, Non-Hispanic at a rate of 5.5 deaths per 100,000 population, just higher than the US rate (4.4 deaths per 100,000 population). Females were affected more than males with a rate of 6.5 deaths per 100,000 population, compared to 1.2 deaths per 100,000 population. Most of these deaths due to benign cancers were cases of preleukemia.

Leukemia is a the most common blood cancer and can result from exposures to certain chemicals and radiation levels. The incidence and mortality rates are highest in White, Non-Hispanics compared to all racial and ethnic groups.

To help prevent any type of cancer, the CDC recommends avoiding tobacco smoke exposure, limiting alcohol intake, exercising regularly and avoiding large amounts of fats, preservatives, red meats and processed food. Getting annual check-ups and participating in pre-cancer screenings will aid in the prevention and early diagnoses of cancers.

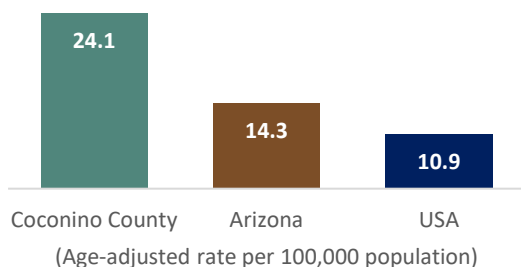


Liver Disease

The rate of liver disease in Coconino County women is about 46% higher than the rate of the country.

In 2017, the rate of death due to liver diseases such as cirrhosis and hepatitis of Coconino County residents was 24.1 deaths per 100,000 population, well above the rates in the state and country. This primarily occurred in Native American residents (15.5 deaths per 100,000 population), which is almost three times higher than White, Non-Hispanic residents (5.5 deaths per 100,000 population). Males were affected more than females with a rate of 13.1 deaths per 100,000 population, compared to 11.1 deaths per 100,000 population, however the rate in Coconino County females exceeds the country's rate of 7.6 deaths per 100,000 population. Almost three-quarters of the deaths due to liver disease in Coconino County residents between 2013 and 2018 occurred in those over the age of 45 (73.0%).

Death Due To Chronic Liver Disease And Cirrhosis, 2017

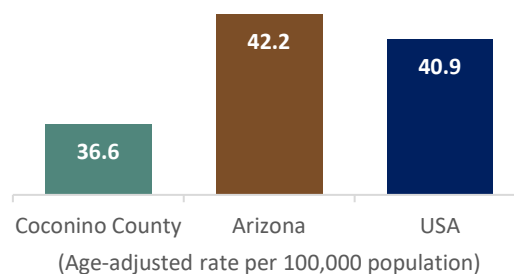


Prolonged injury to the liver due to inflammation or infection can cause permanent damage. Obesity is the leading cause of liver diseases in the country. The risk of developing liver cirrhosis increases in those that have abused alcohol for a long period of time, have type II diabetes, are men, or are older than 50.

1- Coconino County Health and Human Services Medical Examiner's Office
2- Centers for Disease Control and Prevention National Vital Statistics Report
3- Arizona Department of Health Services Advanced Vital Statistics Report

Respiratory Disease

Death Due To Chronic Lower Respiratory Diseases, 2017



In 2017, the rate of death due to chronic lower respiratory diseases such as COPD, emphysema, and asthma of Coconino County residents was 36.6 deaths per 100,000 population, lower than the rates in the state and the U.S. White, Non-Hispanic deaths were higher than other races and ethnicities at 24.0 deaths per 100,000 population, almost three times higher than Native American deaths (8.2 deaths per 100,000 population). Females were affected more with a rate of 20.5 deaths per 100,000 population, compared to males with a rate of 16.0 deaths per 100,000 population, both much lower than the rates of the U.S. (38.1 and 45.0 deaths per 100,000 population, respectively). Five of seven deaths in Coconino County residents between 2013 and 2018 attributed to asthma were male, and 86% of asthma deaths were younger than 45 years of age.



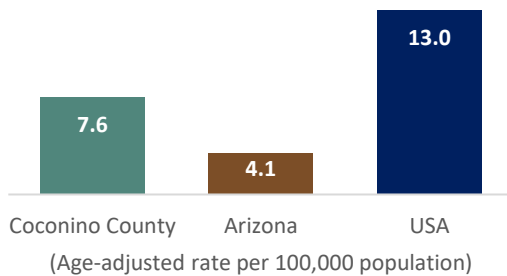
71.4% of Coconino County deaths due to asthma between 2013 and 2018 were male.



Kidney Disease

In 2017, the rate of death due to kidney diseases of Coconino County residents was 7.4 deaths per 100,000 population, much lower than the rate of the U.S., but almost twice the rate of Arizona. Rates of White, Non-Hispanic and Native American deaths due to kidney disease was 3.8 deaths per 100,000 population, lower than the country's respective rates. Females were affected more than males with a rate of 4.5 deaths per 100,000 population, compared to 3.1.8 deaths per 100,000 population. All cases of Coconino County resident deaths due to kidney disease between 2013 and 2018 were older than 55 years of age.

Death Due To Kidney Diseases, 2017



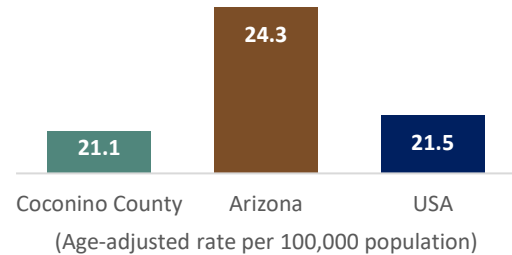
Risk factors that contribute to developing or worsening kidney diseases include high blood pressure and having diabetes, as well as being overweight, physical inactivity, a high-salt diet, smoking, and high cholesterol. Those with chronic kidney diseases are more at risk of infections, vitamin imbalances, depression and a lower quality of life.

Rates of death due to kidney disease in Coconino County residents is almost twice the rates in Arizona as a whole.

1- Coconino County Health and Human Services Medical Examiner's Office
2- Centers for Disease Control and Prevention National Vital Statistics Report
3- Arizona Department of Health Services Advanced Vital Statistics Report

Diabetes Mellitus

Death Due To Diabetes Mellitus, 2017



In 2017, the rate of death due to diabetes mellitus of Coconino County residents was 21.1 deaths per 100,000 population, almost equivalent to the US rate, but much lower than the state. Native American deaths due to diabetes mellitus was highest among all races and ethnicities (12.8 deaths per 100,000 population), followed by White, Non-Hispanic deaths due to diabetes mellitus (8.3 deaths per 100,000 population). Both of these are very low compared to the US. Males were affected more than females with a rate of 26.8 deaths per 100,000 population, compared to 17.1 deaths per 100,000 population. Over 76% of Coconino County resident deaths between 2013 and 2018 due to diabetes mellitus occurred in those between the ages of 55 and 84 years.



Diabetes mellitus type I has many unknowns regarding risk factors. In the United States, the prevalence of diabetes mellitus type II occurs in Native Americans more than any other racial or ethnic group. Other risks of developing diabetes include having prediabetes, being overweight, having a nuclear family members with diabetes mellitus type II, and being physically inactive.

The Story of Flagstaff's Homeless



Homelessness In Coconino County, Az From The Perspective Of A First Engager

My name is Richard Brust and I am the Homeless Outreach Coordinator for the PATH (Projects for Assistance in Transition from Homelessness) Program at Catholic Charities. I have been PATH Coordinator since 2013 and in that time my team and I have housed many clients, assisted with getting them into treatment for serious mental illness and co-occurring substance abuse, and minimized the amount of potential deaths in serious winter weather conditions. The successes have outweighed the failures as we live with the losses of life and missed opportunities for successfully assisting those that have decided to go their own way.

PATH started with Catholic Charities in Northern Arizona in 2006 and has conducted Winter Outreach since the beginning. Over the years, we have not been so lucky as several have passed away in the elements of cold weather, strengthening our processes each year to do better and plan better. Currently, we try to work with 2 teams to cover the East Side and West Side of

“...we try to keep [families] together as they must be divided if they choose to stay at the shelters.”

Flagstaff and check under the 65+ drainage tunnels/bridges, around all local businesses/parking lots, known camping areas, and local parks to be sure that nobody has to endure the winter. We start at around 9-10pm and sometimes don't complete our rounds until 4-6am the next day. We do this as it is easier to find someone hunkered down for the night in opposed to walking around in the daytime. We try and go out when there is 2 inches of snow or more on the ground, if the temperatures are less than 10 degrees Fahrenheit, or both. We don't accommodate anyone that stops by the office during the day with a motel as we prefer they stay at the local shelters and the motels are last resorts for shelter. If we accommodated everyone in this manner, our funding would be drained before the winter ended. Mostly homeless individuals with pets or those that have been kicked out of the shelters due to not abiding by the rules cannot return or chose not to go. Also families that are homeless, we try to keep together as they must be divided if they choose to stay at the shelters. For example, a family of 4 (Mother, Father, Daughter, and Son (aged 9) would need to split up 3 ways if they choose to stay at the shelters. The Mother and Daughter could stay at Hope Cottage, the Father could either stay at Flagstaff Shelter Services or Sunshine Rescue Mission, and the Son would have to stay at Northland Family Help Center's Youth Shelter (being that he is over the age of 8, he cannot stay at Hope Cottage). All of this with no assurance of guaranteed availabilities in all 3 cases. This is why there has been an extreme need for a Family Shelter in Flagstaff that could accommodate at least 20+ families. Catholic Charities has the only known Family Shelter with 3 Units, for up to 3 month stays, and also accepts single father families. There has been talk of Flagstaff Shelter Services being able to accommodate families in the near future, but do not quote me on that. Also, Flagstaff Shelter Services has been instrumental in reducing Winter fatalities by teaming up with local churches for overflow shelter capabilities. In the Winter of 2018-19, PATH sheltered 22 families (households with children), 47 children, 54 women, 75 men, 19 families (households without children), 7 Veterans, and 16 pets.

(continued)

The Story of Flagstaff's Homeless



(continued)

During the Summer months, we are on emergency status to relocate homeless camps during potential fire season. We adhere to the rules of the City of Flagstaff with its No Camping in City Ordinance and with the 14 Day Camping rules of the Coconino National Forest. If we hand out camping supplies, we want to know the location (if we don't assist them with finding one) of where they are going to be camping, that they also abide by the rules of the City and National Forest, have a 5-6 gallon water jug that we provide for fire safety, hygiene, and hydration purposes as well as trash bags to maintain a clean temporary campsite. Once a week, if we know their location, we pick up full trash bags and swap out empty water jugs with full ones. Lately, we are trying to relocate and notify those that choose to camp about the paid campsites (20+) within the National Forest that have different amenities such as fire pits, picnic tables, and sometimes latrines and showers. With someone on disability income, this would cost them about \$300 per month until housing opportunities come along in their favor. This is kind of a new possibility for us to provide this information to those we serve.

“Some have more than others, and others have nothing at all.”

Besides some of the other services we provide to mostly enrolled clients such as life sustaining supplies, bus passes, phones/phone cards, identification/benefits/employment support

assistance, there are many small services that do not exist in Flagstaff or are very limited, especially in rural areas such as Valle, Tusayan, Cameron, Tuba City, Williams, Kaibeto, Parks, and Page. Some have more than others, and others have nothing at all. In Flagstaff, I know a day center that offers limited storage space, laundry services, and showers would go a long way for the homeless population. Perhaps even a parcel of land away from neighborhoods/local businesses for the express purpose of emergency camping that has emergency road access for first responders and sanitation trucks to pick up dumpsters, ramadas with brick wall grills/picnic tables, and shower/toilet structures that have locking doors. It may not be a solution to end homelessness, but could provide an option to limit camping fines and prevent forest fires and potential hygiene/trash problems that have existed in other forests. That's just Flagstaff and could help other rural surrounding communities if the need is there (Page, Williams, and Tuba City may be potential areas where such services could also be a benefit to the homeless). These are merely my own observations that I have discovered over the years. I hope this information has been helpful. One of the recent successes we have had was getting an elderly gentleman housed in a town with a lower elevation that was formerly homeless and suffered from extreme COPD. He was constantly visiting the ER and would be assisted by us for the times we could assist him with motels. For the times we could not (temperature and no snow), he would be camping out. He is doing well and wants to tell his story to assist others that are currently homeless to avoid the mistakes he has made, to enlighten those that do not understand what it is like, and as a lesson of life in that nobody is immune from the many factors that could lead one towards becoming homeless such as mental illness, addiction, financial reasons, domestic abuse, house fires, job loss, and other causes. I will read his book when he completes it.

– *Richard Brust*

Habits and Habitats

The Behaviors and Environments Impacting Resident Health

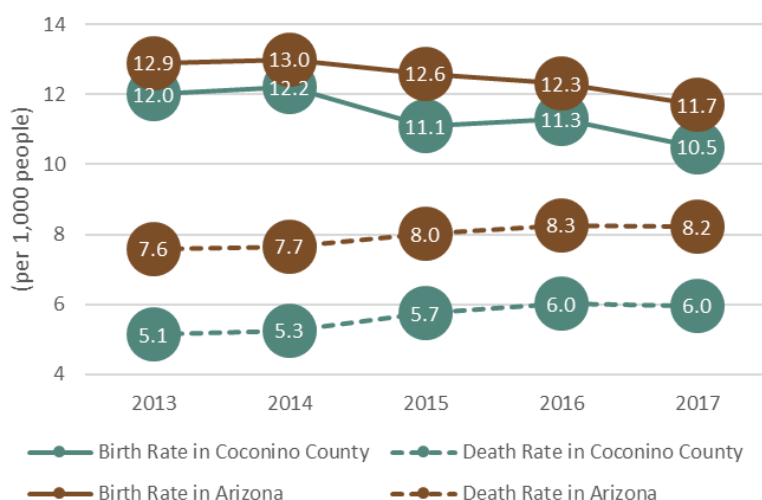


Maternal and Child Health

Maternal and Child Health (MCH) refers to health issues concerning women, children and families. Investment in healthy children and families strengthens communities and avoids unnecessary health care costs.

General Birth and Death Rate

Birth And Death Rates, 2013-2017



Among Coconino County residents between 2013 and 2017, the rate of births has been on a declining trend and the rate of deaths has been increasing. Rates for death and births for Arizona have followed a similar pattern. In 2017, the rate of birth among Coconino County residents was 10.5 per 1,000 population, lower than Arizona's rate of 11.7 births per 1,000 population. The rate of death in 2017 among Coconino county residents was also lower than Arizona's with 6.0 per 1,000 population compared to 8.2 per 1,000 population.



Teen Birth Rates

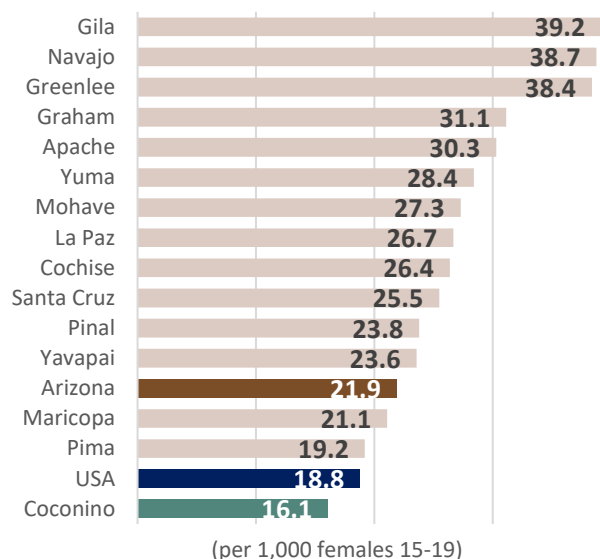
Teen pregnancy in Coconino County females ages 15-17 (11.7 per 1,000 live births) and 18-19 (22.6 per 1,000 live births) are well below the Healthy People 2020 goals of 36.2 and 104.6 per 1,000 live births, respectively.

Teen births among Coconino County females occur least frequently here (16.1 per 1,000 females aged 15 to 19 years) compared to Arizona, all other counties, and the US.

Teen pregnancy and births contribute significantly to the incompleteness of high school among girls. In the US, only about half of teen mothers will complete a high school or equivalent degree by the age of 22, compared to an almost 90% graduation rate of girls who do not give birth during high school.

The children of mother who give birth during their teens are more likely to have lower educational attainment, more health problems, or be incarcerated, extending a cycle of hardship.

Birth Rate to Females 15-19 Years of Age, 2017

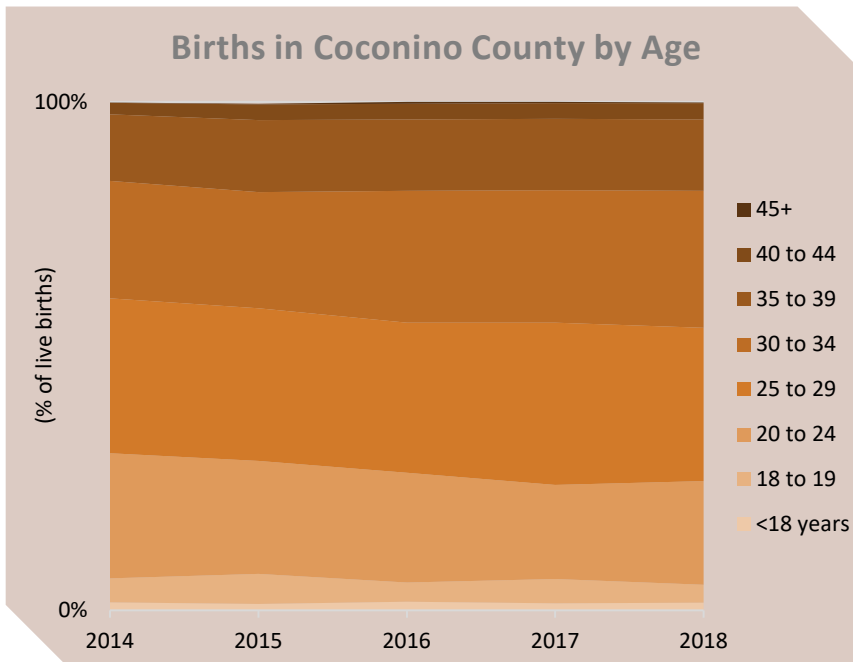


(per 1,000 females 15-19)

1- Coconino County hospital birth records
 2- Coconino County Health and Human Services Medical Examiner's Office
 3- Centers for Disease Control and Prevention National Vital Statistics Report
 4- Arizona Department of Health Services Advanced Vital Statistics Report



Demographic Trends



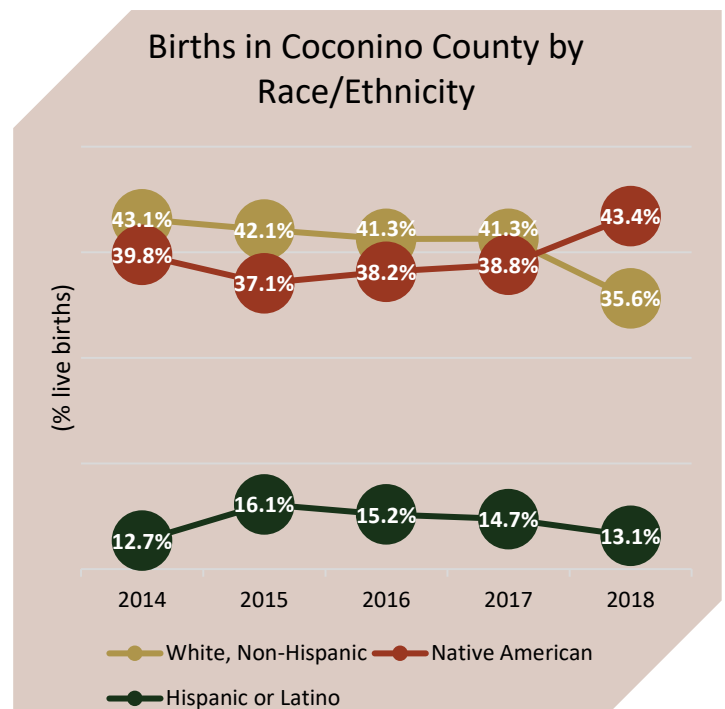
Age

From 2014 to 2018, the age group that made up the largest portion of births in by Coconino mothers was 25 to 29 years, followed 20 to 24 and 30 to 34 years of age. The greatest change over five years was a 4.2% decrease of births in mothers 20 to 24 years of age from 20.4%. Births in mothers aged 30 to 34 years increased 3.8%. Births to those under 18 and over 45 are uncommon, making up less than 2% of all births in Coconino County combined.



Race/Ethnicity

From 2014 to 2018, Births to White, Non-Hispanics, Native American, and Hispanic or Latino women were most common in Coconino County; Black or African American, Asian, and Multiple Race births comprised less than 3% of births each year. From 2017 to 2018, births to Native American women surpassed births to White, Non-Hispanic women, increasing to 43.4% of Coconino County births. Overall, births to Native American increased by 3.7% and births to White, Non-Hispanic women decreased by 7.5% from 2014 to 2018. Births to Hispanic and Latino women in Coconino County increased overall by less than 5%.



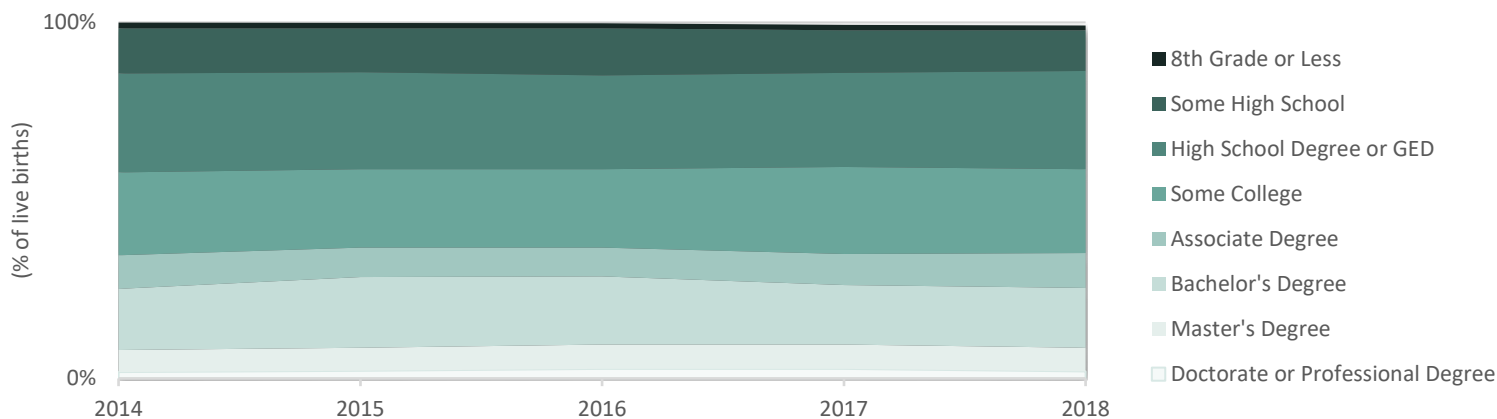
Maternal and Child Health



Education

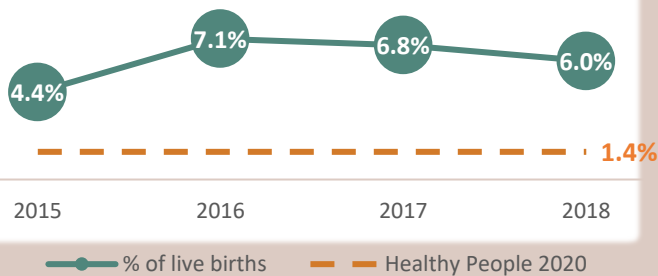
Most births in Coconino County from 2014 to 2018 were to women with a high school degree or GED equivalent, closely followed by those with some college education. All education levels remained fairly uniform between 2014 and 2018, with no group changing more than 0.5%.

Educational Attainment by Mothers



Pregnancy Contraindications

Mothers Who Smoked During Pregnancy, 2017

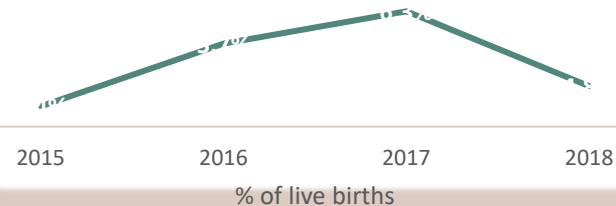


In Coconino County, 6.0 percent of mothers who gave birth in 2018 reported smoking during pregnancy. This is an overall increase of 1.6 percent since 2015, but a decline was observed between 2016 and 2018. Smoking during pregnancy can cause low birth weight, preterm delivery, and lung, brain and facial tissue damage to the fetus. Studies have found that babies whose mothers smoked during pregnancy are about three times more likely to die from SIDS. It is noted that nicotine from e-cigarettes and other tobacco products used during pregnancy can cause brain and lung damage to developing babies. It is recommended that mothers abstain from smoking during and after pregnancy.

Almost 5 percent of Coconino County mothers who delivered babies in 2018 were found to have at least one infection. Infections include gonorrhea, syphilis, hepatitis B and hepatitis C. A 1.5% decrease in infections in mothers who delivered babies occurred between 2017 and 2018, but an overall 0.4 percent increase since 2015 is noted.

Infection during pregnancy is linked to miscarriages, premature birth and low birth weight, and illnesses passed on to the fetus leading to life-long chronic disease or death. Prevention of infections during pregnancy includes abstaining from sex or practicing monogamy with an uninfected partner, the completion of prescribed medication, and using latex condoms.

Mothers With An Infection At The Time Of Delivery, 2017



1- Coconino County hospital birth records
2- Healthy People, US Department of Health and Human Services



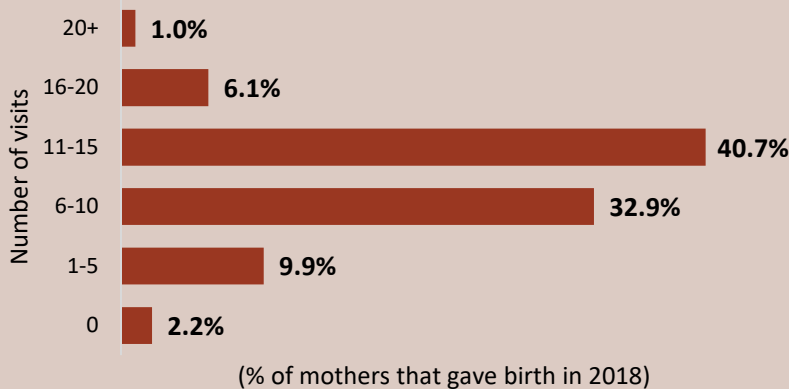
Prenatal Care

In 2018, 40.7% of Coconino County mothers that delivered in 2018 had between 11 and 15 prenatal care visits. This is lower than both the US and Arizona proportions of 49.2% and 45.3%, respectively. The second most populous group of Coconino County mothers had 6 to 10 prenatal visits (32.9%), similar to Arizona (34.6%) and the country (31.2%).

A five-year trend has shown that the group of mothers that attend 6 to 10 prenatal care visits is becoming more common, and those that go to 11 to 15 visits is lessening. Since 2014, the number of mothers who attended 11 to 15 prenatal visits declined 8.5%, where the number who attended 6 to 10 prenatal visits increased 3.6% and those who attended 1 to 5 visits increased 4.1 percent.

The World Health Organization (WHO) recommends a minimum of 8 visits to increase the likelihood of positive pregnancy outcomes. This number of visits encourages the quality of education and counseling a pregnant woman receives from her physician, the likelihood that the pregnant woman is getting proper nutrition and testing, and the chance of identifying any fetal anomalies or conditions.

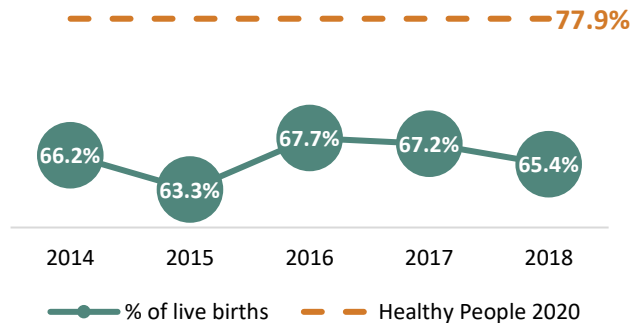
Number of Prenatal Visits During Pregnancy



Almost 65.4% of Coconino County Mothers that gave birth in 2018 initiated prenatal care in the first trimester. This is lower than Arizona, where 68.8% of mothers that gave birth in 2018 received prenatal care in the first trimester, and much lower than the country's proportion of 75.5%.

Since 2014, Coconino County mothers that initiate prenatal care in the first trimester has fluctuated between 63 and 68%, residing well below the Healthy People 2020 goal of 77.9%. Of the Coconino County mothers who delivered a baby in 2018 and initiated prenatal care in the first trimester, 41.6% was White, Non-Hispanic, 36.9% was Native American, and 13.7% was Hispanic. Native American mothers were the largest group to initiate prenatal care in the second and third trimesters, making up 57.6% and 64.2%, respectively.

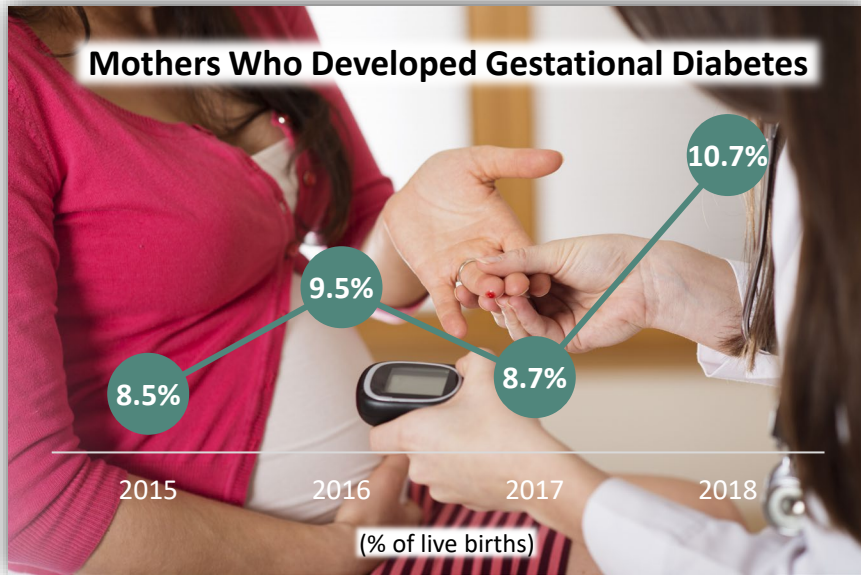
Mothers Who Initiated Prenatal Care In The First Trimester



1- Coconino County hospital birth records
 2- Healthy People 2020, US Department of Health and Human Services
 3- Centers for Disease Control and Prevention National Vital Statistics Report
 4- Arizona Department of Health Services Advanced Vital Statistics Report
 5- World Health Organization



Gestational Diabetes



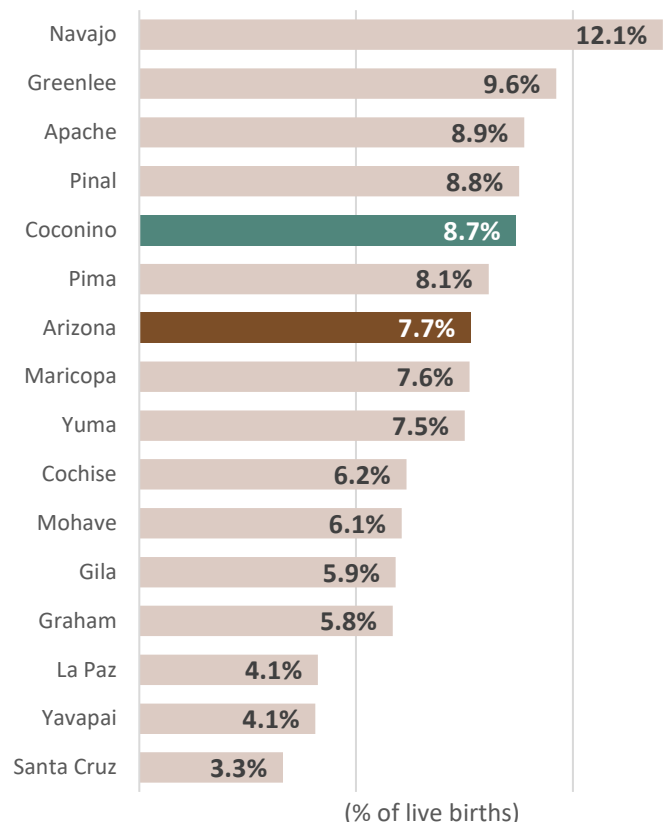
In Coconino County from 2014 to 2018, preterm births increased overall by 2.2% to 10.7%. Healthy People 2020 determined a goal for preterm births to be at 9.4% or less of live births, which Coconino County maintained for four of the last five years.

In 2017, 8.7% of Coconino County women developed gestational diabetes, higher than Arizona as a whole (7.7%) and ten other Arizona counties.

The proportion of women that develop gestational diabetes in the US ranges from 6 to 9%. It is important to screen for gestational diabetes, as women who do develop the condition are more likely to acquire diabetes type II in the future.

In 2018, Coconino County Native American women were over five times more likely to develop gestational diabetes compared to White, Non-Hispanic women; Coconino County Hispanic women were 1.9 times more likely to develop gestational diabetes compared to White, Non-Hispanic women. Coconino County women who gave birth in 2018 that were enrolled in WIC were almost two times more likely to develop gestational diabetes compared to those not enrolled on WIC. The Coconino County women that had 0 prenatal visits were also two times more likely to develop gestational diabetes compared to those that had 11 to 15 prenatal visits. Women that lived in 86040 (Page) and 86045 (Tuba City) in 2018 were 2.4-3.2 times more likely to develop gestational diabetes than those that lived in 86004 (Flagstaff).

Mothers That Developed Gestational Diabetes, 2017



1- Coconino County hospital birth records
 2- Healthy People 2020, US Department of Health and Human Services
 3- Arizona Department of Health Services Advanced Vital Statistics Report



Preterm Births

Preterm birth is described as a delivery at less than 37 weeks of gestation. Preterm births, especially those occurring before 32 weeks, are more at risk of death or disability conditions, such as breathing or eating difficulties, cerebral palsy, delayed development, or vision and hearing problems. A preterm birth and any resulting conditions can lead to high medical costs.

In Coconino County from 2014 to 2018, preterm births increased overall by 1.2%. A spike in preterm births occurred in 2017 with 11.0% of deliveries occurring prior to 37 weeks of gestation. Healthy People 2020 determined a goal for preterm births to be at 9.4 percent or less of live births, which Coconino County maintained for four of the last five years.

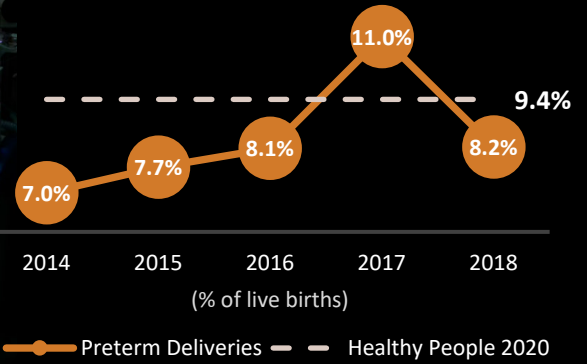
In 2017, 11.0 percent of Coconino County births were considered preterm, higher than the proportions of preterm deliveries in the US (9.9%), Arizona (9.3%) and 12 other Arizona counties.

Mothers who had less than 10 prenatal visits were up to 7 times more likely to have a preterm delivery compared to those who had 11 to 15 visits

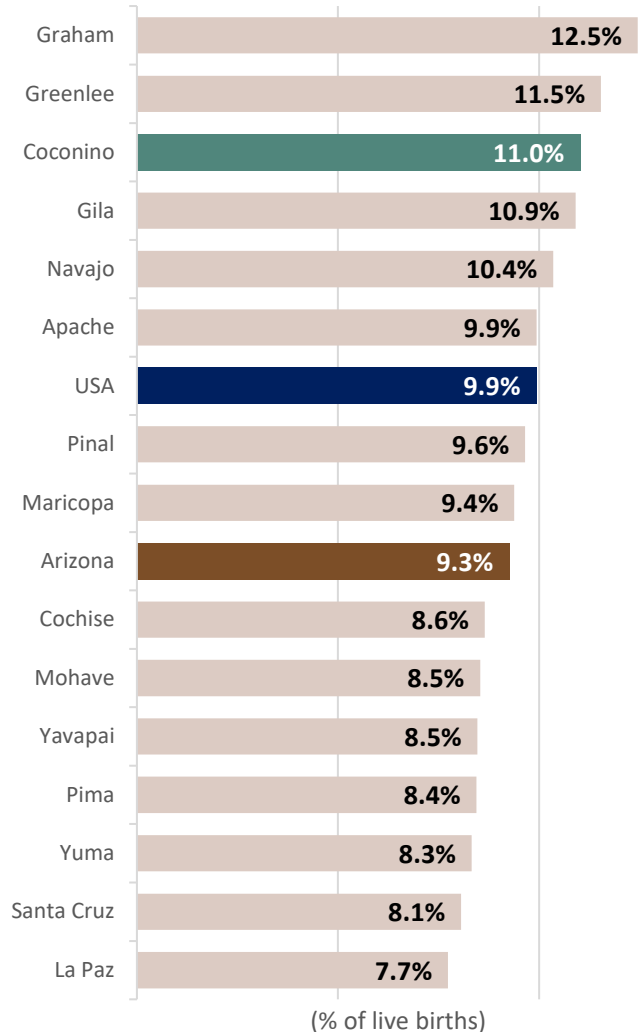
In 2018, Coconino County women that developed gestational diabetes were 1.5 times more likely to deliver preterm compared to those that did not develop gestational diabetes. Of these women, those that had 0 to 10 prenatal visits were up to seven times more likely to have a preterm birth compared to those who had 11 to 15 prenatal visits.



Gestation Less Than 37 Weeks



Gestation less than 37 weeks



1- Coconino County hospital birth records
 2- Healthy People 2020, US Department of Health and Human Services
 3- Centers for Disease Control and Prevention National Vital Statistics Report
 4- Arizona Department of Health Services Advanced Vital Statistics Report

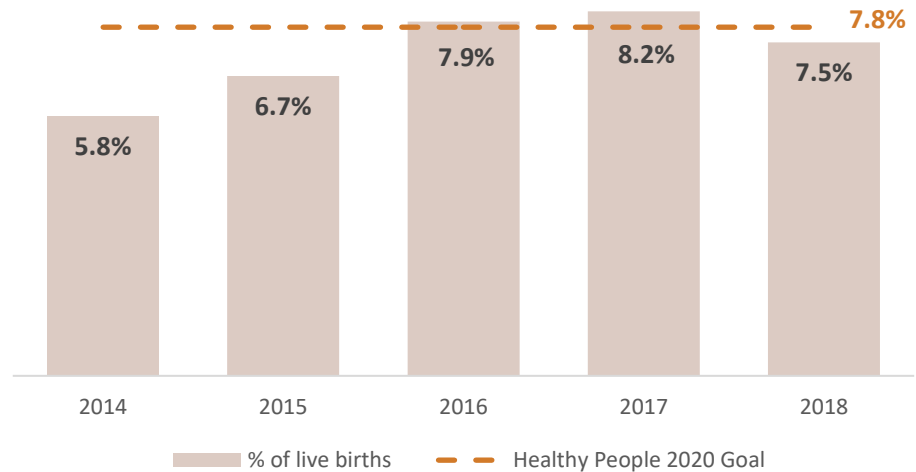


Low Birth Weight

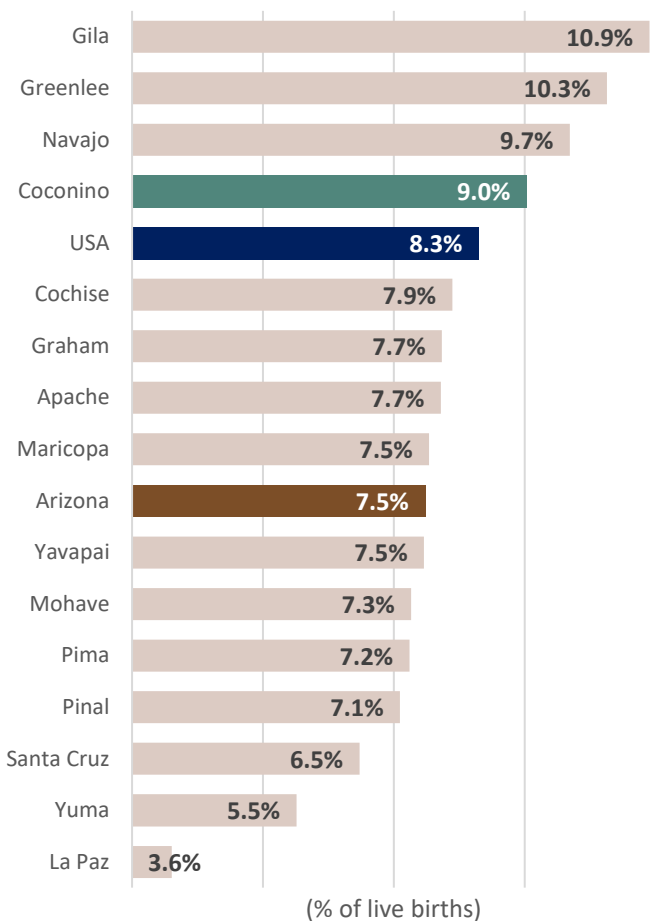
Low birth weight (LBW) is defined by the World Health Organization as a birth weight of an infant of 2,499 grams or less, regardless of gestational age.

In Coconino County from 2014 to 2018, LBW births increased overall by 1.7%. The proportion LBW births rose from 2014 to 2017 and decreased in 2018. Healthy People 2020 determined a goal for LBW births to be at 7.8% or less of live births; Coconino County surpassed this target in 2016 and 2017, but fell below in 2018.

Births less than 2500 grams



Births less than 2500 grams, 2017



In 2017, 9.0 percent of Coconino County births were considered preterm, higher than the proportions of low birth weight deliveries in the US (8.3%), Arizona (7.5%) and 11 other Arizona counties.

In 2018, Coconino County women that had a bachelor's degree were about half as likely to have a LBW birth compared to those with a high school degree. Of these women, those that had 0 to 10 prenatal visits were up to 5.5 times more likely to have a LBW birth compared to those who had 11 to 15 prenatal visits. Lastly, women who smoked during their pregnancy were 1.9 times more likely to have a LBW child compared to those that did not smoke.

1- Coconino County hospital birth records
 2- Healthy People 2020, US Department of Health and Human Services
 3- Centers for Disease Control and Prevention National Vital Statistics Report
 4- Arizona Department of Health Services Advanced Vital Statistics Report

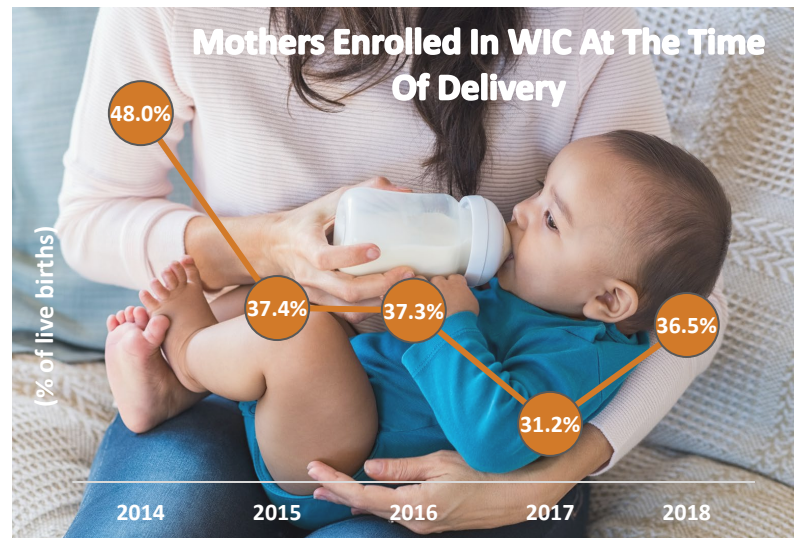


Women, Infants, and Children Program

Enrollment

WIC is available to eligible women who are pregnant, non-breastfeeding up to 6 months postpartum, breastfeeding up to one year postpartum, and infants and children up to age five.

According to 2018 birth records, 36.5% of births in Coconino County were to mothers enrolled in WIC, an overall decrease from 48.0% in 2014. The trend of mothers who gave birth between 2014 and 2018 with the primary payment through Medicaid or another government source was similar to the percentage of those enrolled in WIC, concluding that the number of mothers in Coconino County needing WIC enrollment may be declining.

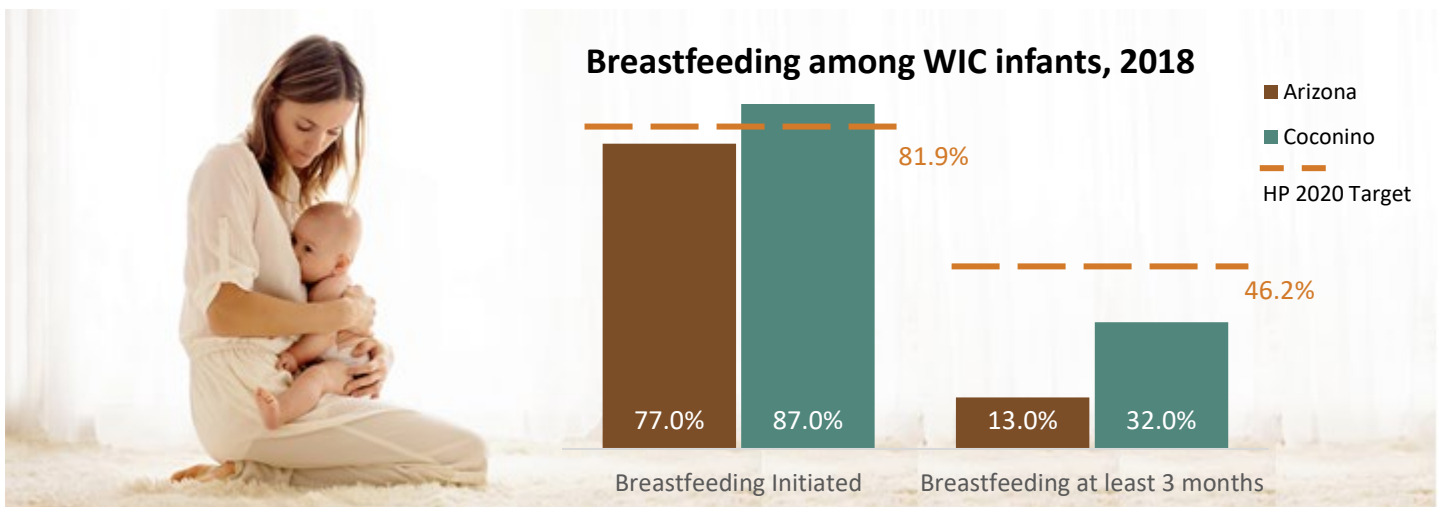


Breastfeeding

The WIC Breastfeeding Peer Counselling (BFPC) program supports WIC clients who are pregnant and/or breastfeeding. The Coconino County Health and Human Services (CCHHS) WIC program was granted a performance award for achieving the highest percentage of infants exclusively nursed for the assigned caseload cohort of 2,000 to 8,000 clients in the first quarter of 2019 federal fiscal year (October 1 through December 31).

In 2018, 87.0 percent of Coconino County mothers enrolled in WIC initiated breastfeeding their infants, which was ten percent higher than the state (77%). Almost one-third of WIC-enrolled mothers in Coconino County continued to exclusively breastfeed (32.0%), much higher than those of Arizona as a whole (13.0%).

Breast milk is considered superior to alternative forms of infant nutrition. Breastfeeding contributes to immunity against many viral and bacterial diseases and is associated with the reduction of risk of respiratory and diarrheal disease risks.



1- Coconino County hospital birth records
 2- Healthy People 2020, US Department of Health and Human Services
 3- Arizona Department of Health Services Advanced Vital Statistics Report
 4- Coconino County WIC records



Immunization rates for kindergarten- and sixth grade-aged students were lower than Arizona's rates for the 2018-2019 school year.

Child Vaccination Rates

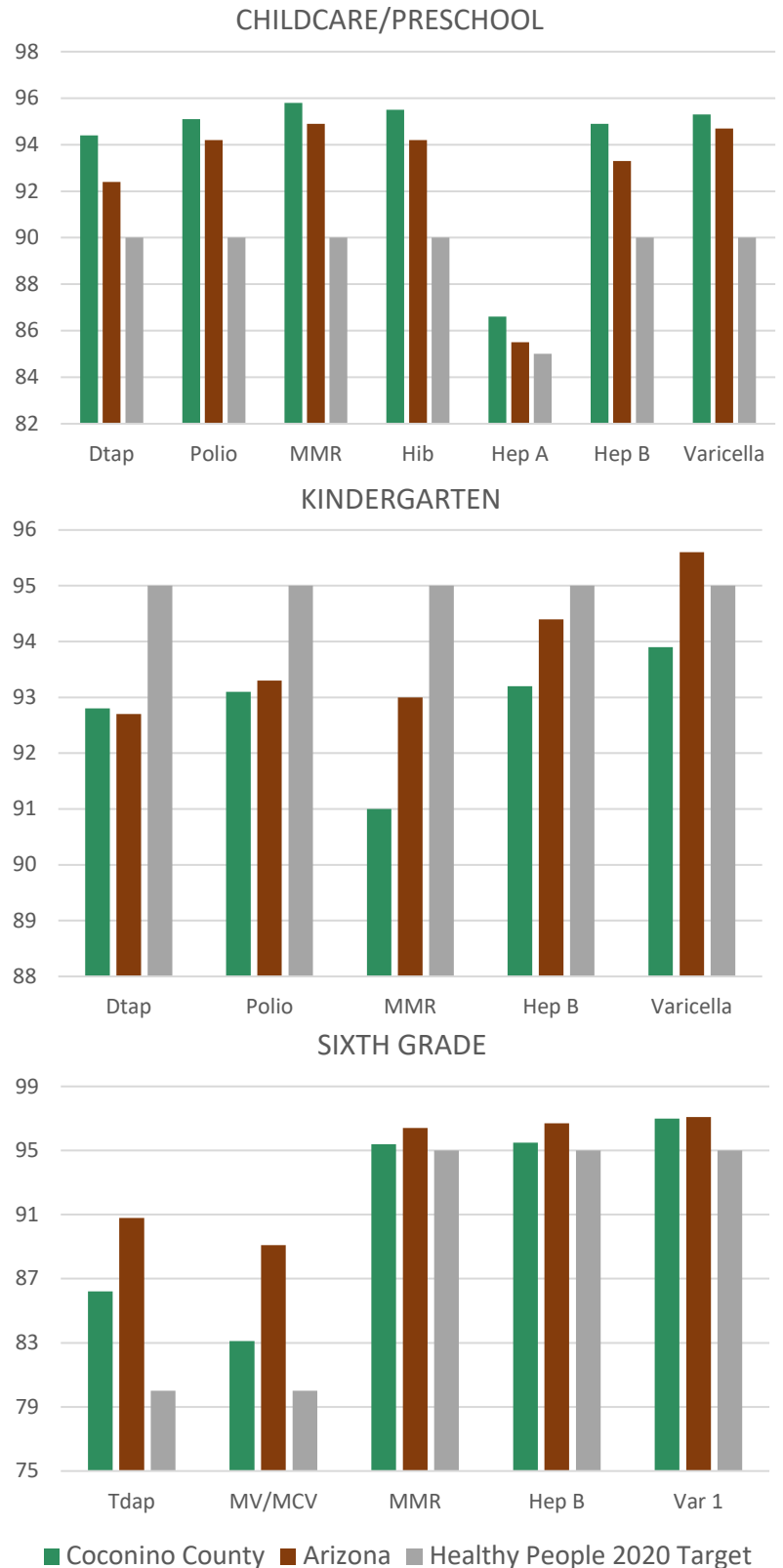
Vaccines are used to prevent several diseases in the community. Immunization schedules are designed for several stages of life, and are especially during childhood, stopping fourteen vaccine-preventable diseases.

The rate of Coconino County childcare/preschool-aged children in 2018-2019 immunized with required vaccines was higher than both Arizona's rates and the Healthy People 2020 target.

The rate of Coconino County kindergarten-aged children in 2018-2019 immunized with required vaccines was lower than both Arizona's rates and the Healthy People 2020 target.

The rate of Coconino County sixth graders in 2018-2019 immunized with required vaccines was higher than the Healthy People 2020 target, but lower/equal to Arizona's rates.

Coconino County Students Reported Vaccination Coverage for 2018/2019 School Year (%)

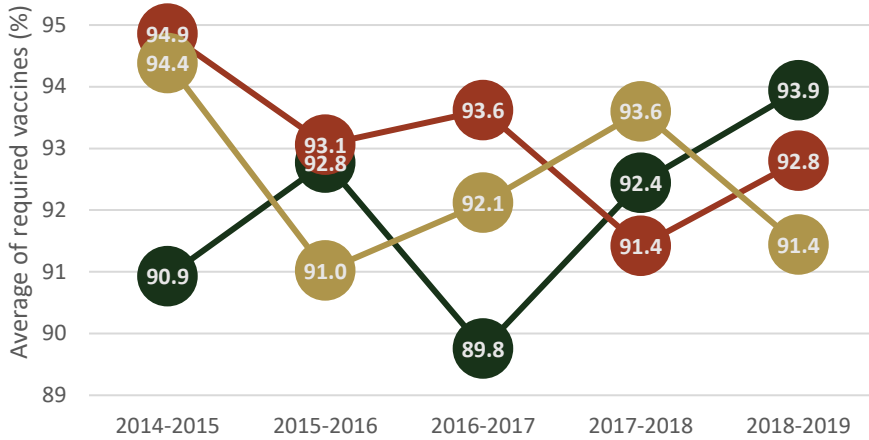


Maternal and Child Health

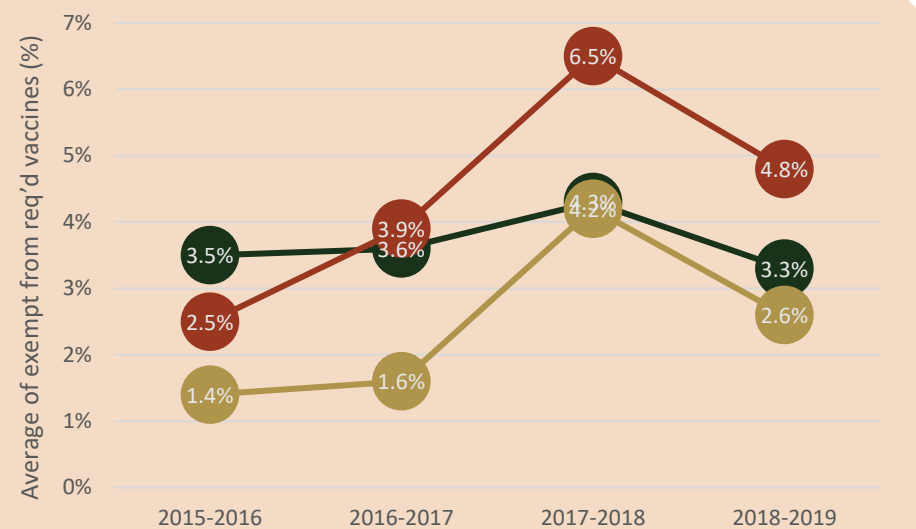


● Childcare ● Kindergarten ● 6th Grade

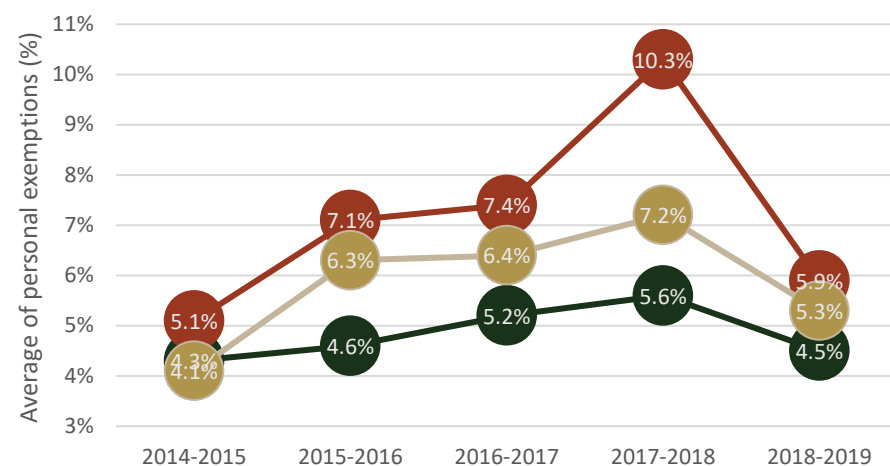
Trend Of Students Immunized, By Age Group



Trend Of % Exempt From All Req'd Vaccine



Trend Of Personal Exemption For ≥1 Vaccines



Child Vaccination Rates

There was an increasing trend in Coconino County kindergarten-aged children immunized with required vaccines in the 2018-2019 school year. The trend of Coconino County childcare/preschool-aged children immunized with required vaccines has been on an increasing trend since 2016-2017. The Coconino County sixth graders had a decreasing trend of children immunized with required vaccines in 2018-2019. In the 2018-2019 school year, the children enrolled in childcare/preschool reported the highest rate of required immunizations of the three age groups.

There was a decreasing trend in the rate of students who received exemptions from all required vaccinations for all three age groups reported for the 2018-2019 school year. This rate for kindergarteners and sixth graders in Coconino County is still higher than reported in previous years but is the lowest rate for childcare/preschool-aged children since 2015-2016.

There has been a decreasing trend in vaccination exemptions since the 2017-2018 school year

There was a decreasing trend in the rate of students who received exemptions from at least one required vaccination for all three age groups reported for the 2018-2019 school year. This rate for all age groups in Coconino County is still higher than reported in previous years but is the lowest rate for childcare/preschool-aged children since 2015-2016. (Note: the rate of childcare/preschool-aged children in the 2014-2015 school year was 4.3 percent, just slightly above the most recently reported rates).

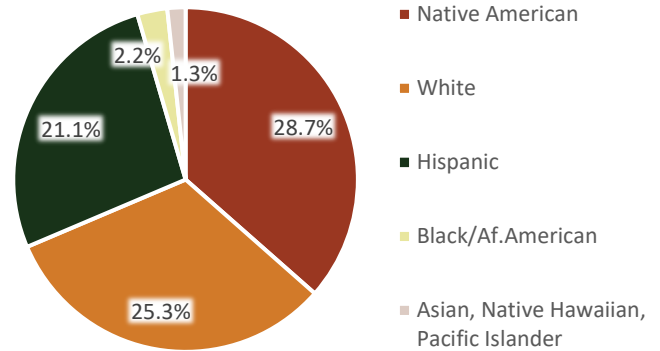


Women, Infants, and Children

WIC benefits are available to pregnant, non-breastfeeding women up to 6 months postpartum, breastfeeding women up to one year postpartum, and to infants and children who are at or below 185 percent of the federal poverty guidelines. The Arizona Supplemental Nutrition Program for WIC provides Nutrition Education, Breastfeeding Support, Supplemental Nutritious Foods and Referrals to Health Care and other Social Services. Monthly benefits are provided using electronic eWIC cards. Coconino County WIC began offering appointments via telephone or virtual platform for certain appointment types.



Race and Ethnicity of 2019 Enrolled WIC Participants



In 2019, Coconino County Health and Human Services' WIC program had a caseload of 1,526 clients. The offices in Flagstaff and Page are open daily, Williams is available once per week, Fredonia and Colorado City offices are open a few times a month, and the Grand Canyon office is staffed once a month. The largest portions is served in Flagstaff (65.1%), followed by Page (16.6%) and Fredonia (14.0%). Williams and Colorado City see the fewest, with 6.7 and 0.9% of CCHHS WIC's clientele, respectively. The majority of CCHHS WIC's clientele is Native American (28.7%) or White, Non-Hispanic (25.3%). Just over 21% of the clients are Hispanic or Latino.

Seniors

5.3 million seniors or 7.3% of the senior population were food insecure in 2018. The rate remains significantly higher than pre-recession levels of 2007.



Senior Meals Served July 2017-June 2018

Congregate Meals	9,479
Home Delivered Meals	7,022
ALTCS Meals	615

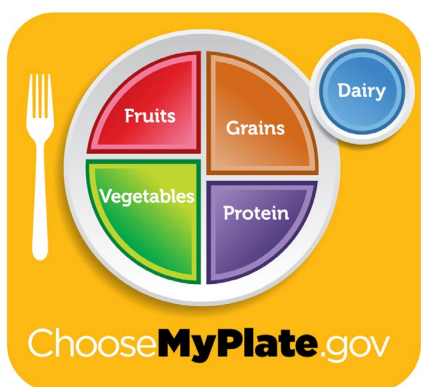
Coconino County's senior services program provides congregate meals, home bound meals (Meals on Wheels), homecare, transportation services, and case management to senior residents in Flagstaff and Williams. Senior Services provides seniors who are 60 years of age and older with services, referrals, and information.



AZ Health Zone

Coconino County's nutrition program (the AZ Health Zone) provides eligible populations with nutrition and physical activity lessons and technical support to organizations offering direct education and summer food programs. The AZ Health Zone (AZHZ) promotes healthy eating and physical activity habits by targeting early care and childcare education providers, eligible schools, and other educational centers. School health is also improved through improving local wellness policies that incorporate standards for meals provided at the schools and physical activity opportunities. This program also encourages local gardening, healthy store initiatives, and food banks.

Their target population includes all persons eligible for SNAP benefits, schools with 50% of more of students participating in the National School Lunch Program, and childcare centers. In the 2018-2019 school year, 73.2% of the schools in Coconino County had over 50% of their student body qualify for the Free and Reduced Lunch Program, allowing over 56% of the students in the county the opportunity to receive AZHZ programming. The most recent data shows that approximately 40% of the eligible student population and 72% of eligible childcare-aged children in Coconino County were given direct education lessons or events. Barriers that this program experiences include long travel distances between sites, shortage of time to visit all sites, and competing priorities at sites



Healthy Eating

Eating healthy is a journey shaped by many factors, including stage of life, preferences, access to food, culture, traditions and the personal decisions we make over time. Coconino County nutrition programs work to help residents find a healthy eating style and build it throughout a lifetime. MyPlate is a visual reminder of a healthier eating style that is widely utilized in nutrition programming.

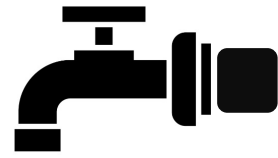


After a Cooking Matters class series with the AZ Health Zone program, one participant remarked, "The MyPlate information was useful. I have enjoyed making the recipes with my family."



Dental Care Voucher Program

This program offer preventative services, such as dental exams, x-rays, cleanings, periodontal treatments and fluoride, as well as emergency exams, extractions and imaging services. Partnerships with a few medical and dental clinics in Flagstaff, Williams, and Page approved a certain amount of vouchers each month. Population target = Coconino County adults 19 and older with no insurance and household income below 201% of the FPL. AND Adults 21+ with AHCCCS and household income below 201% of the FPL. Vouchers can be given only once per person per year, however most recent data has indicated that less than 1% of eligible residents have taken advantage of this program.



Water fluoridation would prevent tooth decay among all socioeconomic, racial, and ethnic groups.

Smart Smiles Program

This program reaches several regions of the county, including Flagstaff, Williams Winslow, Grand Canyon, the Kaibab Plateau, Hopi, Page, and Fredonia and delivers oral health screenings, fluoride varnishes, oral health education, and free incentives of toothbrushes and accessories. The Supai region is also accessed however at this time only education and brushing incentives are offered. The Smart Smiles program is able to provide 800 unduplicated screenings to Coconino County children and 25 oral health screenings to pregnant woman annually. Large distances between regions around Coconino County as well as a fixed grant price produce difficulties in delivering services.

Sealant Program

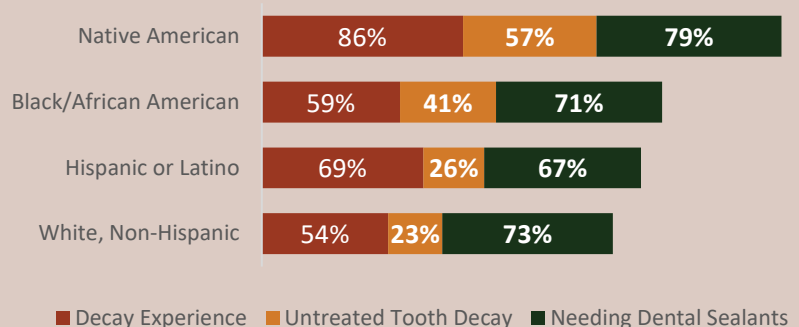
Once applied, the sealants can continue to protect 2 to 4 years.

This program offers dental screenings and dental sealants to second and sixth graders enrolled in schools that qualify for free and reduced lunch program. Research found that low-income children have 60% more cavities in their permanent molars compared to higher-income children. In 2018, 110 dental screenings and 64 dental sealants were given, equaling 14.0 and 0.08%, respectively, of the eligible students reached. Difficulty reaching outlying areas and a limited budget for travel decreases the ability to provide services to all eligible residents.

Disparities in Oral health

Barriers to effective oral care include availability of services, cost of services, insurance coverage, transportation, and cultural and social factors. Additionally, personal choices and behaviors and hygiene practices add to the success of one's oral health. Environmental factors, such as community water fluoridation, also contributes to disparities between populations.

Oral Health Disparities in Arizona Residents, 2017



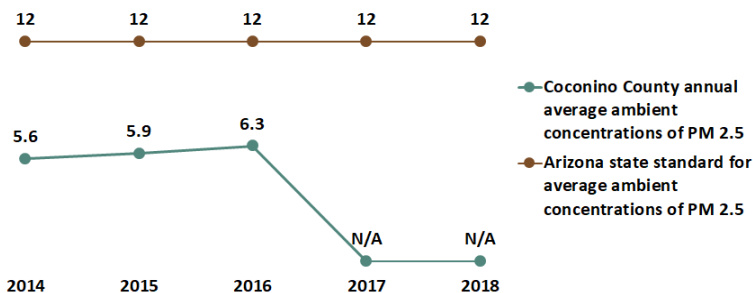
Environmental Health



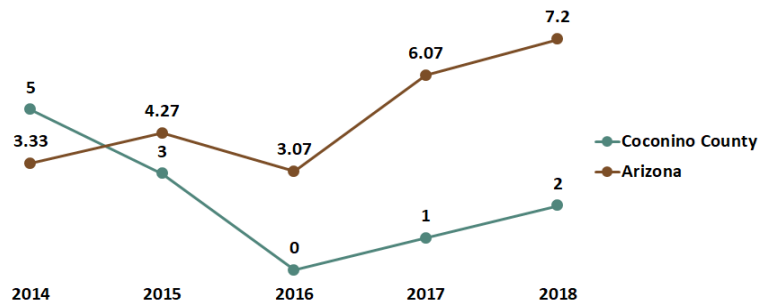
Environmental health is the branch of public health that focuses on the relationships between people and their environment, promotes human health and well-being, and fosters healthy and safe communities. Environmental health is a key part of any comprehensive public health system. CCHHS Environmental Health provides services to prevent food-borne, water-borne and communicable diseases through education and regulatory enforcement of Public Health Statutes, rules, codes, and surveys.

Air Quality and Respiratory Health

2014-2018 - Annual Average Ambient Concentrations of PM 2.5 in Micrograms per Cubic Meter: Coconino County and Arizona Standard



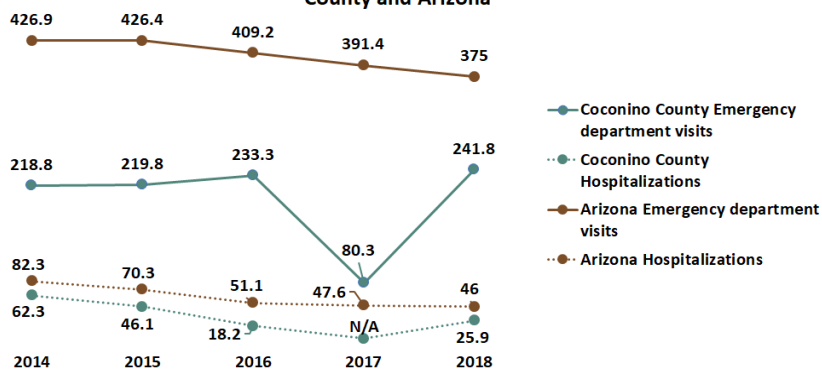
2014-2018 - Number of Days with Maximum 8-Hour Average Ozone Concentration over the National Ambient Air Quality Standard: Coconino County and Arizona



Air quality – Coconino County enjoys clean air much of the year. From 2014-2016, the county's ambient concentrations of fine particulate matter (PM 2.5) were well below the state standard of 12 micrograms per cubic meter. Additionally, Coconino County experiences few days throughout the year where ozone concentrations exceed the National Ambient Air Quality Standard of 0.070 parts per million.

Asthma – From 2014 to 2018, Coconino County's rate of asthma related emergency department visits was lower than the statewide rate of asthma related emergency department visits, which had a decreasing trend over the five-year span. Similarly, Coconino County's rate of asthma related hospitalizations was lower than the statewide rate of hospitalizations, which also decreased over the five-year period.

2014-2018 Age Adjusted Rates of Asthma Related Emergency Department Visits and Hospitalizations per 100,000 Residents: Coconino County and Arizona



Lead in Schools



In a 2017 study of Arizona schools, water samples were taken from fixtures at all public school district schools and tested for lead contamination. In Coconino county, 95% samples were below the state's lead action screening level of 15 parts per billion. Schools that tested above the screening level were required to implement corrective measures.

1- <https://www.apha.org/topics-and-issues/environmental-health#:~:text=Environmental%20health%20is%20the%20branch,any%20comprehensive%20public%20health%20system.>

2- <https://www.coconino.az.gov/229/Environmental-Health>

3- Arizona Department of Health Services. Arizona Environmental Public Health Tracking Network. (n.d.) Web. Accessed: 11/20/2020. www.azdhs.gov/ept

4- https://static.azdeq.gov/dw/lead_screening.pdf



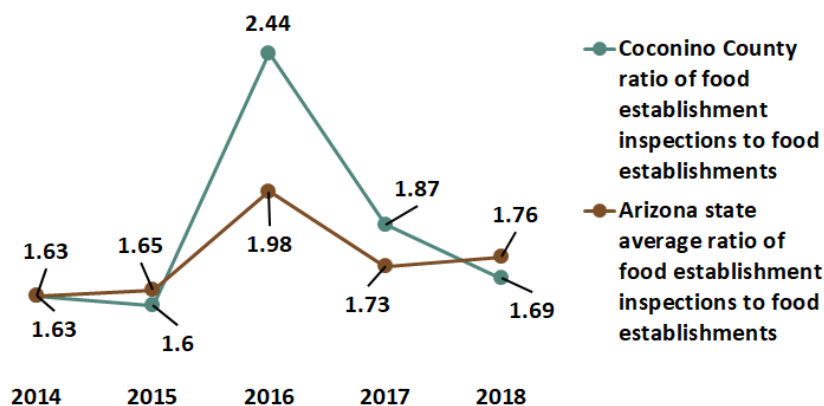
Food Safety

Food Establishment Inspections - Retail food establishments include restaurants, grocery stores, mobile food units, micro markets, food processors, correctional food service facilities, food warehouses, bakeries, instructional facilities, and school cafeterias. These establishments are routinely inspected to evaluate food safety practices.

From 2014-2018 Coconino County performed food establishment inspections at a similar frequency to the state average, except for 2016, when the county's ratio was 46% higher than the state average.



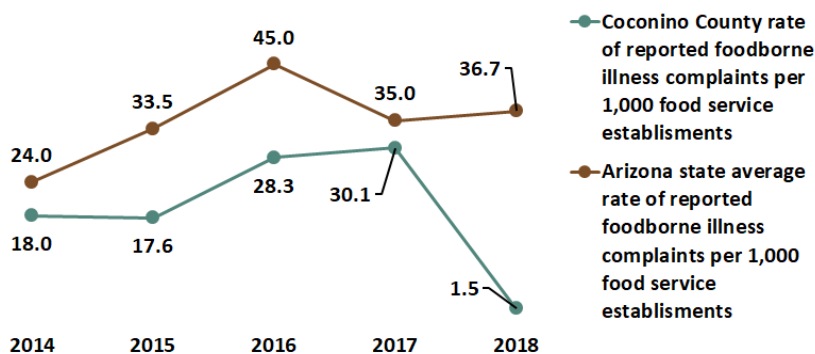
2014-2018 - Ratio of food establishment inspections to food establishments, Coconino County and Arizona State Average



Foodborne Illness Complaints – Over the five-year period between 2014 to 2018, there were 109 foodborne illness complaints in Coconino County. The yearly rate of foodborne illness complaints per 1,000 food service establishments increased by 67% from 2014-2017, however there was a sharp decrease in 2018.

Coconino County's rate of foodborne illness complaints per 1,000 food service establishments is below the Arizona state average, which has steadily increased over the five-year period.

2014-2018 - Rate of Reported Foodborne Illness Complaints per 1,000 Food Service Establishments, Coconino County and Arizona State Average



1- <https://www.azdhs.gov/preparedness/epidemiology-disease-control/environmental-health/environmental-public-health-tracking/index.php#environment-food-safety>

2 - Arizona Department of Health Services. Arizona Environmental Public Health Tracking Network. (n.d.) Web. Accessed: 11/20/2020. www.azdhs.gov/epht

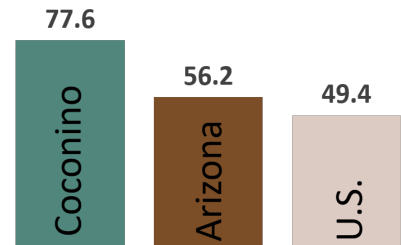
Unintentional Injury



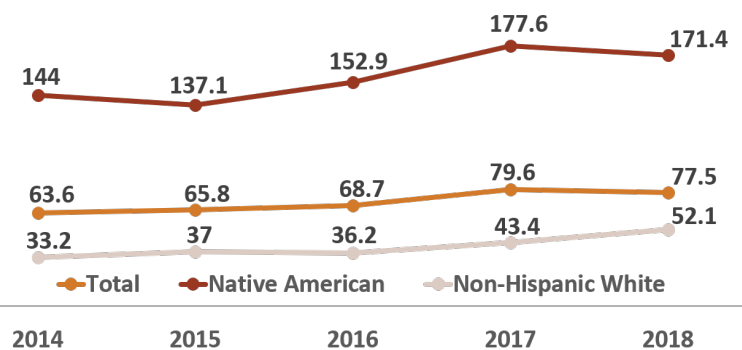
In 2018, unintentional injury (accidents) was the third leading cause of death for Coconino County residents.

Injury has become a growing risk for Coconino County residents and visitors alike. From 2014 to 2018, half of the unintentional injury deaths in Coconino County were visitors. The rate of injury mortality among Coconino County residents has increased 33% from 2014 to 2018. While this increase mirrors a nation-wide trend, injury impacts Coconino County at a rate 1.4 times higher than Arizona and 1.6 times higher than the U.S. in 2017. In 2018, unintentional injuries accounted for 11% of deaths among Coconino County residents and resulted in more deaths than the fourth and fifth (suicide and liver disease/cirrhosis respectively) leading causes of death combined.

Age-Adjusted Unintentional Injury Death Rate (2017)

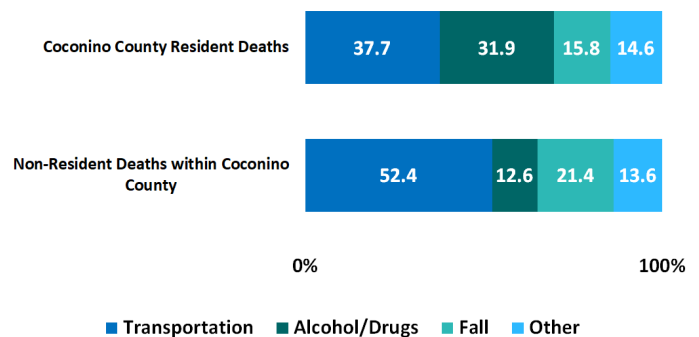


Age-Adjusted Unintentional Injury Death Rate Among Coconino County Residents



Native Americans died at a rate 3.3 times higher than non-Hispanic white residents in 2018.

Mechanism of Unintentional Injury Death (2012-2018)



Among Coconino County residents, transportation accidents (38%) and alcohol/drug overdose (32%) were the leading causes of death from unintentional injury.

Among non-residents, transportation accidents accounted for over half of the unintentional injury deaths, with falls making up the second largest proportion.



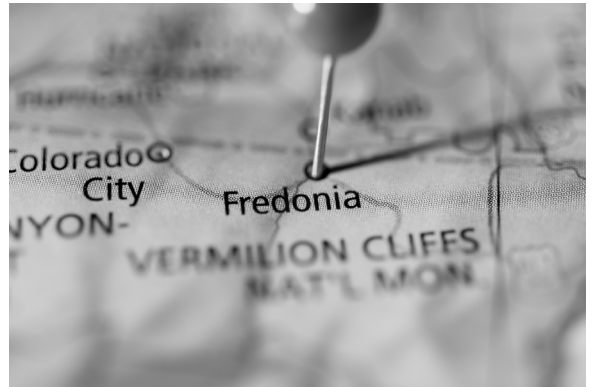
Unintentional injury accounted for 18% of all hospital visits from 2012-2016, totaling \$619 million in hospital charges.

The Story of Fredonia



Fredonia, Arizona is a town in Coconino County. As of the 2010 census it had a population of 1,314. Fredonia is the gateway to the North Rim of the Grand Canyon and has been termed "Arizona's Desert Rose." But as you take a closer look at Fredonia you uncover the residents' passion and the desire to truly help each person with a supportive community.

Hazel Hatch a resident of Fredonia since 1995, loves being a part of the community and states it is a great place to live. Hazel who runs the "Town of Fredonia Care and Share" provides over 170 families a month with a food box. Her team serves over 90 senior boxes the first of the month. "How do you survive if you don't have this little bit of extra help when food is the core of our health?"



The food program is a great benefit to the community. "There is a lot of pre-prep that goes into each box and preparing each one with over 70 pounds of food. It is amazing how many residents appreciate the help that they receive through this program. This is very rewarding, and my husband and I are retired and can give to our community."

"How do you survive if you don't have this little bit of extra help when food is the core of our health?"



Hazel is thankful to the State and St. Mary's Food bank for the grants that have been received to purchase a refrigerator, a freezer and helping to ensure that they pass their inspections to continue this program in Fredonia. Hazel says they serve families from Colorado City, Cain Beds, Moccasin, White Sage and Fredonia. This year, with COVID-19, the community residents donated fresh food to the program from their gardens.

(continued)

The Story of Fredonia



(continued)

Hazel describes Fredonia as a quiet little place with a very supportive community that receives support from the Town government, the library, schools, and churches. “We know our neighbors here with no grocery store or big box stores.

"The community is working on making a difference..."

We have lots of tourist drive through, but we need more businesses and resources to attract the tourist. We don't have enough housing and lose many of our residents to Kanab. The community is working on making a difference and getting things for the elderly and children with recreational activities. “

The library is a central hub of the community. The library program helps to get GEDs for adults and has seen many successful graduates. The library goes above and beyond by helping the senior center deliver food and during COVID offering webinars to help the students and continued to loan books. The library puts together many community events and continues to work on future expansion of programs.



Hazel sums up Fredonia as a tight community who is planning for the future and sees positive change coming from all levels of leadership and community members focused on the strong desire to create a community together.

Transmitting Trends



Sexually Transmitted Infections

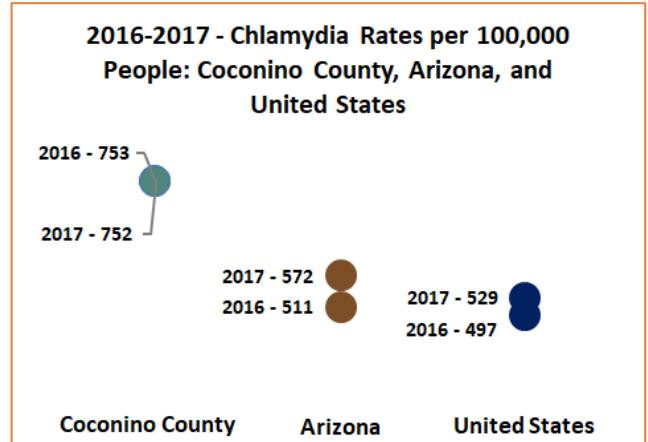
Talk Talk openly about STDs with partners and healthcare providers.

Test The only way to know if you have an STD is to get tested.

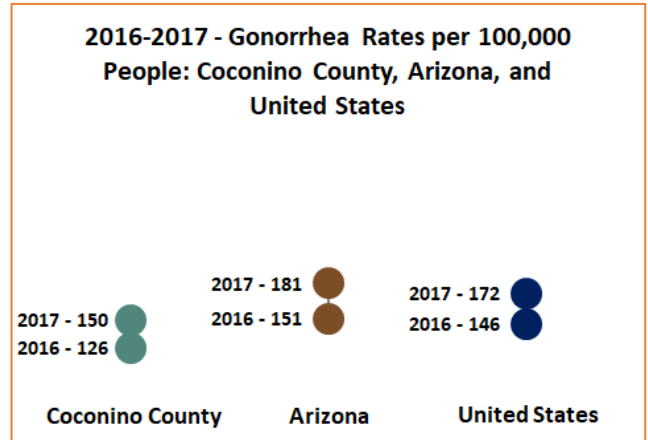
Treat Get treated to protect your health and prevent the spread of STDs.

The most common reported sexually transmitted infections (STIs) in the State of Arizona are gonorrhea, chlamydia and syphilis. STIs increased nationwide from 2013 - 2017 (chlamydia by 22 percent, gonorrhea by 67 percent and syphilis by 76 percent).

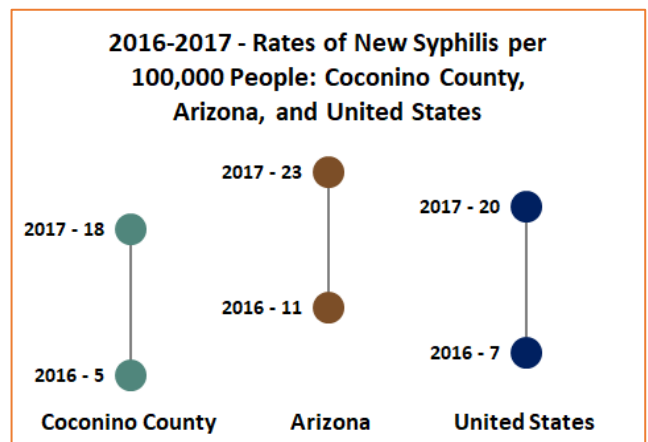
Chlamydia – In 2017, Coconino County had a chlamydia infection rate of 752 infections per 100,000 residents, which was level with its 2016 rate (753 per 100,000). Coconino County's rate of chlamydia infection in 2017 was significantly higher than the overall rates of Arizona (572 per 100,000) and the United States (529 per 100,000). However, there was little change in Coconino County's infection rate from 2016 to 2017, whereas chlamydia infections increased by 12% overall in Arizona and 6% overall in the United States.



Gonorrhea - Coconino County had a gonorrhea infection rate of 150 infections per 100,000 residents in 2017, which was an increase of 19% from the county's 2016 infection rate (126 per 100,000). Coconino County's gonorrhea infection rates remain below the Arizona and United States average, but from 2016 to 2017, increased by a similar proportion; Coconino County increased by 19%, while Arizona and the United States increased by 20% and 18% respectively.



Syphilis – Over the past several years, syphilis has become a re-emerging infection of concern across the United States. From 2016 to 2017, Coconino County experienced a 260% increase in the rate of new syphilis infections per 100,000 residents (5 per 100,000 to 18 per 100,000). On a larger scale, Arizona's new syphilis infection rate rose by 110% and the United States new syphilis infection rate rose by 186% over the same time period.



In early 2018, the Arizona Department of Health Services declared a statewide outbreak of syphilis in Arizona.

1- Arizona Department of Health Services, 2016 STD Annual Report
2- Arizona Department of Health Services, 2017 STD Annual Report

Transmitting Trends



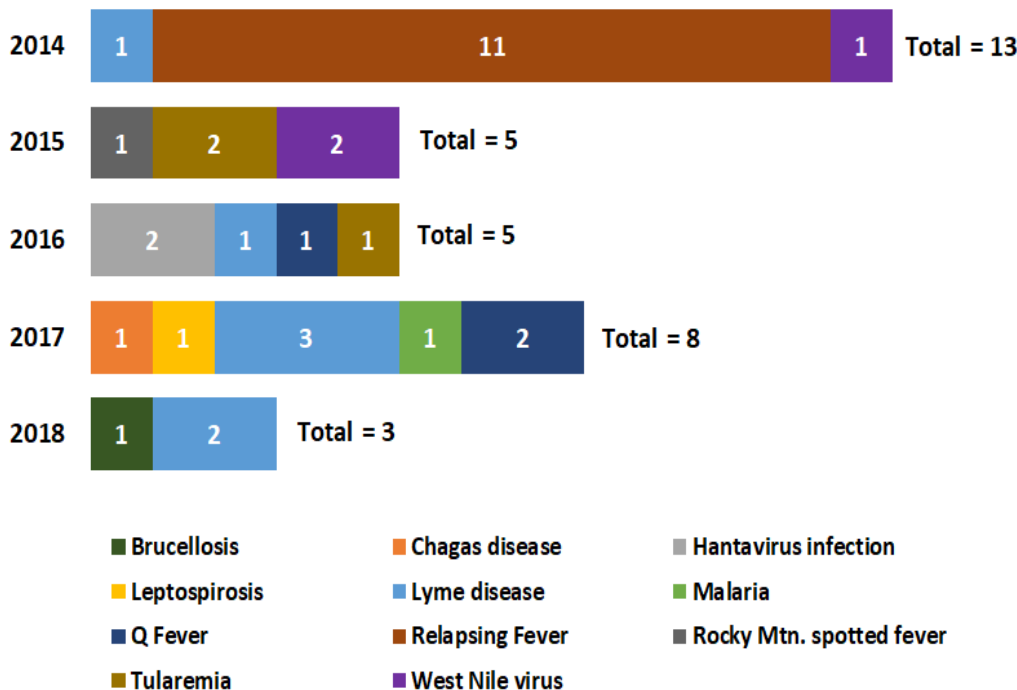
Zoonotic and Vector Borne Diseases

Zoonotic diseases are spread to humans through contact with animals. Zoonotic diseases that occurred in Coconino County from 2014-2018 include brucellosis, leptospirosis, Q fever, tularemia, and hantavirus.

Vector borne diseases are spread to humans through insect bites. Vector borne diseases that occurred in Coconino County from 2014-2018 include Chagas disease, Lyme disease, malaria, relapsing fever, Rocky Mountain spotted fever, and West Nile virus.

In Coconino County, zoonotic and vector borne diseases are uncommon, however cases are documented each year. 2014 saw a total of 13 cases of zoonotic/vector borne disease, the majority of those were relapsing fever cases, which is spread by ticks. Since 2014, cases of zoonotic/vector borne disease have remained low (3-8 cases per year).

Case Counts of Zoonotic and Vector borne Diseases in Coconino County, 2014-2018

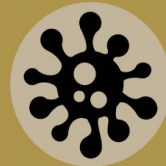


Disease	How it's spread
Zoonotic Diseases	
Brucellosis	Raw milk/livestock
Leptospirosis	Livestock/pets
Q Fever	Goats
Tularemia	Rodents/ticks
Hantavirus	Rodents

Vector Borne Diseases	
Chagas disease	Kissing bug bite
Lyme disease	Tick bite
Malaria	Mosquito bite
Relapsing fever	Tick bite
Rocky Mountain spotted fever	Tick bite
West Nile virus	Mosquito bite

1 - <https://www.azdhs.gov/preparedness/epidemiology-disease-control/index.php#data-stats-past-years>
 2 - <https://www.azdhs.gov/preparedness/epidemiology-disease-control/index.php#infectious-diseases>

Transmitting Trends

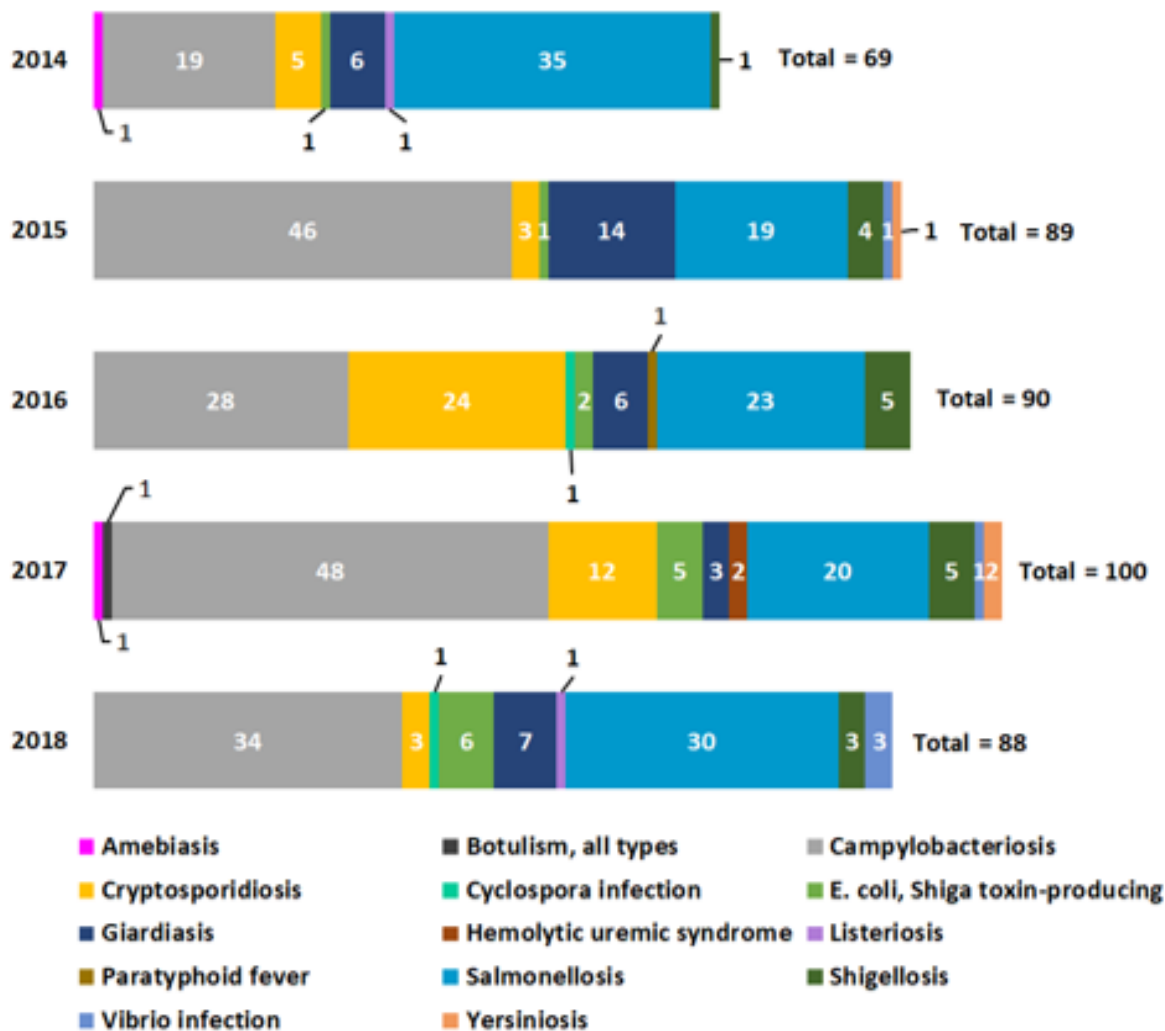


Enteric Diseases

Enteric diseases are those caused by enteric bacteria (bacteria found in intestines) or parasites, which typically enter the body through the mouth. They are acquired through contaminated food and water, by contact with animals or their environments, or through contact with the feces of an infected person.

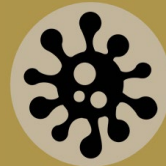
Coconino County experienced a steady incidence of enteric diseases over the five-year period between 2014 and 2018. Campylobacteriosis was the most common infection, with 175 cases between 2014 and 2018, followed by salmonellosis with 127 cases.

Case Counts of Enteric Diseases in Coconino County, 2014-2018



1- <https://www.cdc.gov/ncezid/dfwed/edeb/index.html>

2- <https://www.azdhs.gov/preparedness/epidemiology-disease-control/index.php#data-stats-past-years>

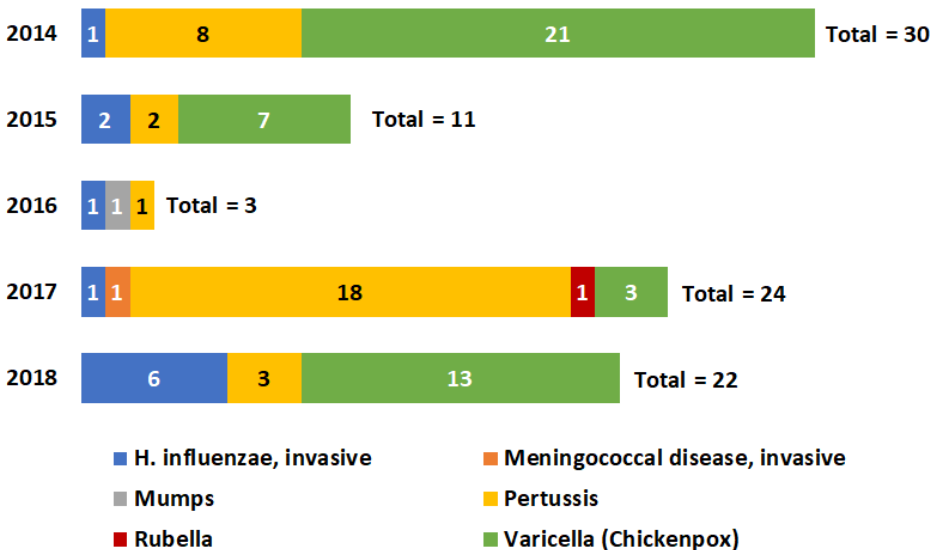


Vaccine Preventable Diseases

Vaccines are designed to help provide immunity to dangerous diseases before the person is exposed.

From 2014 to 2018, Coconino County experienced elevated incidence of varicella in 2014 and 2018 and pertussis in 2017.

Case Counts of Vaccine Preventable Diseases in Coconino County, 2014-2018



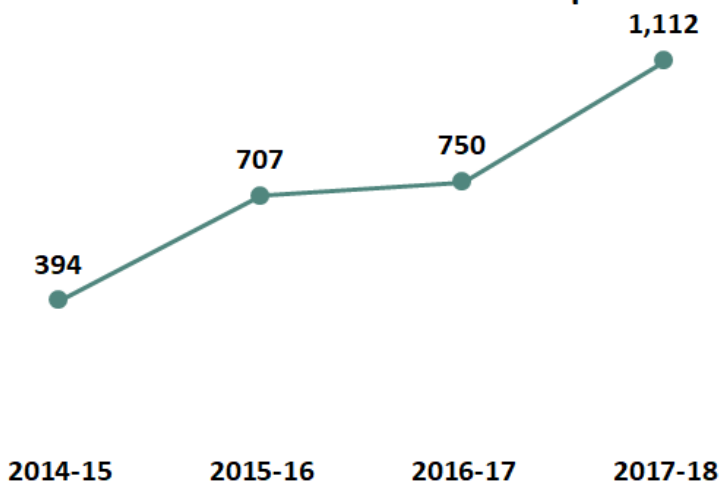
Influenza

Flu can cause mild to severe illness, and at times can lead to death. Flu comes on suddenly. People who have flu often feel some or all of these symptoms: fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills, fatigue.

One of the most effective ways to not get the flu is to get vaccinated each year. Every flu season is different as the flu virus is constantly changing. Immunizations have been shown to reduce flu-related illnesses and the risk of serious complications that can result in hospitalization or even death.

Over the past four flu seasons, Coconino County has observed a steady increase in reported flu cases, peaking at 1,112 cases in the 2017-18 flu season, which was a 182% increase from the number of cases reported in the 2014-15 flu season

Coconino County Total Reported Influenza Cases Four-Season Comparison



1- <https://www.azdhs.gov/preparedness/epidemiology-disease-control/index.php#data-stats-past-years>

2- <https://www.cdc.gov/flu/symptoms/index.html>

3- <https://az-coconinocounty2.civicplus.com/Faq.aspx?QID=216>

4- Coconino County Disease Surveillance Database

Community Collaboration

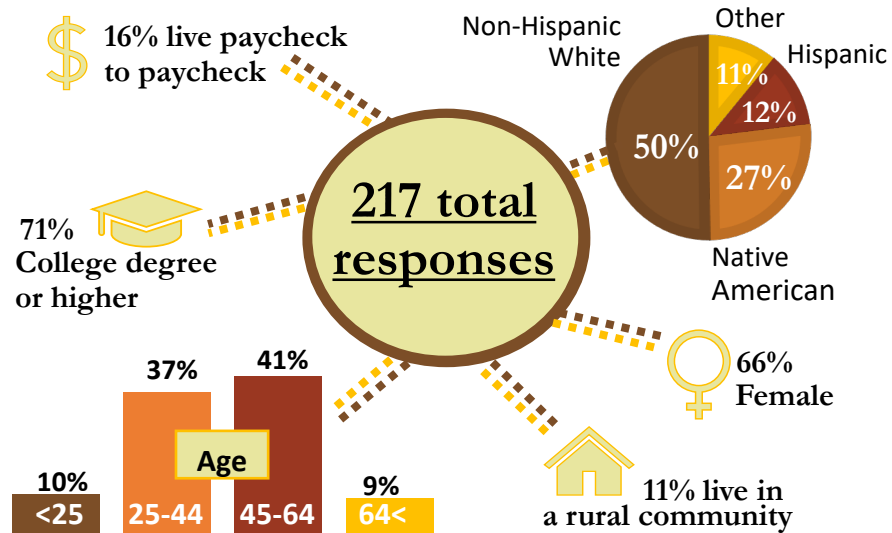


To understand a community's health, it is important to examine the perceptions and beliefs of the individuals that live within it. In order to gain a better understanding of how Coconino County residents viewed their health and the health of their community, Coconino County Health and Human Services completed three outreach efforts: administered a community survey that received two-hundred seventeen (217) responses and facilitated eight focus groups throughout the county. The information collected highlights community opinions about Coconino health trends, changing environments, availability of resources, and the future they envision for their community.

Community Survey

Methodology

The community health assessment survey was developed as part of a Mobilizing for Action through Planning and Partnership (MAPP) Community Themes and Strengths Assessment. The survey (Appendix A) consisted of seven questions, in addition demographics queries, that asked the respondents' thoughts on what makes a healthy community and health trends they are experiencing in Coconino County. The survey was distributed through email to community stakeholders as well as hard copies given out throughout the community including at meetings, service front desks, laundry mats, and social events.



Results

The following section reflects the community survey response reflecting the opinions and thoughts of Coconino County's residents:

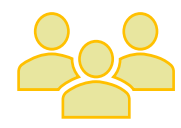
<p>Three most important health issues in our community:</p> <ol style="list-style-type: none"> 1. Alcoholism 2. Mental health problems 3. Diabetes/obesity 	<p>Three socio-environmental circumstances most responsible for health issues in our community:</p> <ol style="list-style-type: none"> 1. Lack of affordable housing 2. Poverty 3. Health care costs 	<p>Three most important "risky behaviors" in our community:</p> <ol style="list-style-type: none"> 1. Alcohol abuse 2. Drug abuse 3. Poor nutrition/eating habits
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REPORT CARD

60% of respondents gave the **community's health** a 'C' (somewhat healthy).

55% of respondents gave their **personal health** a 'D' (unhealthy).

- ➔ 62% of respondents think this community is a **safe place to live**.
- ➔ 54% of respondents think this community is a **good place to grow old**.
- ➔ 66% of respondents think this community is a **good place to raise children**.
- ➔ 68% of respondents were satisfied with the **quality of life** in this community.
- ➔ 55% of respondents think they can make this community a **better place to live**.
- ➔ 40% of respondents think there are not enough **jobs available** in this community.
- ➔ 26% of respondents were dissatisfied with the **health care system** in this community.





Focus Groups

Methodology

From November 2019 to December 2019, Coconino County Health and Human Services conducted eight focus groups with medically underserved populations in Coconino County. These focus groups were designed to identify priority health issues impacting Coconino County residents through a community-driven process known as Mobilizing for Action through Planning and Partnerships (MAPP). The focus groups are primarily targeting one of the four primary components of the MAPP framework, the Community Themes and Strengths Assessment (CHSA). Through a collaborative process, the goal of this qualitative assessment is to identify community thoughts, experiences, opinions, and concerns.

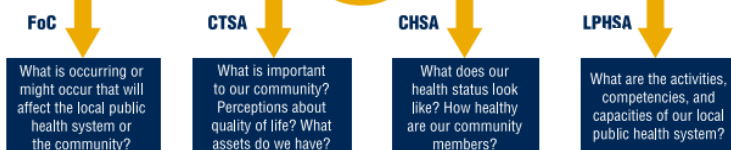
Four MAPP Assessments Flowchart



The focus group component of the community health assessment involved the following steps:

- review of the literature,
- focus group planning,
- focus group recruitment,
- focus group data collection,
- focus group qualitative analysis and data presentation.

OUTCOMES:
a list of challenges and opportunities from each assessment



Focus Group Priority Populations
Native American
Hispanic
Low income (≤200% FPL)
Seniors (65+ years old)
Recently incarcerated
Youth (15-19 years old)
Rural
Housing Insecure

Findings:

What do you like most about living in your community?

- Access to Nature, beauty of the area and clean air.
- Diversity and sense of community; "small town feel, but big city luxuries"
- Access to higher education.
- Access to a Federally qualified health center with mobile provision of health care.

What do you like least about living in your community?

- Price of living; cost of housing/rent.
- Losing small town feel, overcrowded because of the influence of the university.
- Language barrier, not enough Spanish translations for health and community services.

What makes a community healthy?

- Having adequate medical care (fear there are people in the community who are not getting the care they need). Would be nice to have a 24/7 clinic in all areas of the county.
- Access to good education.
- Affordability of housing and medical care.
- Community development through community organization and action.

Appendix A Community Feedback Survey



CCHHS 2019 Community Feedback Survey on Community Health

Coconino County Health and Human Services is conducting the following survey to get your opinion about community health issues in Coconino County. The results of this survey along with other collected information will be used to identify the most pressing concerns which can be addressed through community action. Your feedback and opinions are greatly appreciated.

1. Where are you taking this survey?

- Through an email sent to me
- Health fair
- Community meeting
- WIC office
- Clinic office
- Community/Career Services lobby
- Coconino County Fair
- Other, explain: _____

2. What is your race/ethnicity? (please select all that apply)

- | | |
|---|---|
| <input type="checkbox"/> American Indian/Alaskan Native | <input type="checkbox"/> Non-Hispanic White |
| <input type="checkbox"/> Asian/ Pacific Islander | <input type="checkbox"/> Other |
| <input type="checkbox"/> Black/African American | <input type="checkbox"/> Prefer not to answer |
| <input type="checkbox"/> Hispanic | |

3. What gender do you identify as?

- Male
- Female
- Transgender
- Other
- Prefer not to answer

4. What is your age?

- | | |
|-------------------------------------|--|
| <input type="radio"/> 19 or younger | <input type="radio"/> 55 – 59 |
| <input type="radio"/> 20 – 24 | <input type="radio"/> 60 – 64 |
| <input type="radio"/> 25 – 34 | <input type="radio"/> 65 or older |
| <input type="radio"/> 35 – 44 | <input type="radio"/> Prefer not to answer |
| <input type="radio"/> 45 – 54 | |

5. What is your highest level of education?

- Less than a high school degree
- High school diploma or GED
- College degree or higher
- Other, explain: _____
- Prefer not to answer

Appendix A Community Feedback Survey



6. What is the zip code of your primary residence? _____
7. Which of the following categories describe you? (please select all that apply)
- Low Income
 - I live paycheck to paycheck
 - Uninsured
 - Unemployed
 - AHCCCS Eligible
 - Living with a disability
 - Lesbian, Gay, Bisexual, Transgender (LGBTQ+)
 - As risk of losing housing
 - Homeless
 - Primary residence is on the reservation
 - I do not have a primary care physician
 - Veteran
 - My primary language is not English
 - I live in a rural community, community name: _____
 - None of these apply to me
8. In the following list, what do you think are **the three most important factors for a "Healthy Community"**? (Those factors which most improve the quality of life in a community.) **Choose three (3):**
- Good place to raise children
 - Low crime/safe neighborhoods
 - High quality schools
 - Access to health care
 - Parks and recreation opportunities
 - Clean environment
 - Affordable housing
 - Available arts and cultural opportunities
 - Good jobs and a healthy economy
 - Strong family life
 - Healthy behaviors and lifestyles
 - Low adult health and disease rates
 - Low infant deaths
 - Tolerance of religious or spiritual values
 - Tolerance for diversity
 - Adequate caregiving resources
 - Access to healthy foods
 - Other: _____

Appendix A Community Feedback Survey



9. In the following list, what do you think are **the three most important "health issues"** in our community? (Those factors which most have the greatest impact on the overall community health). **Choose three (3):**
- Alcoholism
 - Cancer
 - Crime/violence
 - Dementia/Alzheimer's Disease
 - Dental Problems
 - Diabetes/obesity
 - Domestic Violence
 - Drug overdoses
 - Fall injuries
 - Firearm-related injuries
 - Heart disease and stroke
 - Infant death
 - Infectious disease (e.g. hepatitis, TB, etc.)
 - Mental Health Problems
 - Motor vehicle crash injuries
 - Sexually transmitted infections (e.g. chlamydia, syphilis, etc.)
 - Suicide
 - Teen Pregnancy
 - Other: _____
10. In the following list, what do you think are **the three most important "risky behaviors"** in our community? (Those factors which have the greatest impact on overall community health). **Choose three (3):**
- Alcohol abuse
 - Distracted driving
 - Drug abuse
 - Lack of exercise
 - Not getting preventable care (i.e. vaccines, medical visits, dental visits)
 - Smoking/tobacco use
 - Not using condoms during sex
 - Not using seat belts/child safety seats
 - Poor nutrition/eating habits
 - Racism/discrimination
 - Untreated stress/anxiety
 - Other: _____

Appendix A Community Feedback Survey



11. What do you think are the **three physical, social, and economic circumstances** that are most responsible for health issues in our community? **Choose three (3):**

- Climate change
- Cost of childcare
- Cultural barriers
- Disconnected families
- Health care costs
- Homelessness
- Lack of access to trails, bike paths, parks
- Lack of affordable housing
- Lack of education
- Lack of providers (medical, mental, dental, specialty providers)
- Lack of transportation
- Language barriers
- Not enough access to healthy food
- Poverty
- Racism and discrimination
- Unemployment
- Other: _____

12. How would you grade the health of our community?

- 'A' Very Healthy
- 'B' Healthy
- 'C' Somewhat Healthy
- 'D' Unhealthy
- 'F' Very Unhealthy

13. How would you grade your own personal health?

- 'A' Very Healthy
- 'B' Healthy
- 'C' Somewhat Healthy
- 'D' Unhealthy
- 'F' Very Unhealthy

Appendix A Community Feedback Survey



14. Please indicate your level of agreement with the following statements:

	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree
I am satisfied with the quality of life in our community (considering my sense of safety and well-being).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with the health care system in our community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This community is a good place to raise children.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This community is a good place to grow old.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are jobs available in the community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The community is a safe place to live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are support networks for individuals and families.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Residents believe that they, individually or collectively, can make the community a better place to live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix A Community Feedback Survey



Are you interested in participating in future Community Health Assessment focus groups (in-person meetings) so we can learn more about your ideas about our community's health? If so, please share your contact information so that we may contact you in the future:

Email: _____

Daytime Phone Number: _____

Please let us know of any additional comments or feedback you have regarding past and future Community Health Assessments conducted by CCHHS below.

Completed surveys may be returned to the Coconino County Health and Human Services via any of the following methods:

Email: sto@coconino.az.gov

Fax: 928.679.7206

In-Person:

Any CCHHS front desk personnel or survey drop box at:

Coconino County Health and Human Services
2625 N King Street 467 Vista Avenue
Flagstaff, AZ 86004 Page, AZ 86040

Mail:

Coconino County Health and Human Services
C/O Samantha To
2625 N King Street
Flagstaff, AZ 86004

Any questions regarding the survey may be directed to Samantha [To](#) at (928) 679-7290 or sto@coconino.az.gov

Thank you for completing this survey

Appendix B Focus Group Questions



Opening:

What do you like most about living in your community?

What do you like least about living in this community?

Problems/concerns for the community

1. What makes a community healthy?

2. Who are the healthy people in your community?

1. What makes them healthy?

2. Why are these people healthier than those who have (or experience) poor health?

3. What are the biggest health-related issues in your community? Why?

Problems/concerns for you and your family

1. What do you and your family/friends do to stay healthy?

2. Where do you get the information you need related to your (your family's, your children's) health?

3. What health-related issues do you and your family/friends deal with?

a. What difficulties do you have staying healthy?

Solutions*

1. What currently exist in this community to address these health concerns we discussed today?

2. What are some ideas you have to help your community get healthy?

1. Stay healthy?

3. What are some barriers we would need to overcome to improve the community's health?

Anything else to add

1. Is there anything else related to the topics we discussed today that you think I should know that I didn't ask or that you have not yet shared?

*Solutions will be further investigated when developing the Community Health Improvement Plan.

Community Health Assessment

Coconino County Health and Human Services (CCHHS) conducts a countywide Community Health Assessment (CHA) every five years. The purpose of a CHA is to learn about the community: the health of the population, factors that contribute to increased health risks or poorer health outcomes, and available community resources.

Community members and stakeholders are invited to review the CHA available at (link) and to assist CCHHS in determining the top health priority areas in our community.

Please take this short survey and let us know what you feel is important when considering community health issues. Your input is very important to completion of the Coconino County Community Health Assessment.

The average time it takes a respondent to complete this form is 10 minutes.

The 2020 CCHHS Community Health Assessment is available at <https://www.coconino.az.gov/1507/Community-Health>. The Key Findings from the 2020 CCHHS Community Health Assessment are provided here. (copy of key findings was inserted into the survey)

1. The CHA provides information about strengths and challenges, assets, and the capacity of the public health and health care systems to address the health challenges in our community. Please rank the following topics identified in the CHA Key Findings in order of health priority in our community.
 - Mental Health
 - Aging Issues
 - Poverty and food insecurity
 - Unintentional Injury
 - Suicide
 - Housing Affordability
 - Language Barriers
 - Alcohol and drug abuse
 - Access to affordable healthcare
 - Access to higher education
 - Obesity and chronic disease
2. Please identify any additional important health issues in our community that you feel should be considered in future assessments.

Appendix C Priority Setting Survey



4. Please select one of the following to best describes your affiliation

- Interested community member
- Healthcare
- Social Work
- Justice and corrections
- Public Health
- Mental health
- Family services
- Education
- External Advisory Committee member
- Coconino County Supervisor

5. What is your race/ethnicity? (please select all that apply)

- American Indian/Alaskan Native
- Asian/ Pacific Islander
- Black/African American
- Hispanic
- Non-Hispanic White
- Other
- Prefer not to answer

6. What gender do you identify as?

- Male
- Female
- Transgender
- Other
- Prefer not to answer

7. What is your age?

- 19 or younger
- 20 – 24
- 25 – 34
- 35 – 44
- 45 – 54
- 55 – 59
- 60 – 64
- 65 or older
- Prefer not to answer

Thank you for taking the time to complete this survey.

Appendix D Data Sources

Page 13-17

Cause of death rates were calculated using Coconino County resident death data provided by Coconino County Medical Examiner's Office (MEO) and populations amounts reported by the American Community Survey 5-year estimations.

Page 19

Annual average daily numbers of interstate travelers were calculated by totaling estimated numbers given by Arizona Department of Transportation reports for interstate areas within Coconino County borders.

Page 36

Alcohol-Related age-adjusted death rates for Coconino County residents were calculated using data provided by Coconino County MEO and U.S. 2000 Standard Populations

Page 37

Drug-Related age-adjusted death rates for Coconino County residents were calculated using data provided by Coconino County MEO and U.S. 2000 Standard Populations

Page 38

Crime and homicide rates per 100,000 people for Coconino County residents were calculated using Arizona Department of Public Safety (AZDPS) reports and Coconino County populations amounts reported by the American Community Survey 5-year estimations.

Page 39

Rates for sexual assault per 100,000 persons for Coconino County Residents were calculated using AZDPS reports and Coconino County populations amounts reported American Community Survey 5-year estimations.

Page 39

Child abuse reports per 1,000 children for Coconino County residents was calculated using the Arizona Department of Child Safety Child Welfare Reporting Requirements Semi-Annual Report from April 2017-Sept2017 and Coconino County populations amounts reported American Community Survey 5-year estimations.

Page 41

Suicide rates for Coconino County residents were calculated using Coconino County resident death data provided by Coconino County MEO and populations amounts reported by the American Community Survey 5-year estimations.

Pages 42-45

Chronic disease rates for Coconino County residents were calculated using Coconino County hospital discharge data and Coconino County populations amounts reported American Community Survey 5-year estimations.

Page 48

Death rates for Coconino County residents were calculated using Coconino County resident death data provided by Coconino County MEO and populations amounts reported by the American Community Survey 5-year estimations. Birth rates for Coconino County Residents calculated using Coconino County hospital birth record data and Coconino County populations amounts reported American Community Survey 5-year estimations.

Pages 48-55

Demographics of births for Coconino County residents were calculated by querying Coconino County hospital birth records data