

Health Outcomes & Indicators

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SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

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Low Birth Weight

- **Low Birthweight** is the percentage of live births where the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.).

Births are counted in the mother's county of residence. Births are counted in the county corresponding to the mother's address on the child's birth certificate, not the county the child was born in.

Numerator. The number of live births for which the infant weighed less than 2,500 grams (approximately 5 lbs., 8 oz.) over seven years.

Denominator. Total number of live births for which weight was recorded over seven years.

Low Birth Weight – Henry County and its Neighbors

- The percentage of live births considered low birth weight to mothers living in Henry County was 6%. Henry County along with Wood, Williams, Putnam, and Defiance all had low birth weight percentages of 6%--the lowest among neighboring counties.
- Lucas County had the highest at 9%.

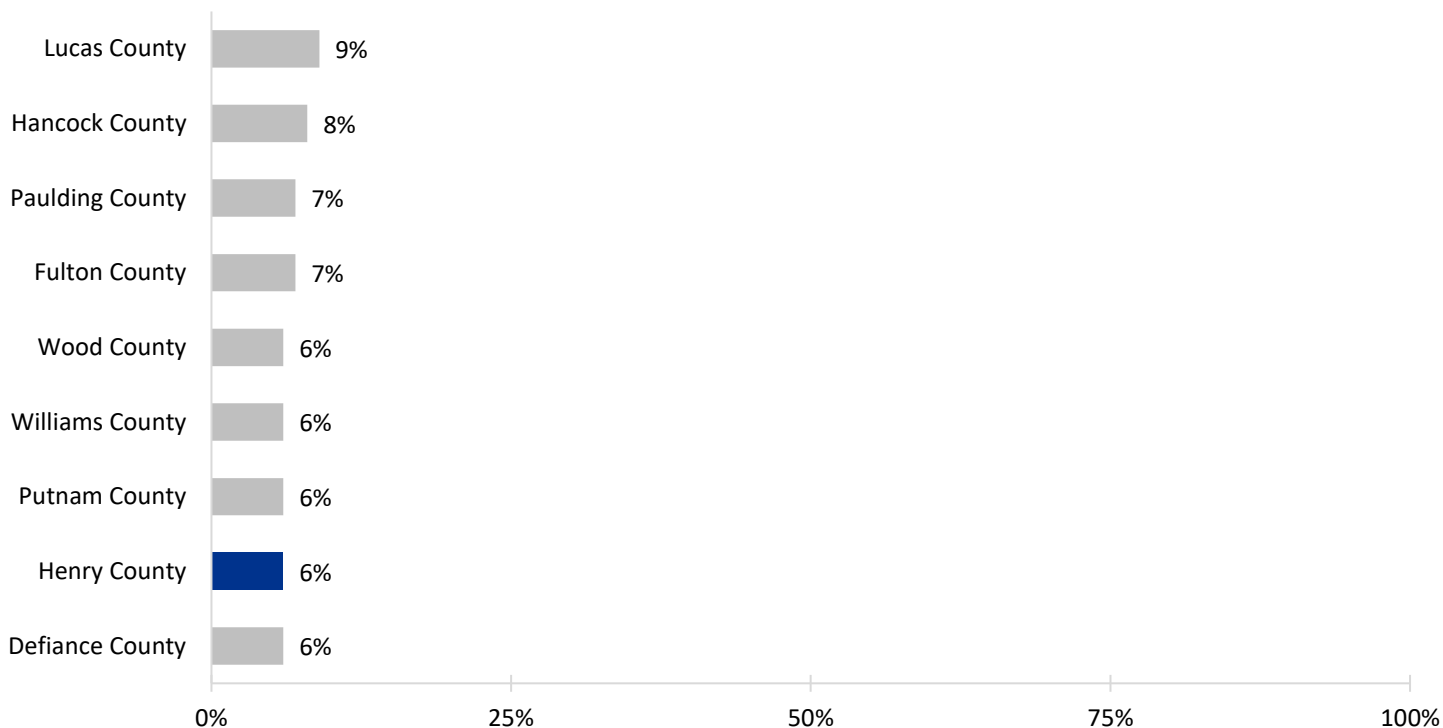


Figure 7.1 County Rankings in the Percentage of Live Births Where the Infant Weighed Less Than 2,500 Grams for Henry County and its Neighboring Counties. Data Source: County Health Rankings, 2019

Health Outcomes & Indicators

Conditions & Disease Prevalence

Measures of Conditions & Disease Prevalence | Heart Disease & Stroke

Heart Disease

- **Heart disease** describes a range of conditions that affect your heart. Diseases under the heart disease umbrella include blood vessel diseases, such as coronary artery disease; heart rhythm problems (arrhythmias); and heart defects you're born with (congenital heart defects), among others.
- Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States.

Heart Disease – Henry County and its Neighbors

- The total cardiovascular disease hospitalization rate among Henry County residents aged 65 and older was 149.7 per 1,000. Henry County had the lowest rate among neighboring counties and had a rate lower than the state of Ohio and the U.S.
- Lucas County had the highest rate at 229.4 per 1,000 resident aged 65 and older.
- Among adults in Henry County, 6% reported they had survived a heart attack or myocardial infarction (CHSA-Adult Survey, 2019).

Henry County had the lowest rate of heart disease among neighboring counties and had a rate lower than the state of Ohio and the U.S.

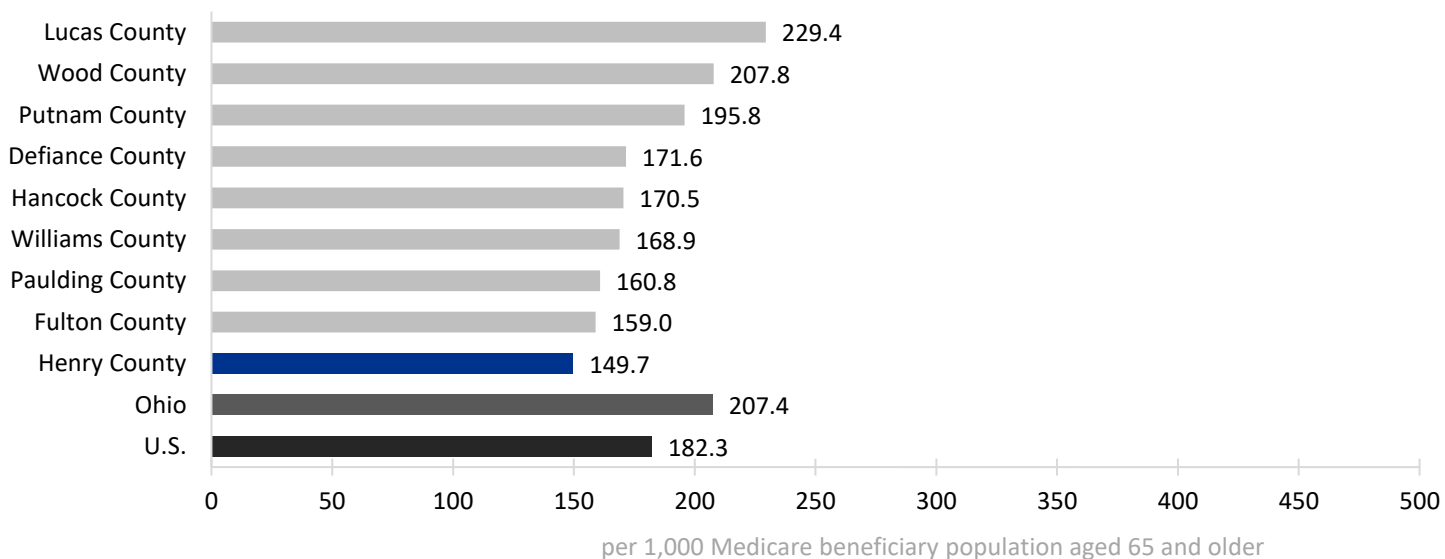


Figure 7.2 County Rankings of Total Cardiovascular Disease Hospitalization Rate per 1,000 Medicare Beneficiaries Aged 65 and Older for Henry County and its Neighboring Counties, the State of Ohio, and the Nation, 2014-2016 Continuous Data. Data Source: CDC Interactive Atlas of Heart Disease and Stroke Tables

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Stroke

- A *stroke* occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or bursts (or ruptures). When that happens, part of the brain cannot get the blood (and oxygen) it needs, so it and brain cells die.
- It is estimate that 80% of strokes are preventable.
- Conditions that increase your risk for stroke include:
 - A previous stroke
 - High blood pressure
 - High cholesterol
 - Heart disease
 - Diabetes
 - Sickle Cell disease
- The following behaviors increase the risk for stroke:
 - Unhealthy diet
 - Physical inactivity
 - Obesity
 - Too much alcohol
 - Tobacco use
- Other factors:
 - Genetics & family history
 - Age
 - Sex
 - Race or Ethnicity

Stroke – Henry County and its Neighbors

- The total stroke hospitalization rate among Henry County residents aged 65 and older was 20.1 per 1,000. Henry County had a rate lower than the state of Ohio and U.S.
- Defiance County had the highest rate at 29.7 per 1,000 resident aged 65 and older.

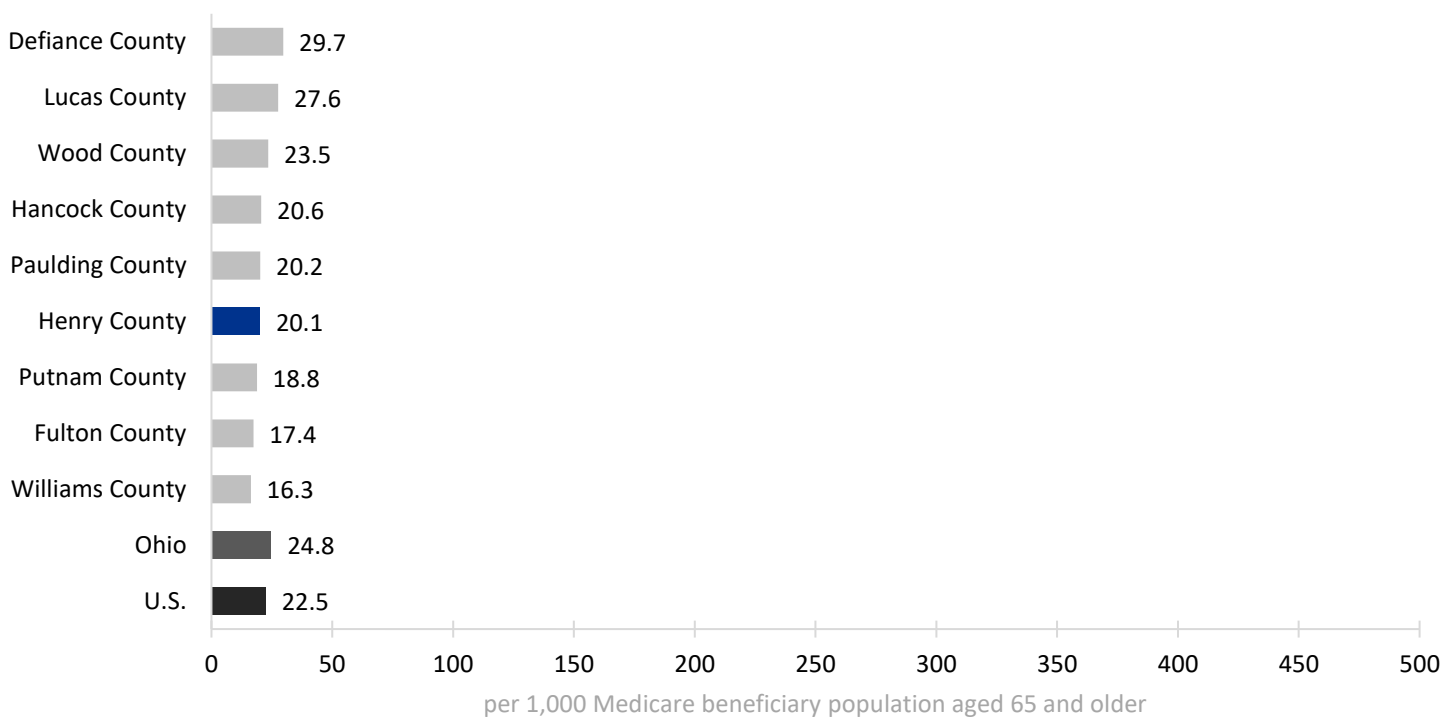


Figure 7.3 County Rankings of Stroke Hospitalization Rate per 1,000 Medicare Beneficiaries Aged 65 and Older for Henry County and its Neighboring Counties, the State of Ohio, and the Nation, 2014-2016 Continuous Data. Data Source: CDC Interactive Atlas of Heart Disease and Stroke Tables

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Avoidable Heart Disease & Stroke Death Rates – Henry County and its Neighbors

- Henry County residents had an avoidable heart disease and stroke death rate of 51.2 per 100,000. Henry County had a rate lower than the state of Ohio and U.S.
- Lucas County had the highest rate at 89.1 per 100,000 residents.

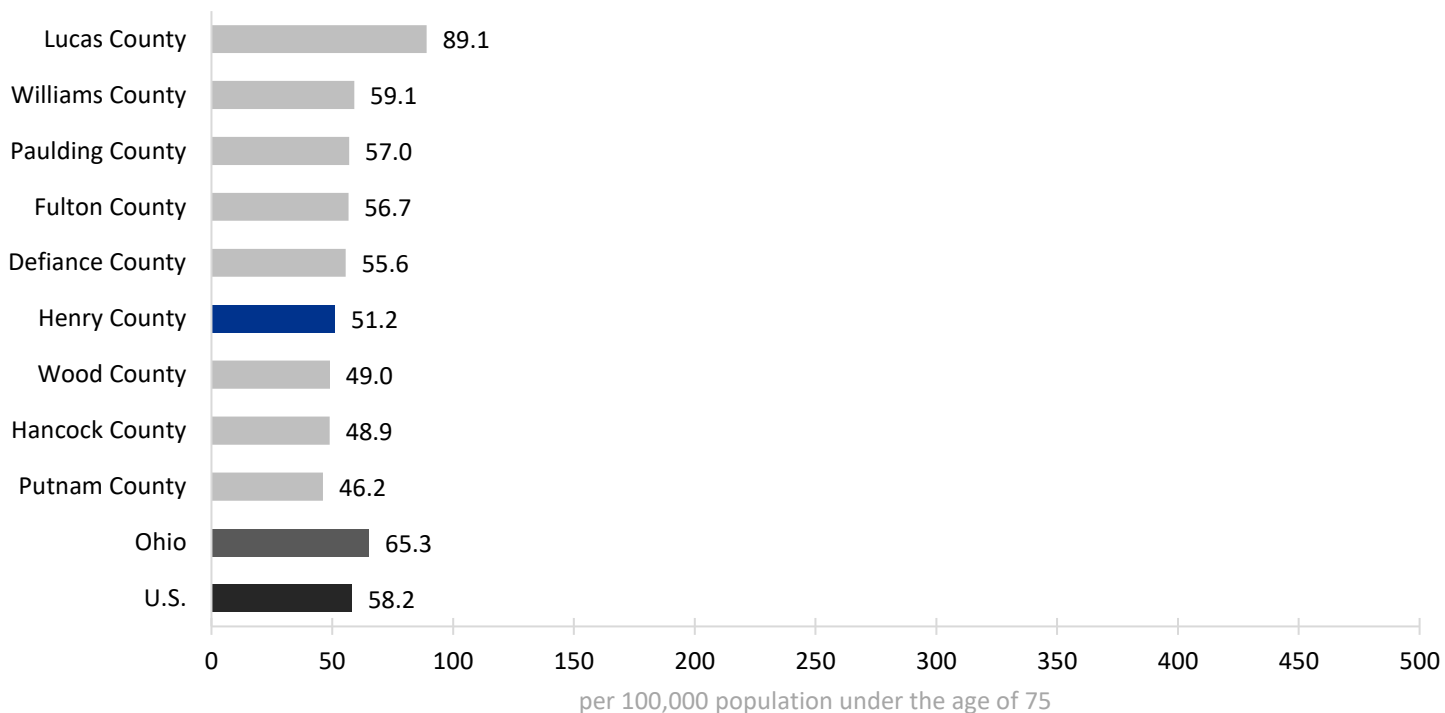


Figure 7.4 County Rankings of Avoidable Heart Disease and Stroke Death Rate per 100,000 Population Under the Age of 75 for Henry County and its Neighboring Counties, the State of Ohio, and the Nation, 2014-2016 Continuous Data. Data Source: CDC Interactive Atlas of Heart Disease and Stroke Tables

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High Cholesterol

- *If your cholesterol is too high*, it builds up on the walls of your arteries. Over time, this buildup is known as atherosclerosis.
- High cholesterol is associated with an elevated risk of cardiovascular disease. That can include coronary heart disease, stroke, and peripheral vascular disease. High cholesterol has also been linked to diabetes and high blood pressure.
- The main risk from high cholesterol is heart disease.

High Cholesterol – Henry County and its Neighbors

- One-third of Henry County adults had been diagnosed with high cholesterol. **This is over double the Healthy People 2020 target of 14%.**
- A larger share of men was diagnosed with high cholesterol (41%) compared to women (26%).
- Since 2010 the percentage with high cholesterol has been creeping up—in 2010 it was only 29% of adults.

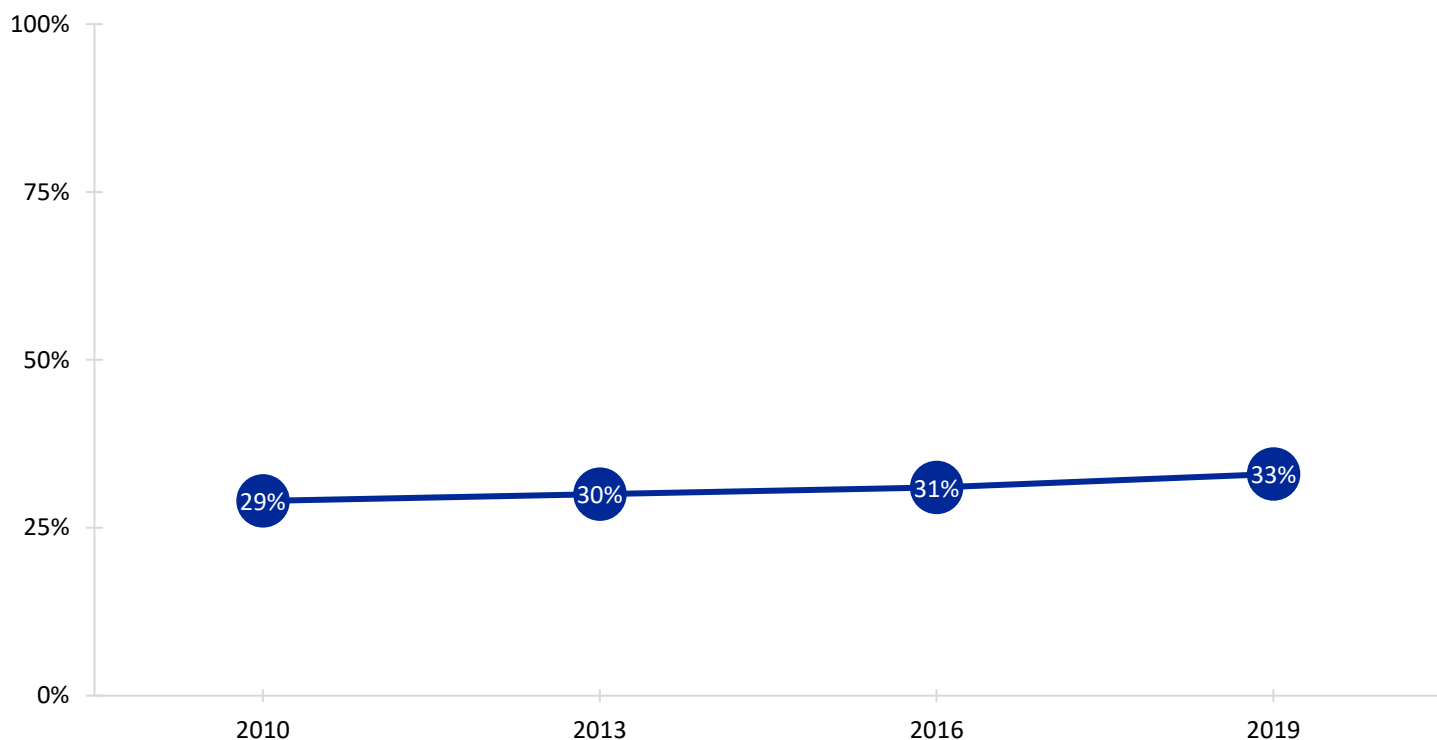


Figure 7.5 Trend in the Percentage of Henry County Adults Reporting a Diagnosis of High Cholesterol, 2010-2019. Data Source: Henry County Community Health Status Assessment Adult Survey

*“One-third of in Henry County adults had been diagnosed with high cholesterol. **This is over double the Healthy People 2020 target of 14%.**”*

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Hypertension

- *Hypertension* is another name for high blood pressure.
- High blood pressure is a common condition in which the long-term force of the blood against your artery walls is high enough that it may eventually cause health problems, such as heart disease. The more blood your heart pumps and the narrower your arteries, the higher your blood pressure.

Hypertension – Henry County and its Neighbors

- The total hypertension hospitalization rate among Henry County residents aged 65 and older was 121.7 per 1,000. Henry County had the lowest rate among neighboring counties and had a rate lower than the state of Ohio and U.S.
- Lucas County had the highest rate at 183.2 per 1,000 resident aged 65 and older.
- One-third of Henry County adults reported having high blood pressure. An additional 6% were told they were pre-hypertensive/borderline high. **This is higher than the Healthy People 2020 Target of 27%.**
- The share of men diagnosed with high blood pressure is higher than that of women—41% versus 26%.
- 92% of adults had their blood pressure checked within the past year.

Henry County had the lowest hypertension hospitalization rate among neighboring counties and had a rate lower than the state of Ohio and U.S.

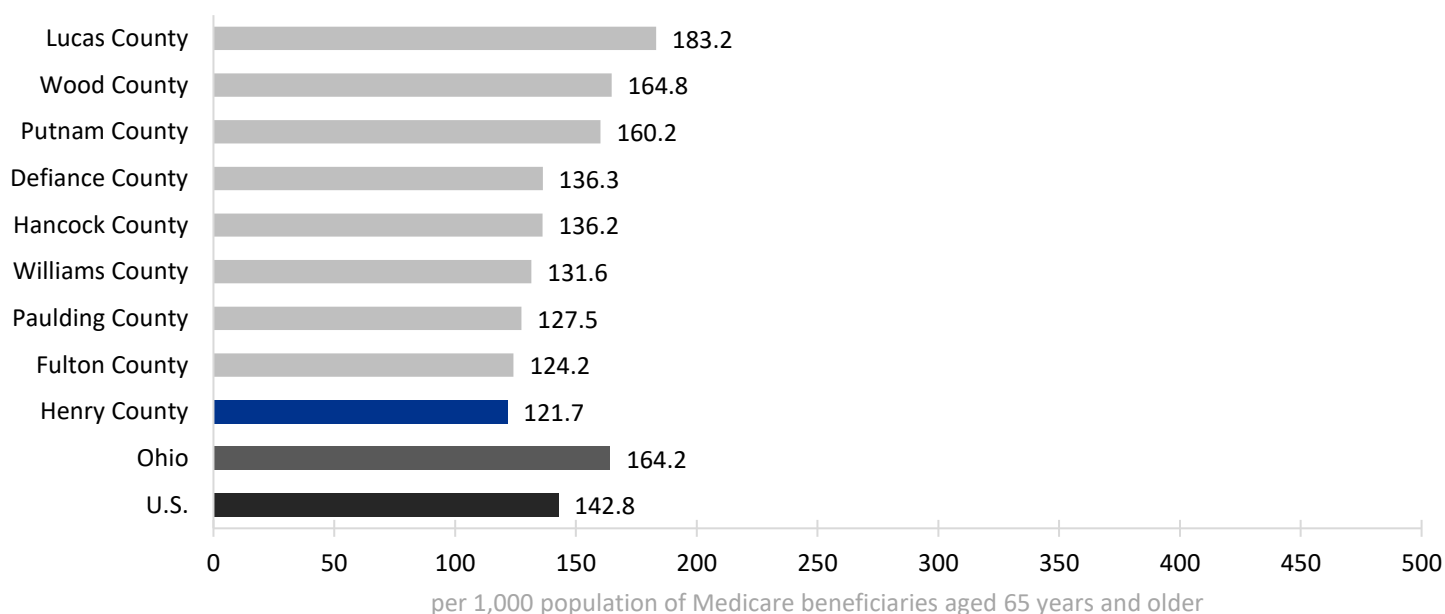


Figure 7.6 County Rankings of Hypertension Hospitalization Rate per 1,000 Population of Medicare Beneficiaries Aged 65 Years and Older for Henry County and its Neighboring Counties, the State of Ohio, and the Nation, 2014-2016 Continuous Data. Data Source: CDC Interactive Atlas of Heart Disease and Stroke Table

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Measures of Conditions & Disease Prevalence | Cancer

Cancer – Henry County and its Neighbors

- Henry County had the second highest age-adjusted cancer incident rate among neighboring counties at 459.4 cases per 100,000.
- Henry County's rate was slightly lower than the state of Ohio's but slightly higher than the United States.
- Lucas County had the highest cancer incident rate at 467.6 per 100,000.
- Williams County had the lowest rate at 402.3 per 100,000.
- Among Henry County adults, 12% had been diagnosed with cancer at some point in their lives.
- The largest share of cancer deaths in Henry County from 2015-2017 were lung and bronchus cancers (OPH Data Warehouse).
- A slightly larger share of men (23%) versus women (18%) died from cancer between 2015 and 2017.

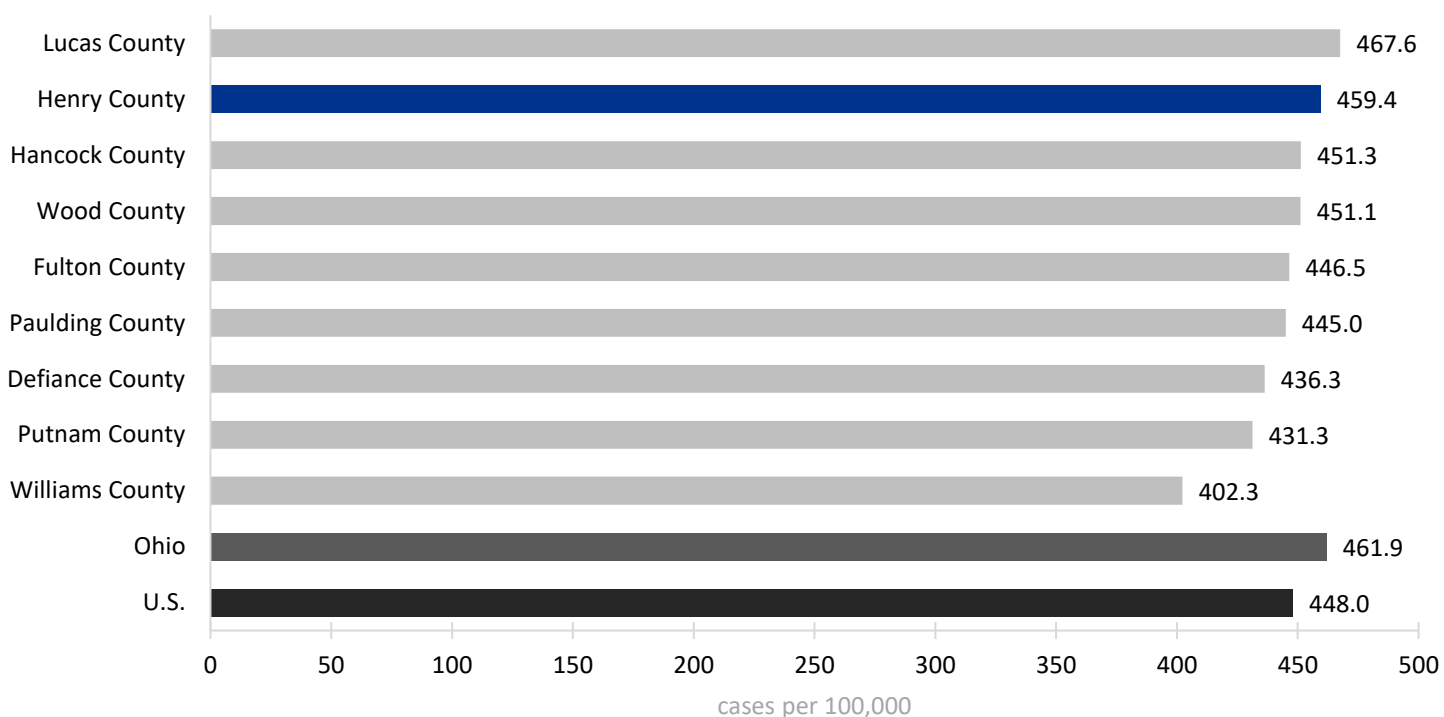


Figure 7.7 County Rankings of the Age-Adjusted Cancer Incidence Rate—Cases per 100,000 Population for Henry County and its Neighboring Counties, the State of Ohio, and the Nation, 2014-2016 Continuous Data. Data Source: Created by statecancerprofiles.cancer.gov on 11/11/2019 6:11 pm.

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Health Outcomes & Indicators

Measures of Conditions & Disease Prevalence | Diabetes

Diabetes – Henry County and its Neighbors

- Henry County had the lowest percentage of the population diagnosed with diabetes at 6.8%
- The highest percentage was found in Defiance county at 11.8%.
- According to self-report data from 2019 10% of Henry County adults had been diagnosed with diabetes—the highest share since 2010.
- An additional 10% had been diagnosed with pre-diabetes or borderline diabetes.

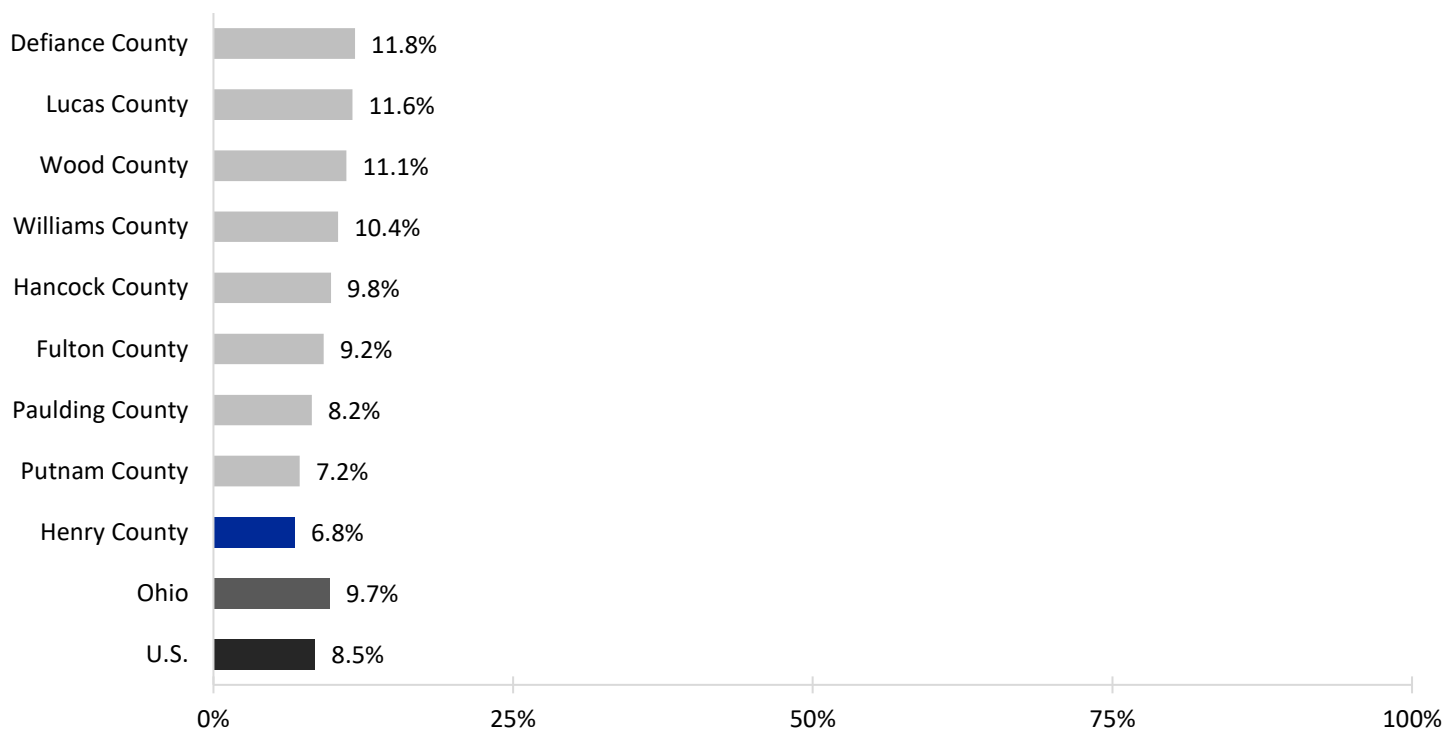


Figure 7.8 County Rankings of the Percentage of Adults Diagnosed with Diabetes for Henry County and its Neighboring Counties, the State of Ohio, and the Nation, 2014-2016 Continuous Data. Data Source: The National Diabetes Surveillance System, Diabetes Atlas of the CDC's Behavioral Risk Factor Surveillance System data

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Measures of Conditions & Disease Prevalence | Lung Diseases

Please note, these numbers reflect the estimated prevalence and incidence of lung disease within each county and state, and not the actual number. That is, the estimate is derived from national and/or state data and adjusted for the age-specific population of each area. Many other factors may affect actual prevalence. For more information see,

<https://www.lung.org/our-initiatives/research/monitoring-trends-in-lung-disease/estimated-prevalence-and-incidence-of-lung-disease/>

Asthma

Asthma – Henry County and its Neighbors

- Rate of asthma—whether adult or pediatric—are low. Among adults 7.6% of Henry County residents suffer from asthma.
- There is little variation in asthma rates between Henry County and her neighbors—values range from a low of 7.4% to a high of 7.9%. The highest rate was found in Wood County and the lowest rate was found in Putnam County.
- Similarly, there is little range in the county variation of pediatric asthma—values range from a low of 1.8% and a high of 2.2%. The highest rate was found in Putnam County and the lowest rate in Wood County—the complete opposite among adults.
- In Henry County 2% of children had asthma.

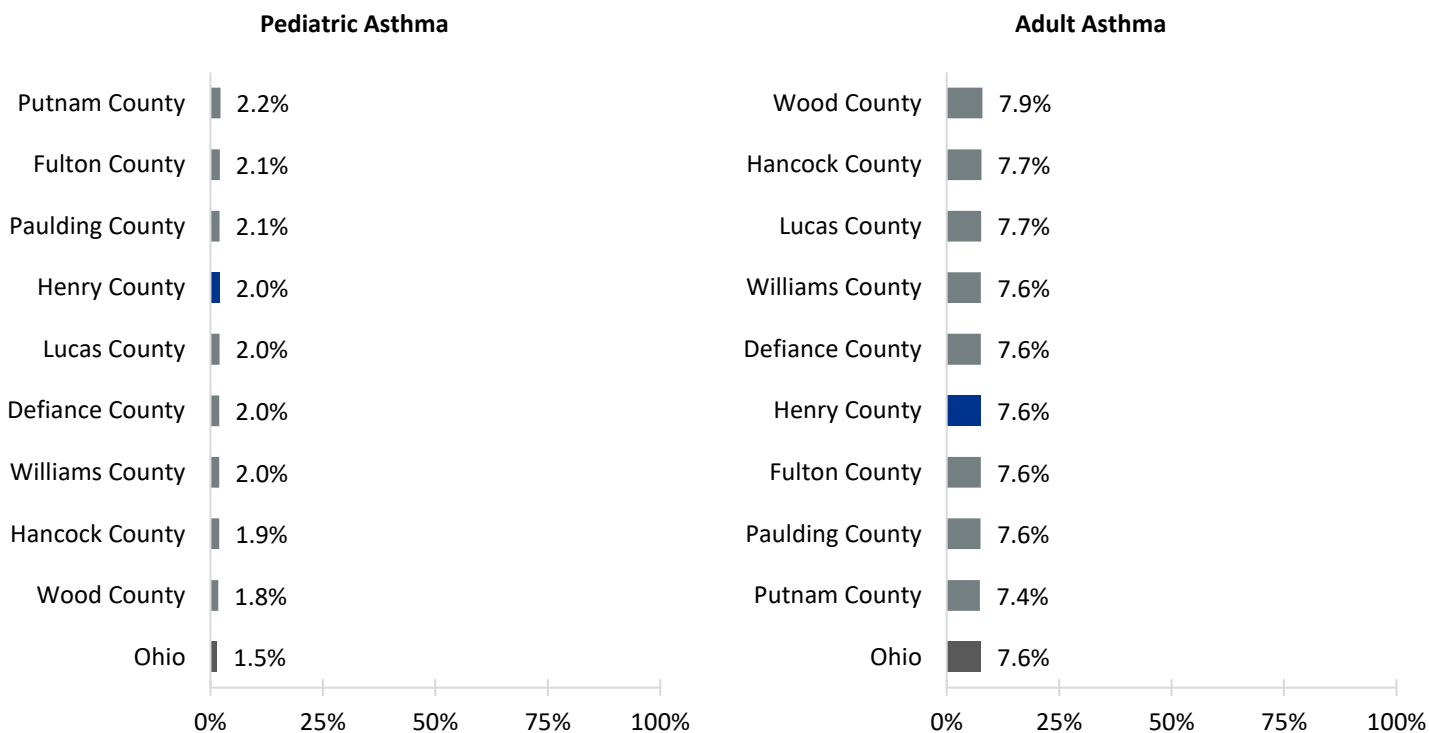


Figure 7.9 County Rankings of the Percentage of Children and Adults Diagnosed with Asthma for Henry County and its Neighboring Counties, the State of Ohio, and the Nation. Data Sources: 2017 Behavioral Risk Factor Surveillance Survey

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Chronic obstructive pulmonary disease

- *Chronic obstructive pulmonary disease* (COPD) is a chronic inflammatory lung disease that causes obstructed airflow from the lungs. Symptoms include breathing difficulty, cough, mucus (sputum) production and wheezing.

COPD – Henry County and its Neighbors

- There is little variation in COPD rates between Henry County and her neighbors—values range from a low of 6.1% to a high of 6.7%. The highest rate was found in Williams County and the lowest rate was found in Wood County.
 - In Henry County 6.7% of residents had COPD.

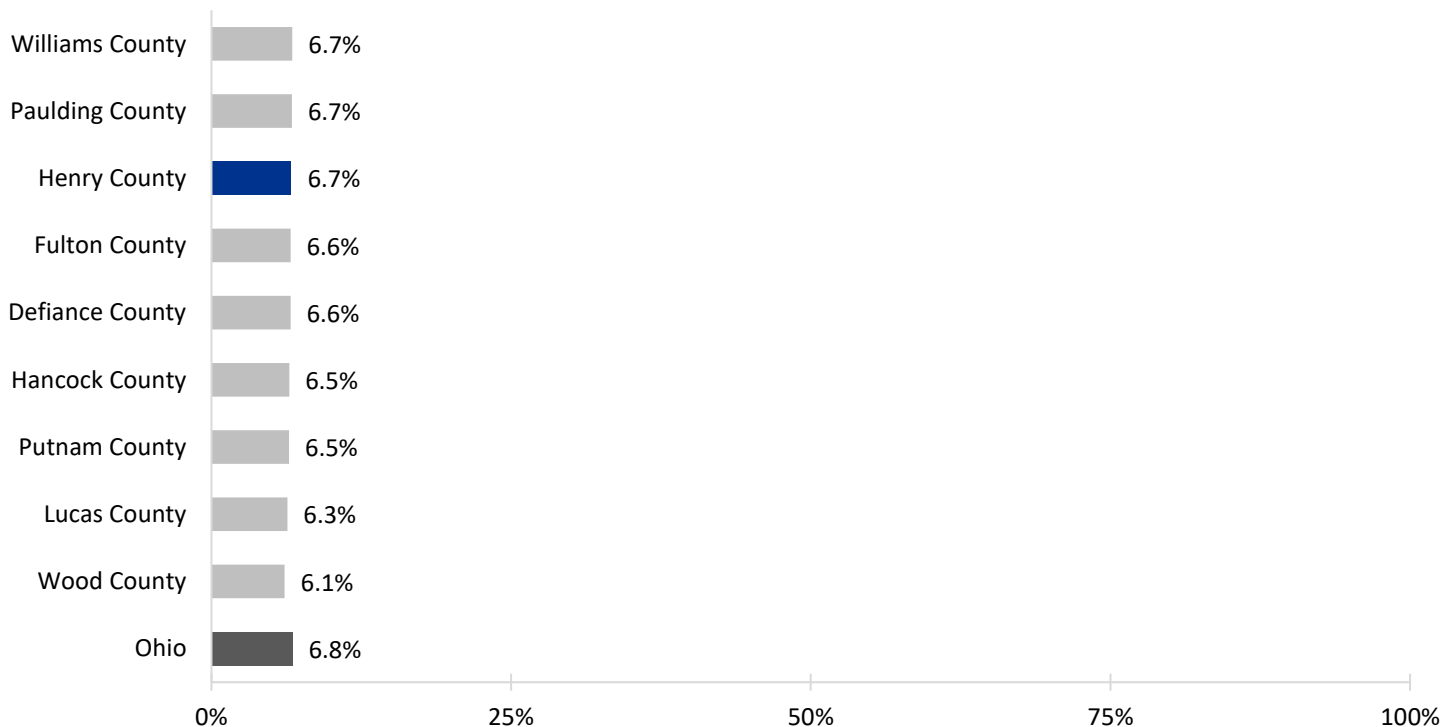


Figure 7.10 County Rankings of the Percentage Diagnosed with COPD for Henry County and its Neighboring Counties, the State of Ohio, and the Nation. Data Sources: 2017 Behavioral Risk Factor Surveillance Survey

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Adult Chronic Lung Disease

This is a type of disorder that affects the lungs and other parts of the respiratory system. It usually develops slowly and may get worse over time. Chronic lung disease may be caused by smoking tobacco or by breathing in secondhand tobacco smoke, chemical fumes, dust, or other forms of air pollution. Types of chronic lung disease include asthma, chronic obstructive pulmonary disease (COPD), pulmonary fibrosis, asbestosis, pneumonitis, and other lung conditions. Also called CLD (National Cancer Institute Dictionary of Cancer Terms).

Adult Chronic Lung Disease – Henry County and its Neighbors

- There is little variation in adult chronic lung disease rates between Henry County and her neighbors—values range from a low of 11.7% to a high of 12.1%. The highest rate was found in Williams County and the lowest rate was found in Wood County.
- In Henry County 12.0% of residents suffered from an adult chronic lung disease.

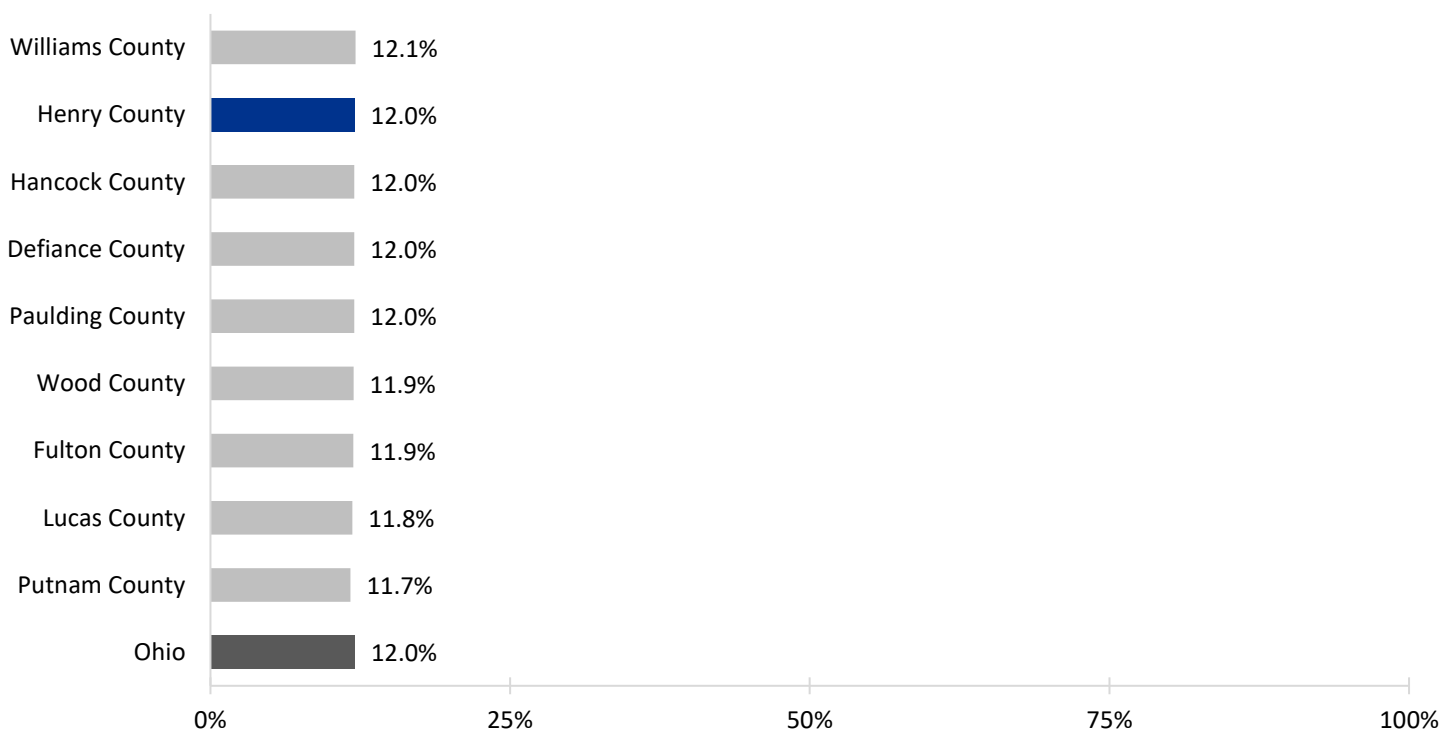


Figure 7.11 County Rankings of the Percentage Diagnosed with COPD for Henry County and its Neighboring Counties, the State of Ohio, and the Nation. Data Sources: 2017 Behavioral Risk Factor Surveillance Survey

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

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Measures of Conditions & Disease Prevalence | HIV/AIDS

- **HIV Prevalence** is the rate of diagnosed cases of HIV for people aged 13 years and older in a county per 100,000 population. Rates measure the number of events in a given time period (generally one or more years) divided by the average number of people at risk during that period. Rates help us compare risks of health factors across counties with different population sizes.

This measure of HIV prevalence includes all county residents, including those living in group quarters such as prisons or on military bases. Some states, when releasing prevalence measures, exclude these populations. This may account for differences in these values and values from your state department of health.

Numerator. The numerator is the number of HIV cases. HIV is a reportable disease meaning that when a provider treats a patient for HIV they are required to report that case to their health department.

Denominator. The denominator is the total population.

- In 2018, 37,832 people received an HIV diagnosis in the United States (US) and dependent areas.
- From 2010 to 2017, HIV diagnoses decreased 11% among adults and adolescents in the 50 states and District of Columbia. However, annual diagnoses have increased among some groups. Source: CDC. [Diagnoses of HIV infection in the United States and dependent areas, 2018pdf icon](#). *HIV Surveillance Report 2019*; 30.

HIV Prevalence – Henry County and its Neighbors

- Henry County had the second lowest HIV prevalence rate among neighboring counties at 47 per 100,000 population aged 13 years and older.
- The lowest prevalence was found in Putnam County at 18.
- The highest was found in Lucas County at 244.

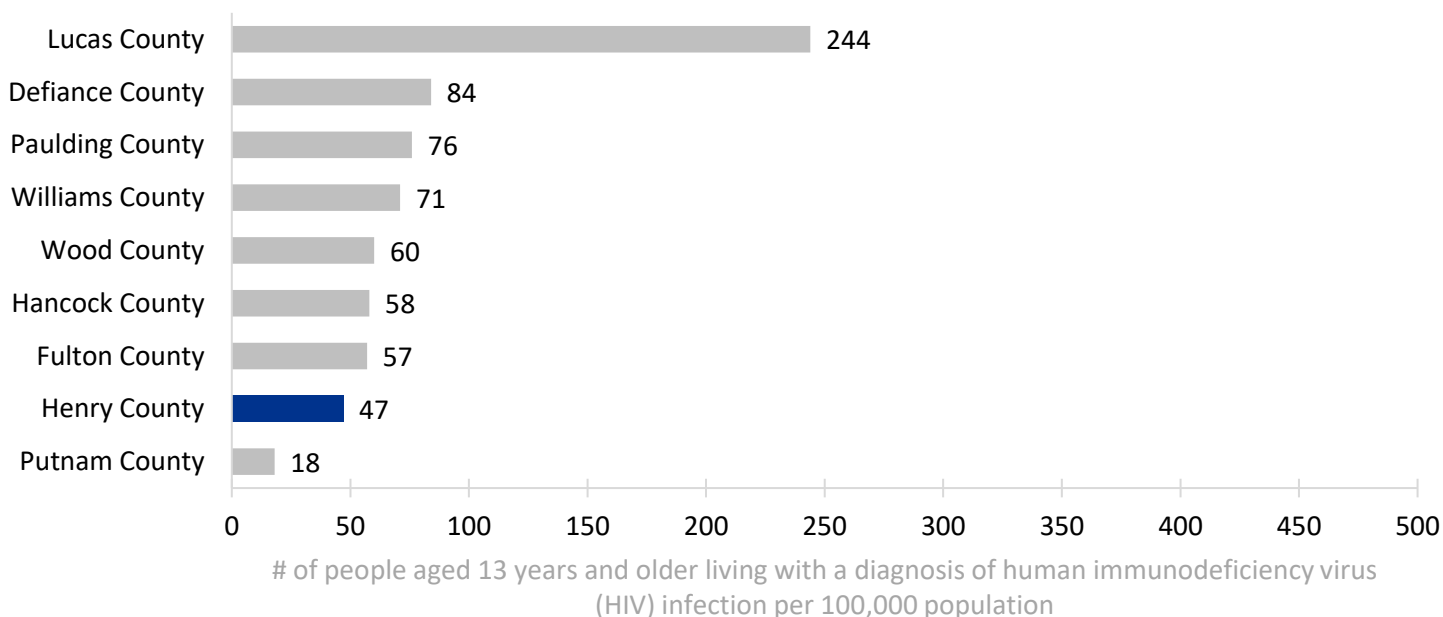


Figure 7.12 County Rankings of the HIV Prevalence Rate for Henry County and its Neighboring Counties, the State of Ohio, and the Nation. Data Source: County Health Rankings, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), 2015

Henry County adults were asked:

Would you say that in general your health is?

- Excellent*
- Very good*
- Fair*
- Poor*

- The percentage rating their health as fair or poor has remained relatively stable since 2010. In 2019 1-in-10 adults rated their health as such.
- A slightly larger share of men rated their health as fair or poor as compared to women—12% versus 9%.
- Almost one-quarter (23%) of adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation in the past month.

Over half (55%) of Henry County adults rated their health as excellent or very good.

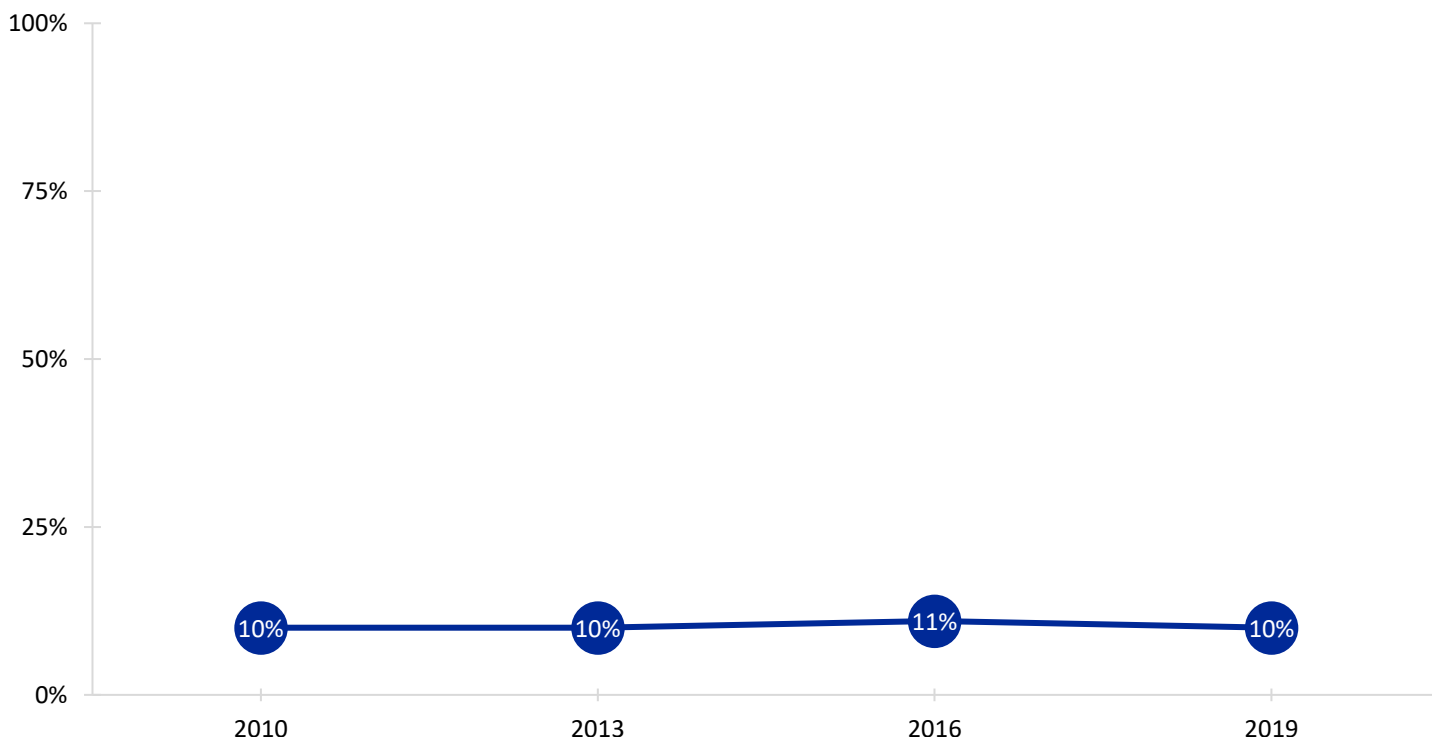


Figure 7.13 Trend in the Percentage of Henry County Adults Who Rated Their Health as Fair or Poor, 2010-2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measure of Quality of Life | Physical Health Status—Adult Self-Report

Henry County adults were asked:

*Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health **not** good?*

Number of days _____

- Among Henry County adults, 18% rated their physical health as not good on four or more days in the previous month.
- Henry County adults reported their physical health as not good on an average of 2.6 days in the previous month.

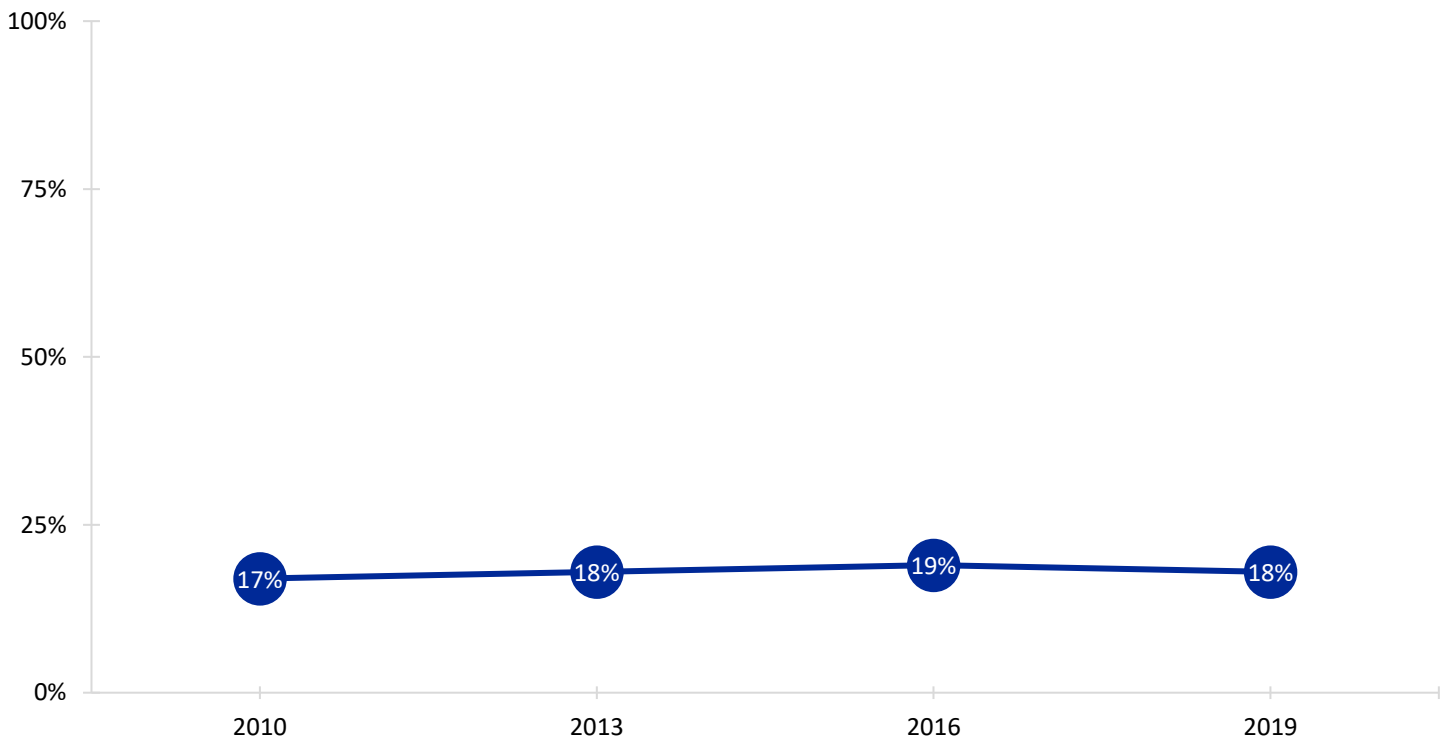


Figure 7.14 Trend in the Percentage of Henry County Adults Who Rated Their Physical Health as “Not Good” on Four or More Days in the Past 30 Days, 2010-2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

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Health Outcomes & Indicators

Mental Health Status | Adult Self-Report

Henry County adults were asked:

*Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health **not** good?*

Number of days _____

- Among Henry County adults, 19% rated their physical health as not good on four or more days in the previous month.
- Henry County adults reported their physical health as not good on an average of 3.2 days in the previous month.

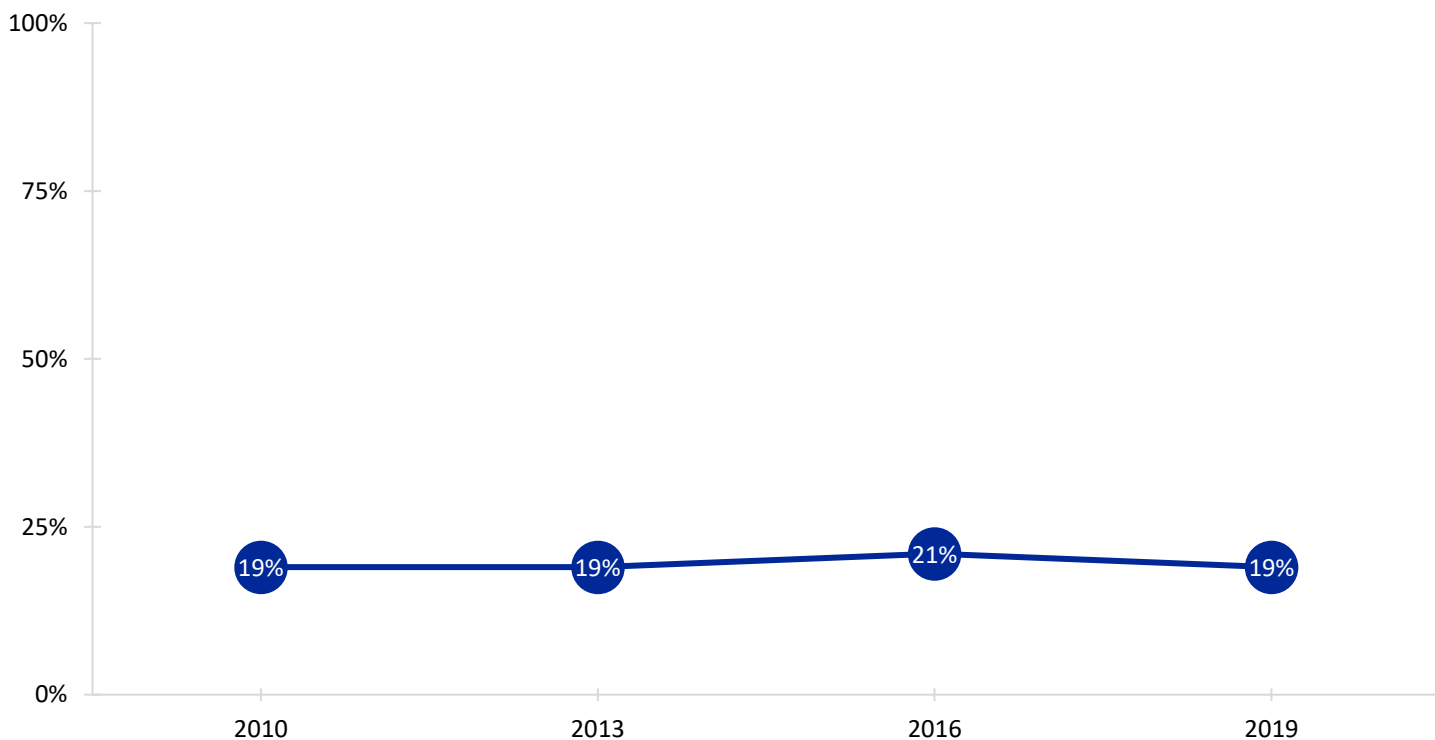


Figure 7.15 Trend in the Percentage of Henry County Adults Who Rated Their Mental Health as “Not Good” on Four or More Days in the Past 30 Days, 2010-2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Impairments and Health Problems

- Nearly one-third (30%) of Henry County adults reported they were limited in some way because of a physical, mental or emotional problem.
 - The most limiting health problems were arthritis/rheumatism (46%) and back or neck problems (42%).
- Over one-quarter (26%) of Henry County adults had fallen in the past year.
 - 14% had fallen two or more times

Over the last two weeks, Henry County adults reported they had been bothered by the following:

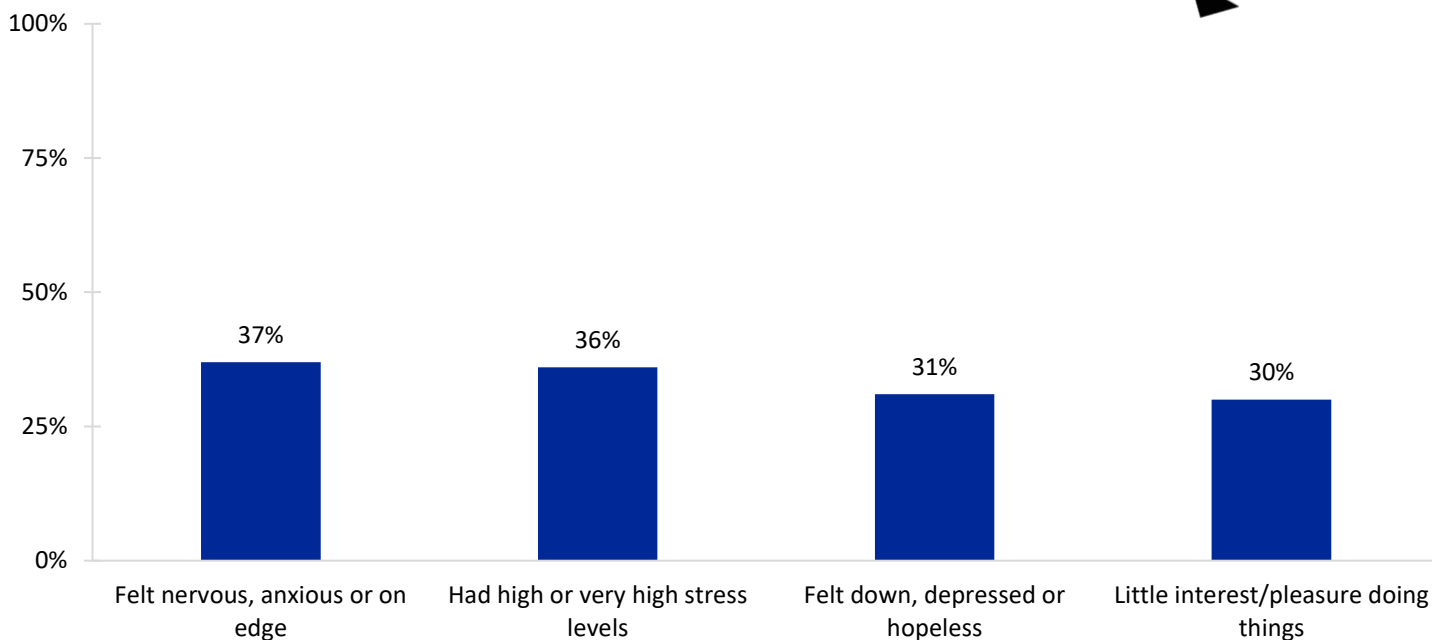
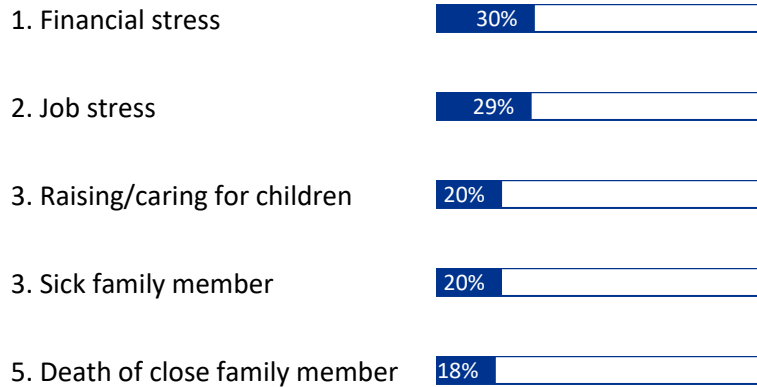


Figure 7.16 Percentage of Henry County Adults Agreeing the Following Things Have Bothered Them in the Last Two Weeks, 2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

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Health Outcomes & Indicators

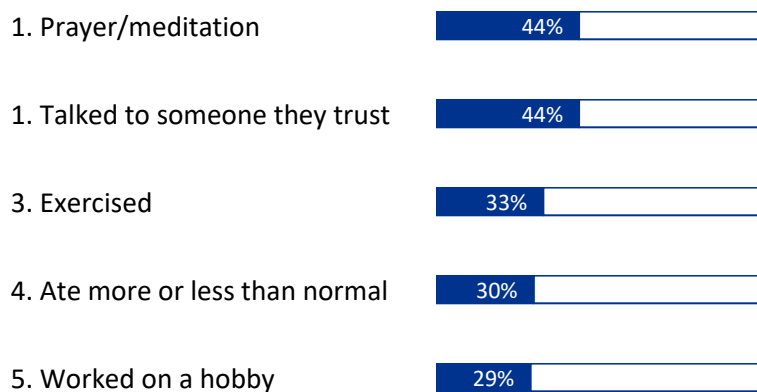
Causes of Anxiety Stress & Depression



- Among adults, the most frequently checked causes of their anxiety, stress, or depression finances (34%).
- The second most frequently checked cause was their job (28%), followed by raising/caring for children (20%), a sick family member (20%); and death of a close family member or friend (18%).

Figure 7.17 Top Five Reported Causes of Anxiety, Stress, & Depression Among Henry County Adults, 2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

Dealing with Anxiety Stress & Depression

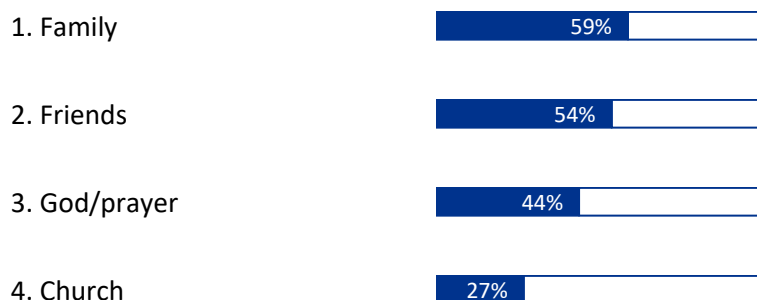


Adults were shown a list of 17 ways in which they might deal with stress ranging from exercise, and sleep, to misuse of prescription drugs. They were asked to circle all of the items that applied.

- The top five selected were prayer/meditation (44%), talking with someone they trust (44%), exercising (33%), ate more or less than normal (30%), and worked on a hobby (29%).

Figure 7.18 Top Five Reported Ways of Dealing with Anxiety, Stress, & Depression Among Henry County Adults, 2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

Social Support



Adults were asked “Where do you get the social and emotional support you need?” They were shown a list of 14 people/places and were asked to circle all that applied.

- Among those who did respond, the top five selected were family (59%), friends (54%), God/prayer (44%), church (27%)

Figure 7.19 Top Five Reported Sources of Social and Emotional Support Among Henry County Adults, 2019. Data Source: Henry County Community Health Status Assessment Adult Survey, 2019

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Quality of Life County-Level Rankings for the State of Ohio

Rank	County	Rank	County
1	Delaware	45	Sandusky
2	Medina	46	Erie
3	Geauga	47	Washington
4	Putnam	48	Butler
5	Mercer	49	Fayette
6	Warren	50	Preble
7	Henry	51	Lorain
8	Union	52	Summit
9	Shelby	53	Belmont
10	Holmes	54	Stark
11	Lake	55	Hocking
12	Auglaize	56	Crawford
13	Wayne	57	Richland
14	Fulton	58	Monroe
15	Darke	59	Franklin
16	Williams	60	Perry
17	Miami	61	Brown
18	Greene	62	Columbiana
19	Noble	63	Trumbull
20	Fairfield	64	Clark
21	Ashland	65	Hamilton
22	Defiance	66	Hardin
23	Huron	67	Allen
24	Hancock	68	Cuyahoga
25	Champaign	69	Ashtabula
26	Van Wert	70	Vinton
27	Wood	71	Jefferson
28	Ottawa	72	Lucas
29	Madison	73	Mahoning
30	Harrison	74	Highland
31	Wyandot	75	Guernsey
32	Paulding	76	Muskingum
33	Licking	77	Morgan
34	Clermont	78	Lawrence
35	Tuscarawas	79	Montgomery
36	Clinton	80	Marion
37	Logan	81	Pike
38	Pickaway	82	Scioto
39	Morrow	83	Ross
40	Coshocton	84	Jackson
41	Portage	85	Gallia
42	Carroll	86	Meigs
43	Seneca	87	Athens
44	Knox	88	Adams

Source: County Health Rankings, <https://www.countyhealthrankings.org/app/ohio/2019/rankings/outcomes/6>

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Mental Health Status | Youth

Depression, Self-harm & Suicide

Depressed youth (students in grades 6-12) are those who report feeling so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities.

Percent of Henry County Youth Who...

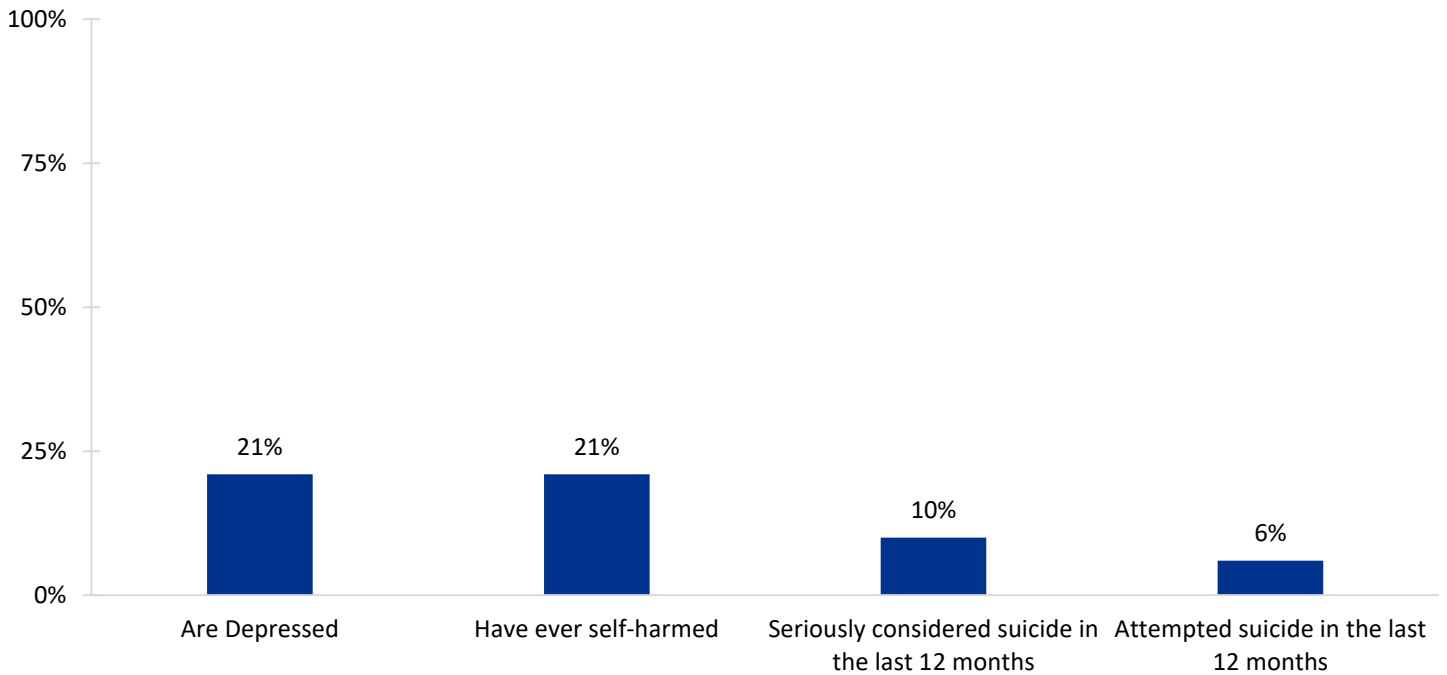


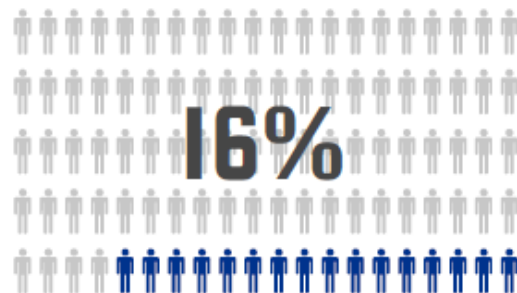
Figure 7.20 Percentage of Henry County Youth Reports of Depression, Suicide and Self-harm, 2019. Data Source: Henry County Community Health Status Assessment Adolescent Survey, 2019

Girls are significantly more depressed than boys.

Depression Among Girls



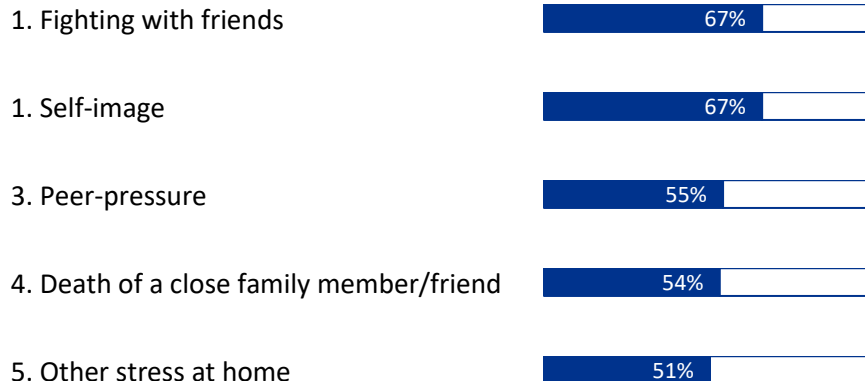
Depression Among Boys



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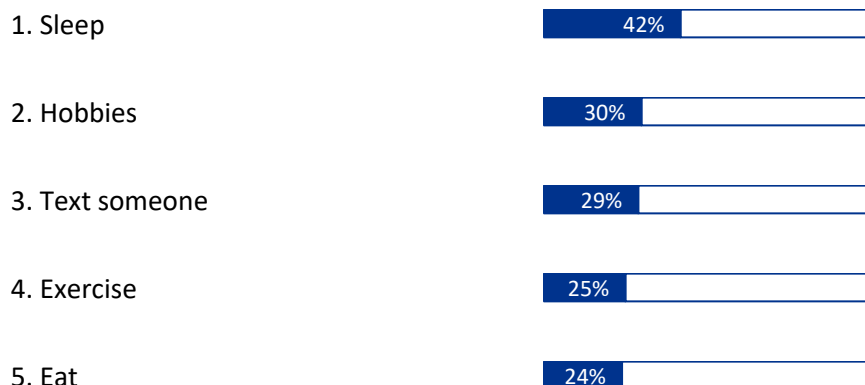
Causes of Anxiety Stress & Depression



- Among depressed youth, the two most frequently checked causes of their anxiety, stress, or depression were fighting with friends & self-image (67%).
- The second most frequently checked cause was peer pressure (55%), followed by death of a close family member (54%), and other stress at home (51%).
- One-quarter (26%) selected other indicating their stressor was not on the list of options provided.

Figure 7.21 Top Five Reported Causes of Anxiety, Stress, & Depression Among Henry County Youth, 2019. Data Source: Henry County Community Health Status Assessment Adolescent Survey, 2019

Dealing with Anxiety Stress & Depression



Students were asked how they deal with anxiety, stress, or depression. They were shown a list of 15 ways of doing so and were asked to circle all of that applied to them.

- The top five selected were sleep (42%), hobbies (30%), text someone (29%), exercise (25%), and eat (24%).

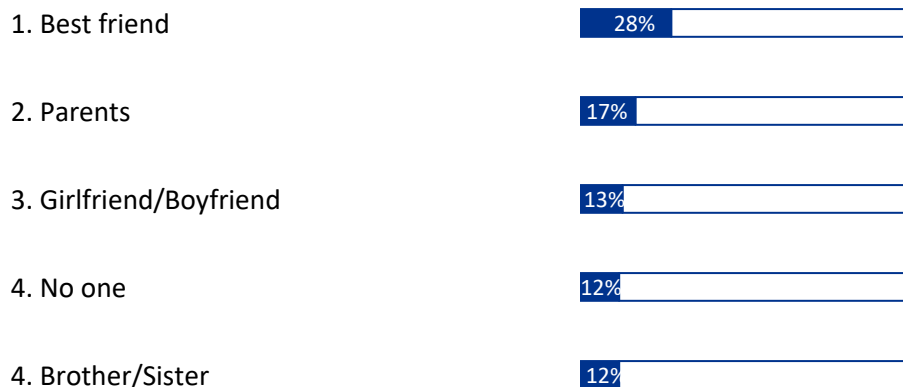
Figure 7.22 Top Five Reported Ways of Dealing with Anxiety, Stress, & Depression Among Henry County Youth, 2019. Data Source: Henry County Community Health Status Assessment Adolescent Survey, 2019

Of the 11 activities, two had a significant **negative** effect on depression—meaning, youth reporting participation in these activities had **lower** levels of depression—participating in school clubs or social organizations or in a sport or intramural program ($p < .05$).

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Social Support



Students were asked with whom they talked to when dealing with personal problems or feelings of depression or suicide. They were shown a list of 16 people and were asked to circle all that applied.

- Among those who did respond, the top five selected were best friend (28%), parents (17%), girlfriend/boyfriend (13%), no one (12%), and brother/sister (12%).

Figure 7.23 Top Five Reported Sources of Social and Emotional Support Among Henry County Youth, 2019. Data Source: Henry County Community Health Status Assessment Adolescent Survey, 2019

About half (51%) responded they did **not** have personal problems or feelings of depression or suicide.

*12% of youth talk to **NO ONE** when dealing with personal problems or feelings of depression or suicide.*

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Life Expectancy

- *Life Expectancy* measures the average number of years from birth a person can expect to live, according to the current mortality experience (age-specific death rates) of the population. Life Expectancy takes into account the number of deaths in a given time period and the average number of people at risk of dying during that period, allowing us to compare data across counties with different population sizes.

Life expectancy is age-adjusted. Age is a non-modifiable risk factor, and as age increases, poor health outcomes are more likely. Life Expectancy is age-adjusted in order to fairly compare counties with differing age structures.

What deaths count toward life expectancy? Deaths are counted in the county where the individual lived. So, even if an individual dies in a car crash on the other side of the state, that death is attributed to his/her home county.

Measure limitations. Life Expectancy includes mortality of all age groups in a population instead of focusing just on premature deaths and thus can be dominated by deaths of the elderly (CDC, 1986). This could draw attention to areas with higher mortality rates among the oldest segment of the population, where there may be little that can be done to change chronic health problems that have developed over many years. However, this captures the burden of chronic disease in a population better than premature death measures (Dranger, Remington, 2004).

Furthermore, the calculation of life expectancy is complex and not easy to communicate. Methodologically, it can produce misleading results caused by hidden differences in age structure, is sensitive to infant and child mortality, and tends to be overestimated in small populations (Eayres & Weilliams, 2004; Silcocks, Jenner, Reza & 2001).

Life Expectancy – Henry County and its Neighbors

- Life expectancy among Henry County residents was 78.7 years.
- The highest life expectancy was to residents of Putnam County at 80.3 years.
- The lowest life expectancy was to residents of Lucas County at 76.1 years.

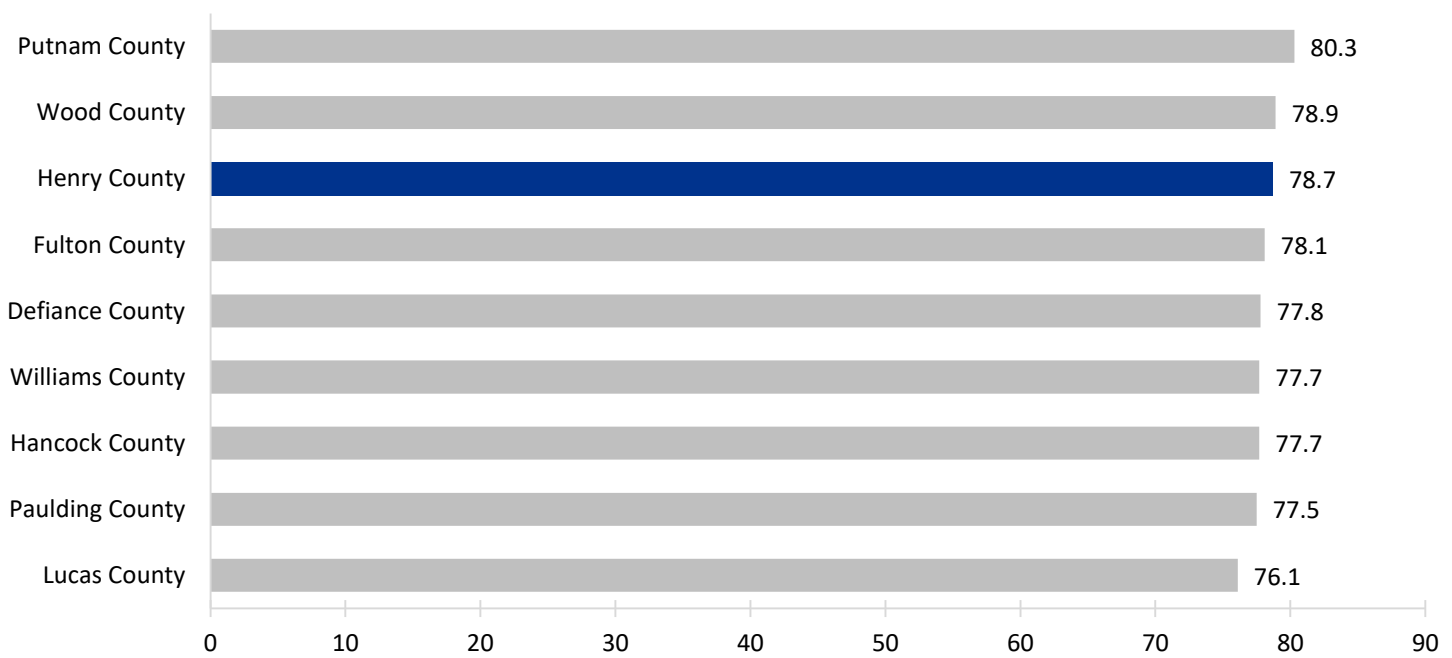


Figure 7.24 County Rankings Life Expectancy for Henry County and its Neighboring Counties. Data Source: County Health Rankings

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Health Outcomes & Indicators

Average Ages at Death – By Henry County Zip Code

We were able to estimate the median and mean age at death among Henry County residents by zip code.

- The highest mean age at death was among those residents of New Bavaria at 82.9 and the lowest was among those residents in Liberty Center at 71.8.

Because means are affected by outliers—extremely high and low values—we also present the median age at death by zip code.

- The highest median age at death was among the residents of Holgate at 82.5 and the lowest was among the residents of Deshler at the age of 77.

Note: The Y-axis begins at 60 years to facilitate chart observations. This may exaggerate differences between and within zip codes, so interpret with care.

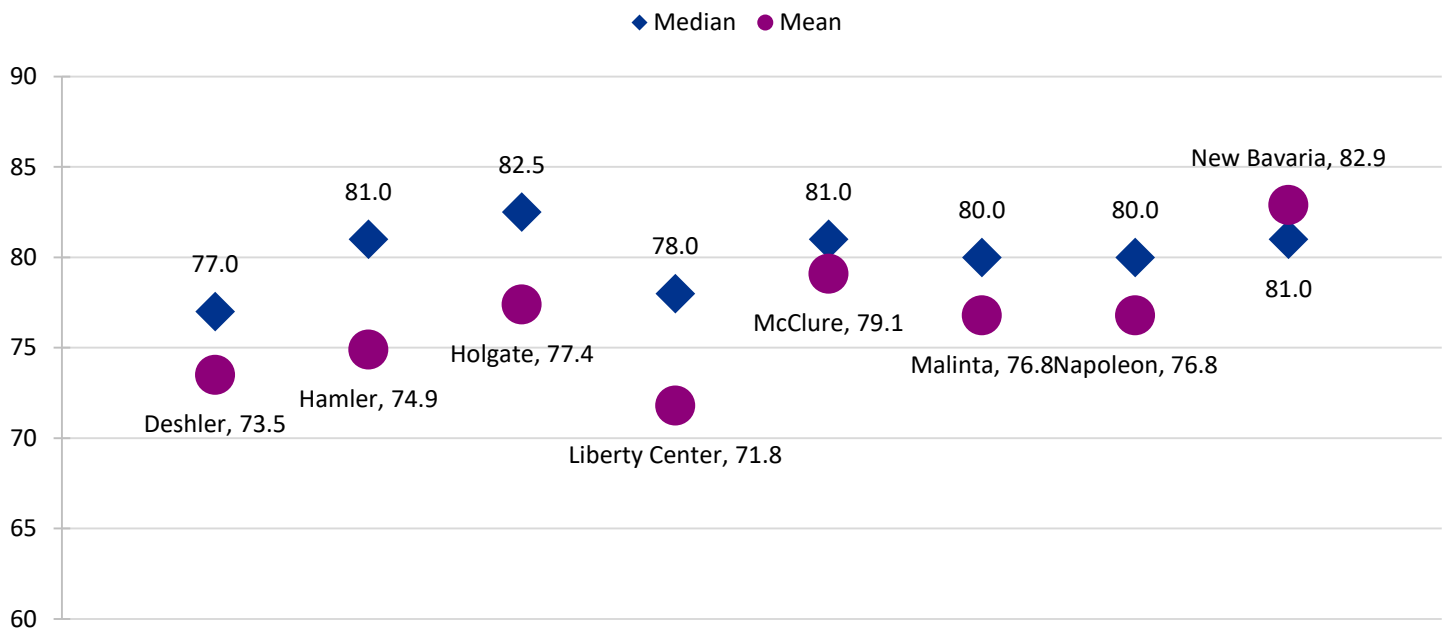


Figure 7.25 Median and Mean Ages at Death Among Henry County Residents by Zip Code. Data Source: HCHD analyses of Henry County Resident Mortality Files, 2015-2018

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Leading Causes of Death Among Henry County Residents

The National Center for Health Statistics (NCHS) defines and groups deaths into standardized categories by their underlying cause. There are seven different standard groups of “causes of death.” For this report we used the *List of 113 Selected Causes of Death* grouping. This grouping is formulated for data tabulation and analysis of general mortality and for ranking leading causes of death. All deaths not on the *List of 113 Selected Causes of Death* were collapsed into the category “Not a Leading Cause of Death.” If a death was on the *List of 113*, but there were not enough to report individually they were collapsed into the “Other Leading Causes” category.

Information on the leading causes of death among Henry County residents is constrained by population size and recent changes in how the information is collected and defined. To combat these constraints, data from 2014-2018 were combined and analyzed together. Given so few people die under the age of 30, we had to collapse those aged 0-29 into one category. Note, too that *these data are based of deaths of Henry County residents*. While most individuals who passed away in Henry County were residents of the county (four-year average of 88%), a sizable share of Henry County residents who passed did not die in Henry County (four-year average of 40%).

- Overwhelmingly, the single leading cause of death among those aged 0-29 was accidents (45%), followed by suicide (11%) and cancer (11%).
 - For those under the age of 30, nearly one-third of deaths (29%) were caused by something not on the standard *List of 113 Causes of Death*.
- Similar overall results were found for those between the ages of 30 and 49. The number one leading cause of death was accidents (45%) followed by other leading causes (17%), heart disease (11%), and suicide (9%).
- Among those aged 50 and older the two leading causes of death were cancer and heart disease. There was also an increasing percentage falling into the “not a leading cause of death” category.

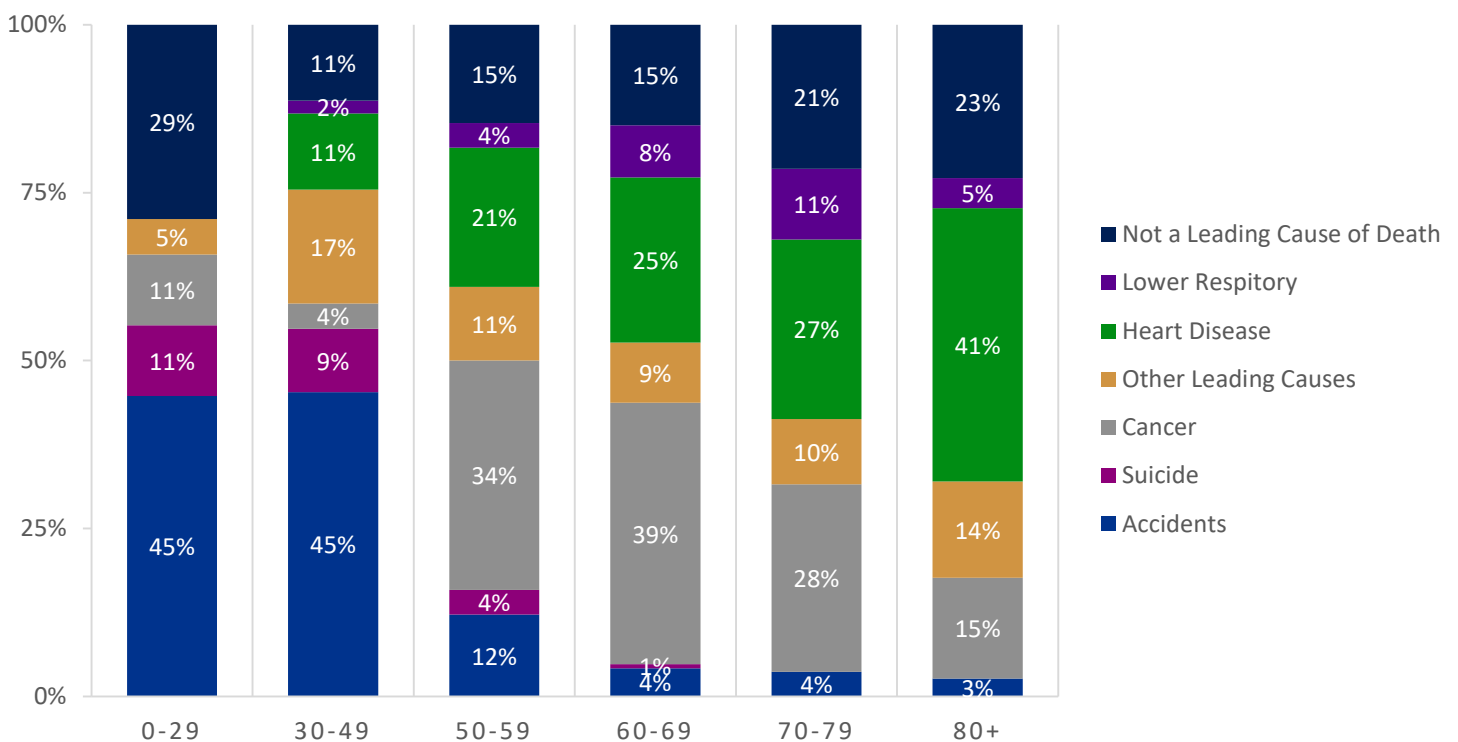


Figure 7.26 Leading Causes of Death Among Henry County Residents by Age. Data Source: HCHD analyses of Henry County Resident Mortality Files, 2015-2018

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In the figure below, we see age patterns emerge when individual causes of death are examined.

- Accidents and suicide are more prevalent at younger ages.
- Cancer is curvilinear—generally it increases with age, but then begins dropping after aged 60-69.
- Heart disease deaths are more prevalent at older ages.

At younger ages, Henry County residents tend to die in accidents. At older ages cancer and heart disease are the leading causes of death.

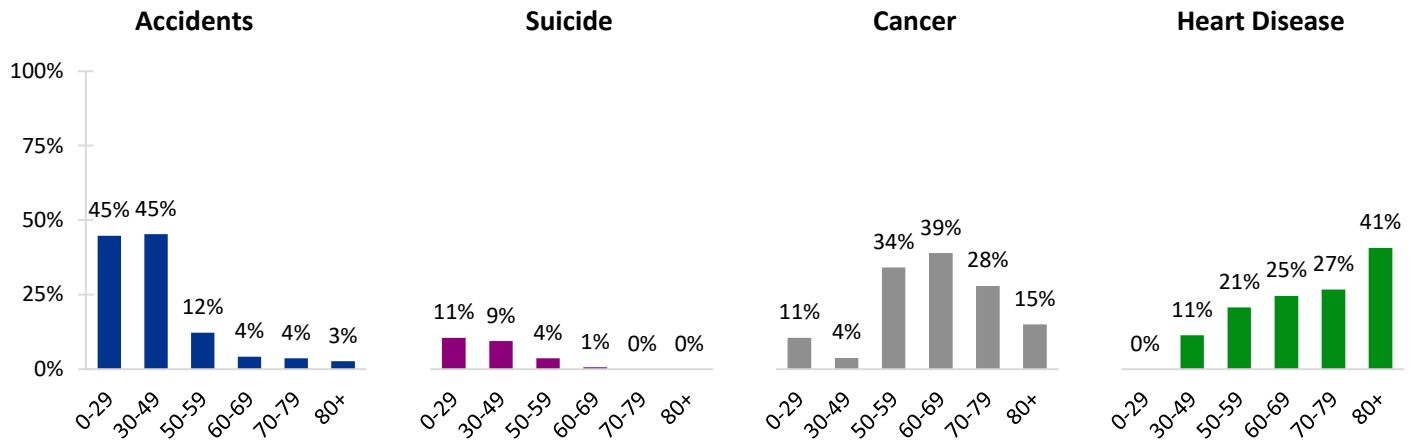


Figure 7.27 Age by Leading Causes of Death Among Henry County Residents. Data Source: HCHD analyses of Henry County Resident Mortality Files, 2015-2018

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Leading Causes of Death for Women by Age Groups

0-49	50-59	60-69	70-79	80-89	90+
1 Accidental poisoning & exposure to noxious substances	1 Heart disease	1 Cancer	1 Heart disease	1 Heart disease	1 Heart disease
2 Motor vehicle accidents	1 Cancer	2 Heart disease	2 Cancer	2 Cancer	2 Other*
3 Heart disease	3 Accidental death	3 Other	3 Other	3 Other*	3 Cancer

*Other indicate dementia

Leading Causes of Death for Men by Age Groups

0-49	50-59	60-69	70-79	80-89	90+
1 Accidental poisoning & exposure to noxious substances	1 Cancer	1 Cancer	1 Cancer	1 Heart disease	1 Heart disease
1 Motor vehicle accidents	2 Heart disease	2 Heart disease	2 Heart disease	2 Cancer	2 Other diseases
3 Intentional self-harm	3 Other diseases	3 Lower respiratory	3 Lower respiratory	3 Other diseases	3 Alzheimer's disease
3 Other diseases					

Figure 7.28 Leading Causes of Death by Gender and Age Among Henry County Residents. Data Source: HCHD analyses of Henry County Resident Mortality Files, 2015-2018

- Among women under the age of 50 drug overdoses are the leading cause of death followed by motor vehicle accidents. Among men, overdoses and motor vehicle accidents are tied as the number one leading cause and suicide is in the top three.
- Among deaths to those aged 50 and older, there are few differences by gender—generally the leadings to causes of death are cancer and heart disease.
- A few exceptions are that among men aged 60-79 lower respiratory ailments are the third leading cause, whereas among women aged 60-89 dementia is the third leading cause.

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Mortality

Measures of Mortality | Infant Mortality

Because the number is small there is little we can glean from the data. What we can discern is the following:

- All mothers were aged 30 or younger
- 3 were under the age of 20
- All mothers were White
- 1 had private insurance
- 3 Were normal weight at birth
- 3 were vaginal deliveries
- 3 died from SIDS

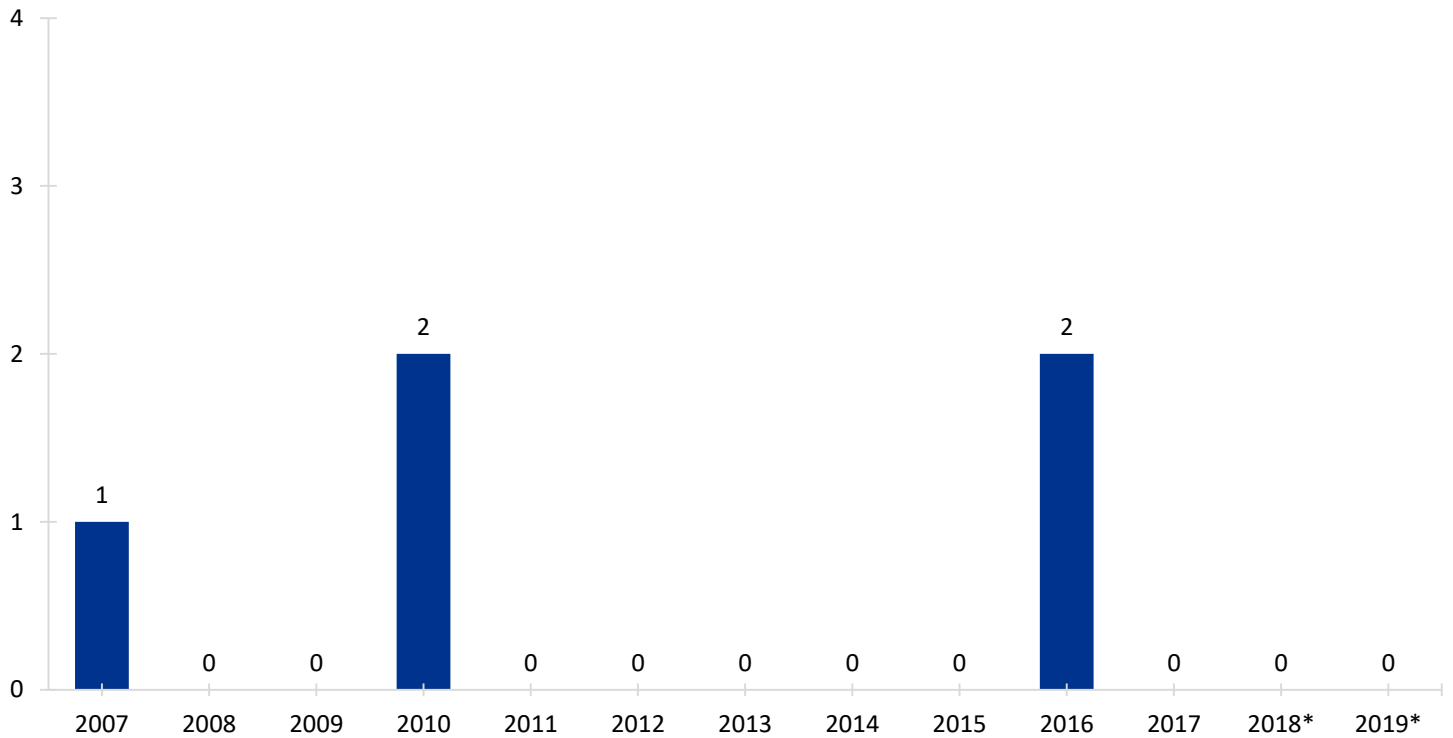


Figure 7.29 Infant Deaths Among Henry County Residents, 2007-2019. Data Source: The Infant Mortality dataset, Ohio Public Health Information Warehouse, 2007-2019

Note: * indicates preliminary data

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Child Mortality

- *Child Mortality Rate* measures the number of deaths among children under age 18 per 100,000 population.

What deaths count toward child mortality? Deaths are counted in the county where the individual lived. So, even if a child dies elsewhere in the state, that death is attributed to his/her home county.

Some data are suppressed. A missing value (N.A.) is reported for counties with fewer than 10 child deaths in the time frame.

Child Mortality – Henry County and its Neighbors

- Compared to neighboring counties, Henry County had a relatively low child mortality rate—second from the lowest at 39 per resident children aged 18 and under.
- The highest child mortality rate was found in Lucas County with 65 child deaths per 100,000 children under the age of 18.
- Putnam County had the lowest rate at 29 per 100,000.

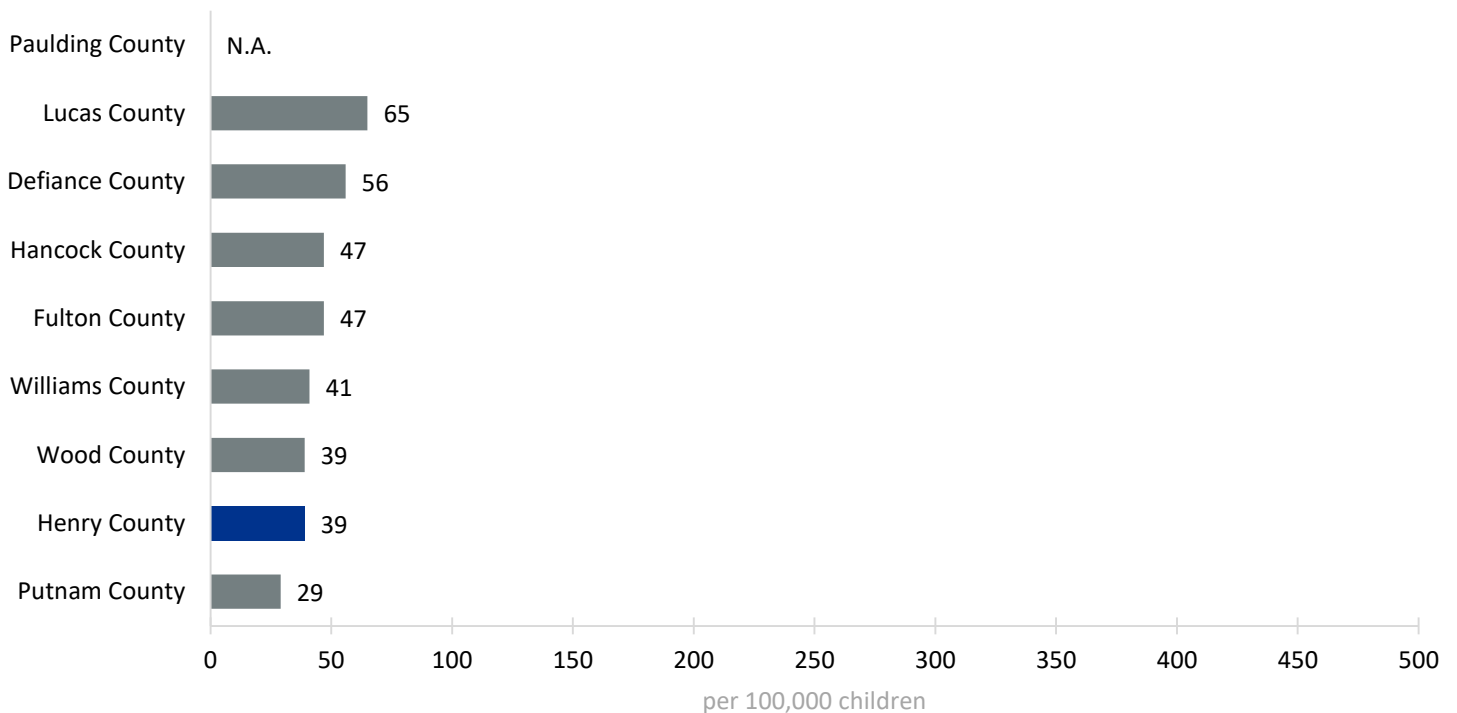


Figure 7.30 County Rankings of the Child Mortality Rate for Henry County and its Neighboring Counties. Data Source: County Health Rankings

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Health Outcomes & Indicators

Measures of Mortality | Premature Mortality

- *Premature Age-Adjusted Mortality* measures the number of deaths among residents under the age of 75 per 100,000 population.

What deaths count toward premature death? Deaths are counted in the county where the individual lived. So, even if an individual dies in a car crash on the other side of the state, that death is attributed to his/her home county.

Premature Mortality – Henry County and its Neighbors

- Henry County had a premature age-adjusted mortality rate of 328 per 100,000 residents under the age of 75. This rate places us towards the middle of neighboring counties.
- Lucas County had the highest premature age-adjusted mortality rate at 446 per 100,000 residents under the age of 75.
- Paulding County had the lowest rate at 264 per 100,000 residents under the age of 75.

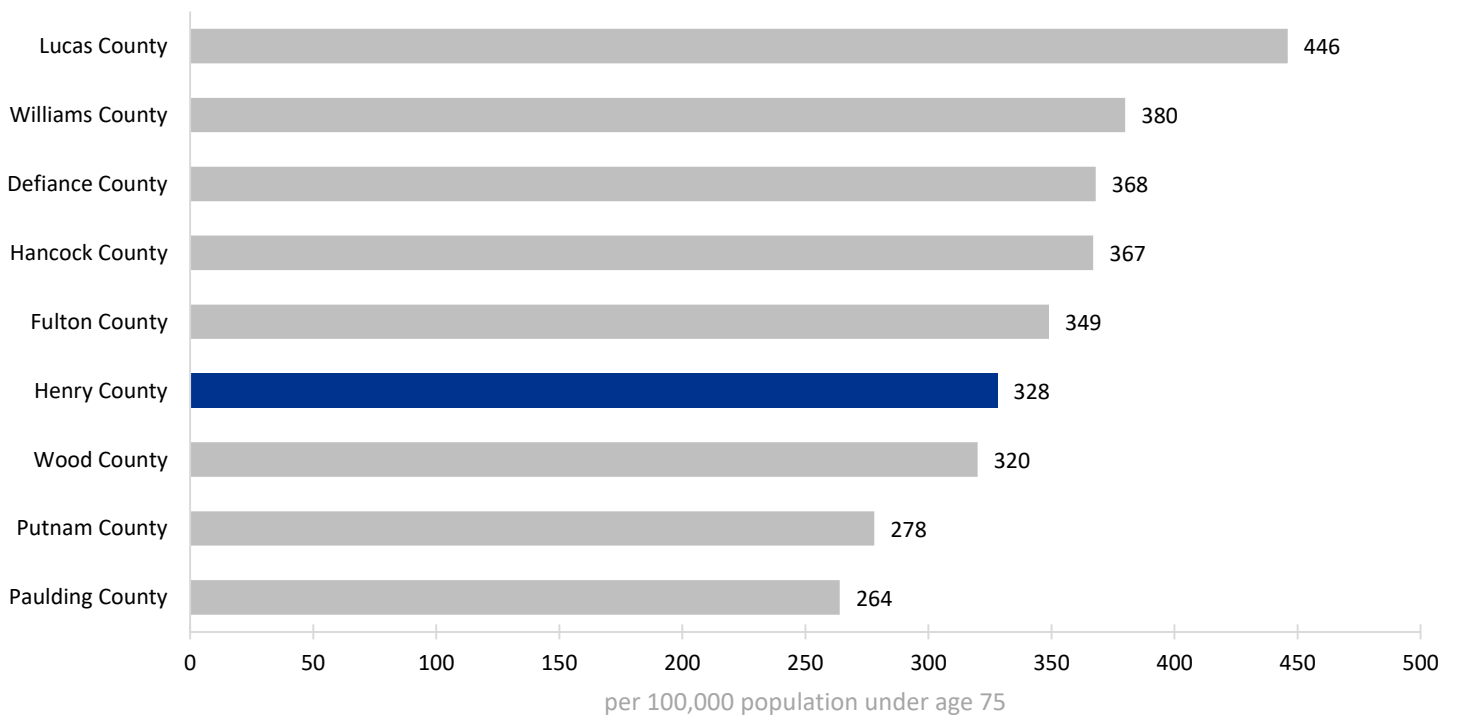


Figure 7.31 County Rankings of the Premature Age-adjusted Mortality Rate for Henry County and its Neighboring Counties.
Data Source: County Health Rankings

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Deaths of Despair

- *Deaths of Despair*: Reflects the rate of deaths due to suicide, alcohol-related disease and drug overdoses per 100,000 population (2010-2016; Centers for Disease Control and Prevention).

Concerns took hold when researchers Anne Case and Angus Deaton—who coined the term—reported on the uptick in deaths from opioid and alcohol abuse and suicide. New research published at the end of 2019 by Woolf and Schoemaker confirms the earlier findings and also notes an increase in deaths from obesity, hypertension, and renal failure. They also highlight social isolation as a key contributor—possibly increasing the risk of death by 29% (for more info you can read this [article](#)).

So what exactly have researchers found that has them so worried?

- Life expectancy in the U.S. has declined for the past three years, despite a previously 55 year increase.
- More specifically, mid-life all-cause mortality rates have risen.
- The increase has been found across all race groups
- States in the Northeast and the Ohio Valley have seen the highest relative increases.

Deaths of Despair – Henry County and its Neighbors

- Compared to neighboring counties, Henry County had the lowest deaths of despair rate at 25.5 per 100,000 population.
- The highest rate was found among the population of Lucas County where there were nearly 46 deaths of despair per 100,000 population.

Compared to neighboring counties, Henry County had the lowest deaths of despair rate.

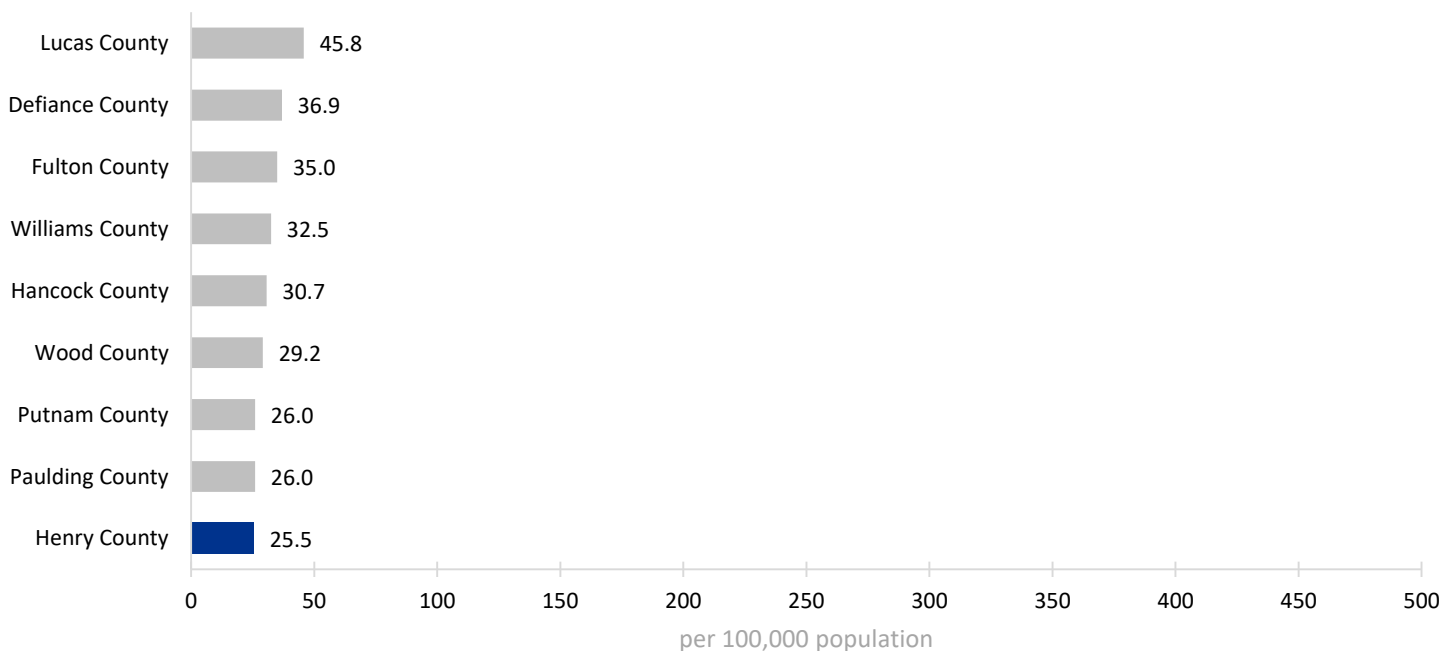


Figure 7.32 County Rankings in Deaths of Despair Deaths involving drugs, alcohol or suicide for Henry County and its Neighboring Counties. Data Source: U.S. News and World Report Healthiest Communities, 2019 Rankings, Copyright 2019 © U.S. News & World Report L.P.

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Health Outcomes & Indicators

Measures of Mortality | Alcohol-Impaired Driving Deaths

- *Alcohol-Impaired Driving Deaths* is the percentage of motor vehicle crash deaths with alcohol involvement.

Alcohol-Impaired Driving Deaths are reported for the *county of occurrence*. This is because it is more likely that the drinking behavior that led to the driving crash happened where the accident occurred rather than in the county where the people involved in the crash reside.

Measure Limitations. This measure considers the percentage of *crash deaths* involving alcohol, **not** the number of total crashes or the number of total crashes involving alcohol. Another limitation of this measure is that not all fatal motor vehicle traffic accidents have a valid blood alcohol test, so these data are likely an undercount of actual alcohol involvement. A final limitation is that even though alcohol is involved in all cases of alcohol-impaired driving, there can be a large difference in the degree to which it was responsible for the crash (e.g. someone with a 0.01 BAC vs. 0.35 BAC).

Numerator. The numerator is the total number of alcohol-impaired motor vehicle crash deaths in the 5-year period. The National Highway Traffic Safety Administration defines a fatal crash as alcohol-related or alcohol-involved if either a driver or a non-motorist (usually a pedestrian or bicyclist) had a measurable or estimated blood alcohol concentration of 0.01 grams per deciliter or above.

Denominator. The denominator is the total number of motor vehicle crash deaths in the 5-year period.

Alcohol-Impaired Driving Deaths – Henry County and its Neighbors

- The percentage of alcohol-impaired driving deaths among Henry and neighboring counties ranges from a low of 15% in Wood County to a high of 43% in Putnam County.
- Henry County had nearly one-third (31%) of driving deaths as alcohol-impaired. This is a similar rate for the state of Ohio (33%).

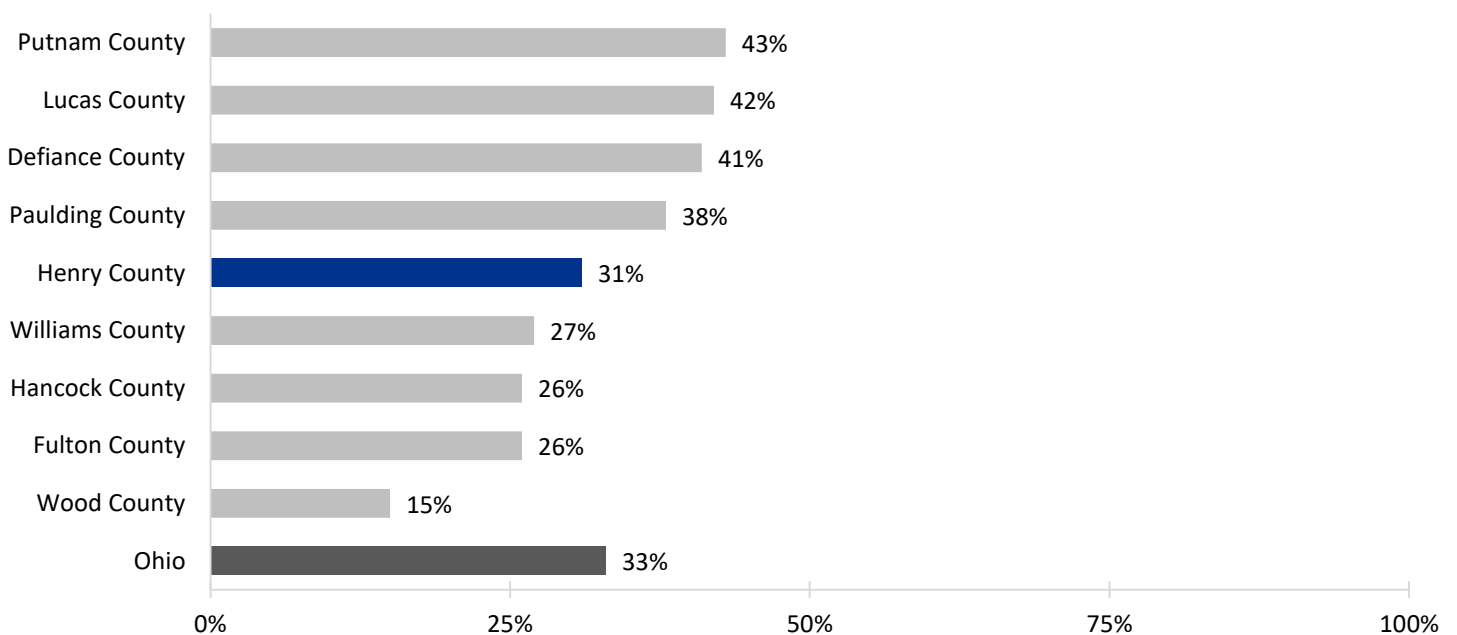


Figure 7.33 County Rankings in Alcohol-impaired Driving Deaths for Henry County and its Neighboring Counties and the State of Ohio. Data Source: County Health Rankings, Fatality Analysis Reporting System (FARS), 2013-2017

Note: To qualify as a FARS case, the crash had to involve a motor vehicle traveling on a traffic way customarily open to the public and must have resulted in the death of a motorist or a non-motorist within 30 days of the crash.

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Drug Overdose Deaths

Drug overdose deaths are a leading contributor to premature death and are largely preventable. Currently, the United States is experiencing an epidemic of drug overdose deaths. Since 2000, the rate of drug overdose deaths has increased by 137 percent nationwide. Opioids contribute largely to drug overdose deaths; since 2000, there has been a 200 percent increase in deaths involving opioids (opioid pain relievers and heroin) ([CDC, 2016](#))

- *Drug Overdose Death Rate* is the number of deaths due to drug poisoning per 100,000 population.

Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred. It is important to note that deaths are counted in the county of residence of the deceased. So, even if a drug overdose death occurred across the state, the death is counted in the home county of the individual who died.

Some data are suppressed. A missing value is reported for counties with fewer than 10 drug poisoning deaths in the time frame.

Numerator. The numerator includes deaths from accidental, intentional, and undetermined drug poisoning by and exposure to: 1) nonopioid analgesics, antipyretics and antirheumatics, 2) antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, 3) narcotics and psychodysleptics [hallucinogens], not elsewhere classified, 4) other drugs acting on the autonomic nervous system, and 5) other and unspecified drugs, medicaments and biological substances, over a 3-year period. ICD-10 codes used include X40-X44, X60-X64, X85, and Y10-Y14.

Denominator. The denominator is the aggregate annual population over the 3-year period.

Drug Overdose Deaths – Henry County and its Neighbors

- The drug overdose mortality rate among Henry and neighboring counties ranges from a low of 13 per 100,000 population in Putnam County to a high of 36 per 100,000 in Lucas County.
- Henry County had 18 per 100,000 drug overdose deaths per 100,000 population. This is half the rate for the state of Ohio with 37 deaths per 100,000.

Note: These rates vary slightly from those in the report generated by the HCNWO because of the data years used.

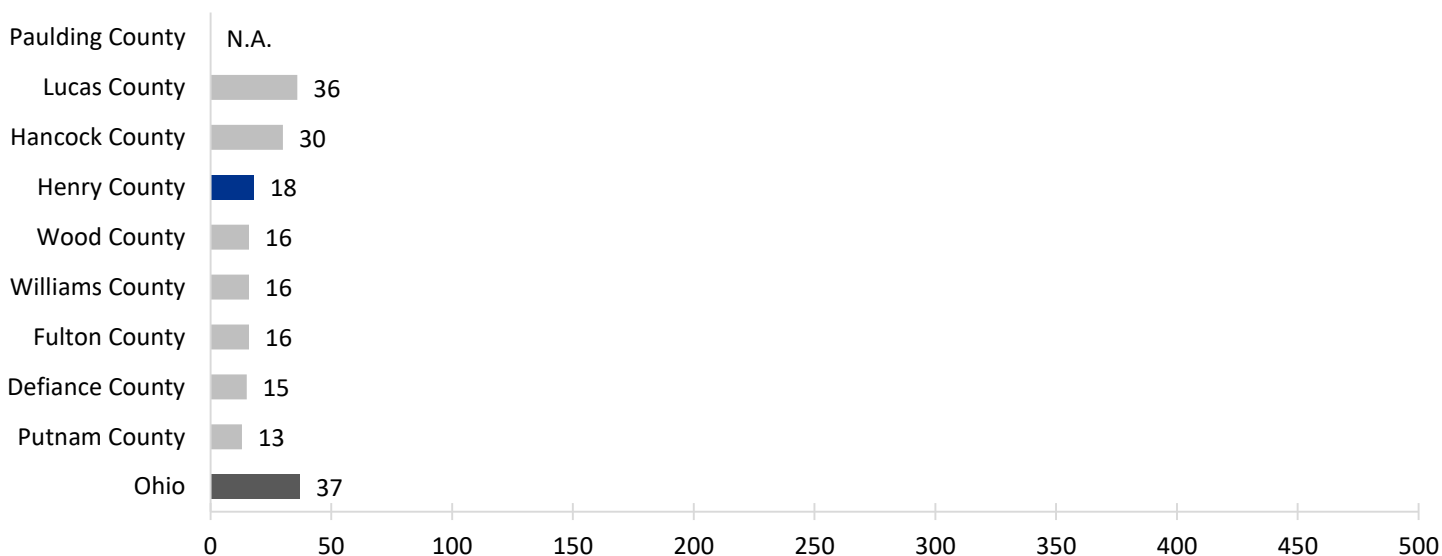


Figure 7.34 County Rankings in Drug Overdose Mortality Rate for Henry County and its Neighboring Counties and the State of Ohio. Data Source: County Health Rankings, Compressed Mortality File (CMF), 2015-2017

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Suicide

- Over the past twelve years, there has been an average of 2.25 suicides a year among Henry County *residents*.
- Actual numbers of suicides can vary dramatically, particularly in areas with small populations.
- As you see below, the largest number of suicides in any given year occurred in 2011 with six.
- Conversely, in 2016 there were not any suicides.

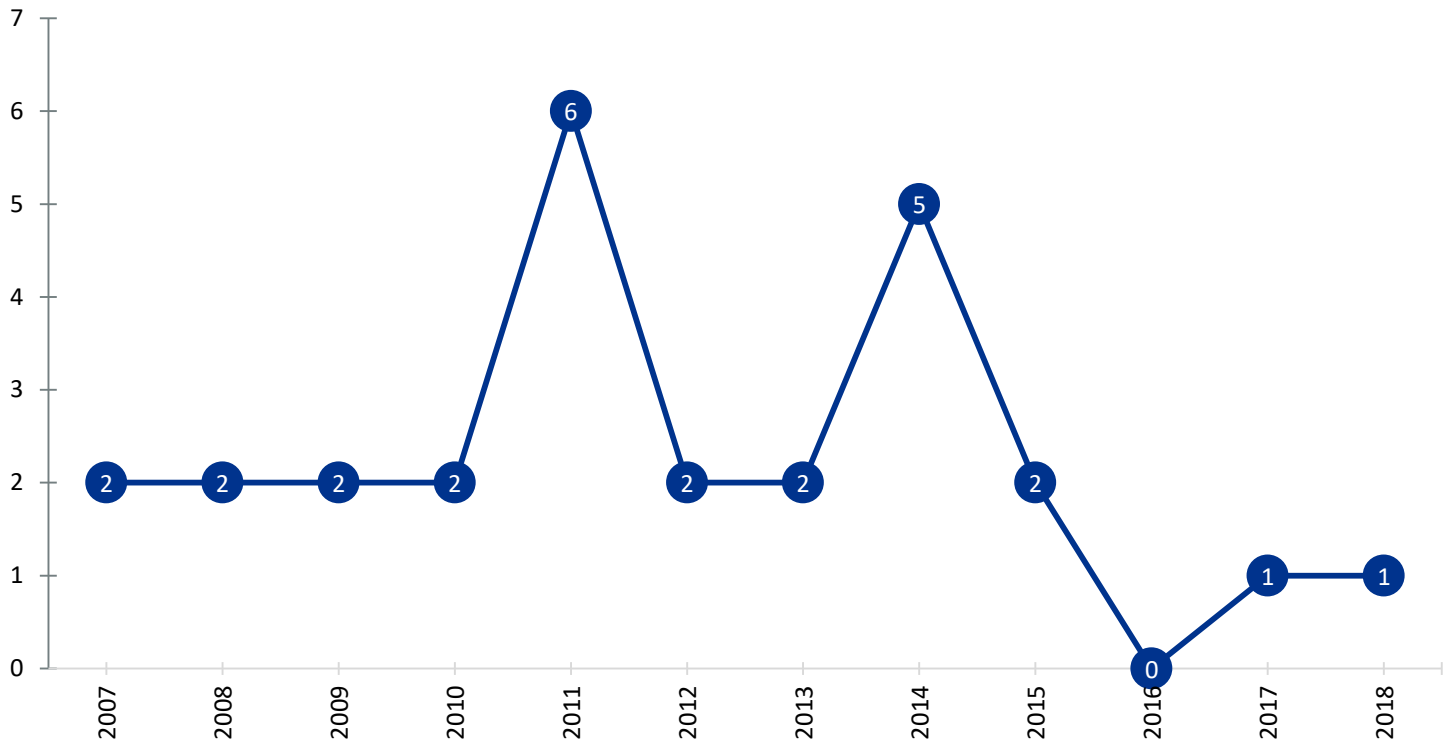


Figure 7.35 Trend in the Number of Suicides Among Henry County Residents, 2007-2018. Data Source: HCHD analyses of Henry County Resident Mortality Files, 2007-2018

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Firearm Fatalities Rate

- **Firearm Fatalities** is the number of deaths due to firearms in a county per 100,000 population. Rates measure the number of events (i.e., deaths, births, etc.) in a given time period (generally one or more years) divided by the average number of people at risk during that period. Rates help us compare health data across counties with different population sizes.

Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred. It is important to note that deaths are counted in the county of residence of the deceased. So, even if a firearm death occurred across the state, the death is counted in the home county of the individual who died.

Some data are suppressed. A missing value is reported for counties with fewer than 10 firearm fatalities in the time frame.

Numerator. The numerator is the number of deaths in a county due to firearms.

Denominator. The denominator is the aggregate annual population over the 5-year period.

Firearm Fatalities Rate – Henry County and its Neighbors

- There were not enough firearm fatalities in Henry County to provide a rate.
- Paulding and Lucas Counties had the highest rates at 12 per 100,000 population

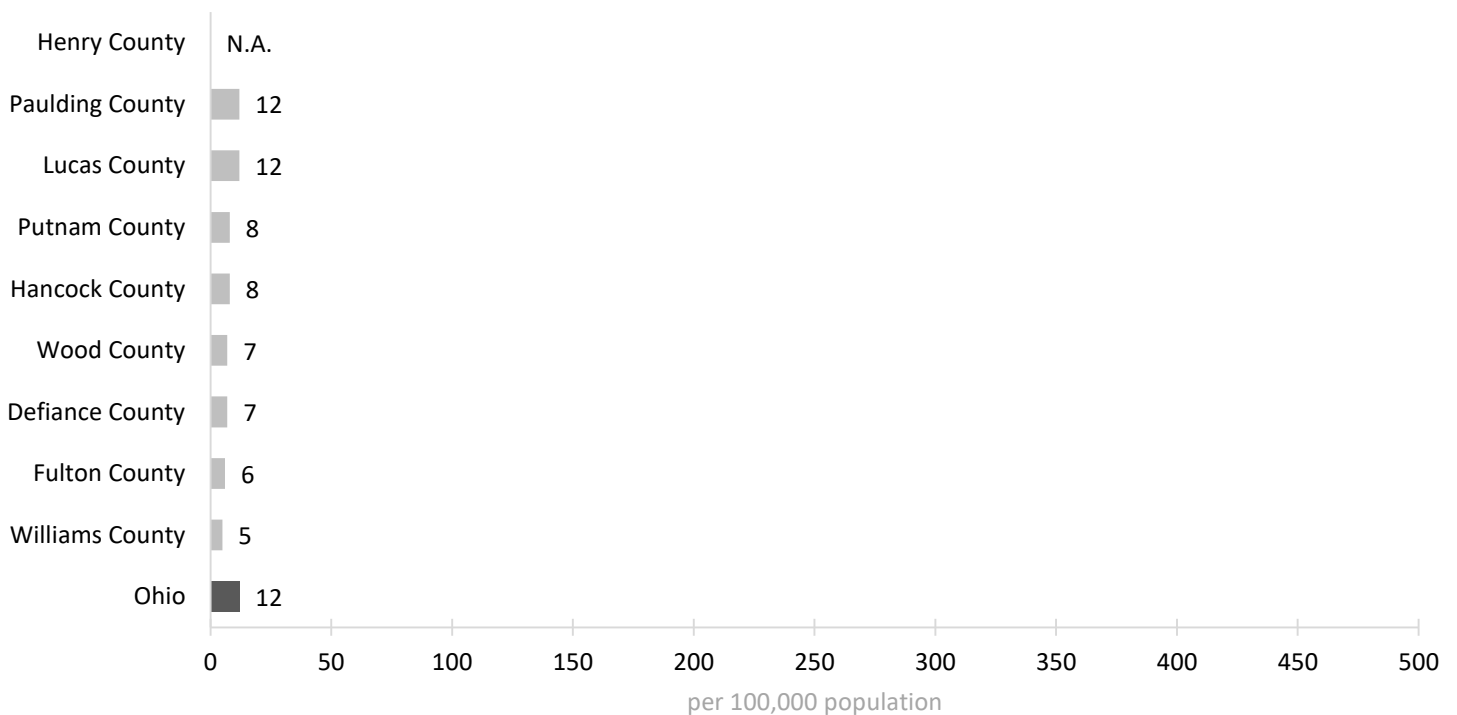


Figure 7.36 County Rankings in Firearm Fatalities Rate for Henry County and its Neighboring Counties and the State of Ohio. Data Source: County Health Rankings, Compressed Mortality File (CMF), 2013-2017

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Homicide Rate

- **Homicide rate** is the number of deaths from assaults per 100,000 population. Rates measure the number of events (i.e., deaths, births, etc.) in a given time period (generally one or more years) divided by the average number of people at risk during that period. Rates help us compare data across counties with different population sizes.

Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred. It is important to note that deaths are counted in the county of residence of the deceased. So, even if a homicide occurred across the state, the death is counted in the home county of the individual who died.

Some data are suppressed. A missing value is reported for counties with fewer than 10 homicide deaths in the time frame.

Numerator. The numerator is the number of deaths in a county over a 7-year period due to homicide.

Denominator. The denominator is the aggregate county population over the 7-year period.

Homicide Rate – Henry County and its Neighbors

- In Henry County, homicides are a rare occurrence. There have been two among residents between 2007 and 2018—one in 2012 and one in 2015. There were two few to generate a reliable rate.

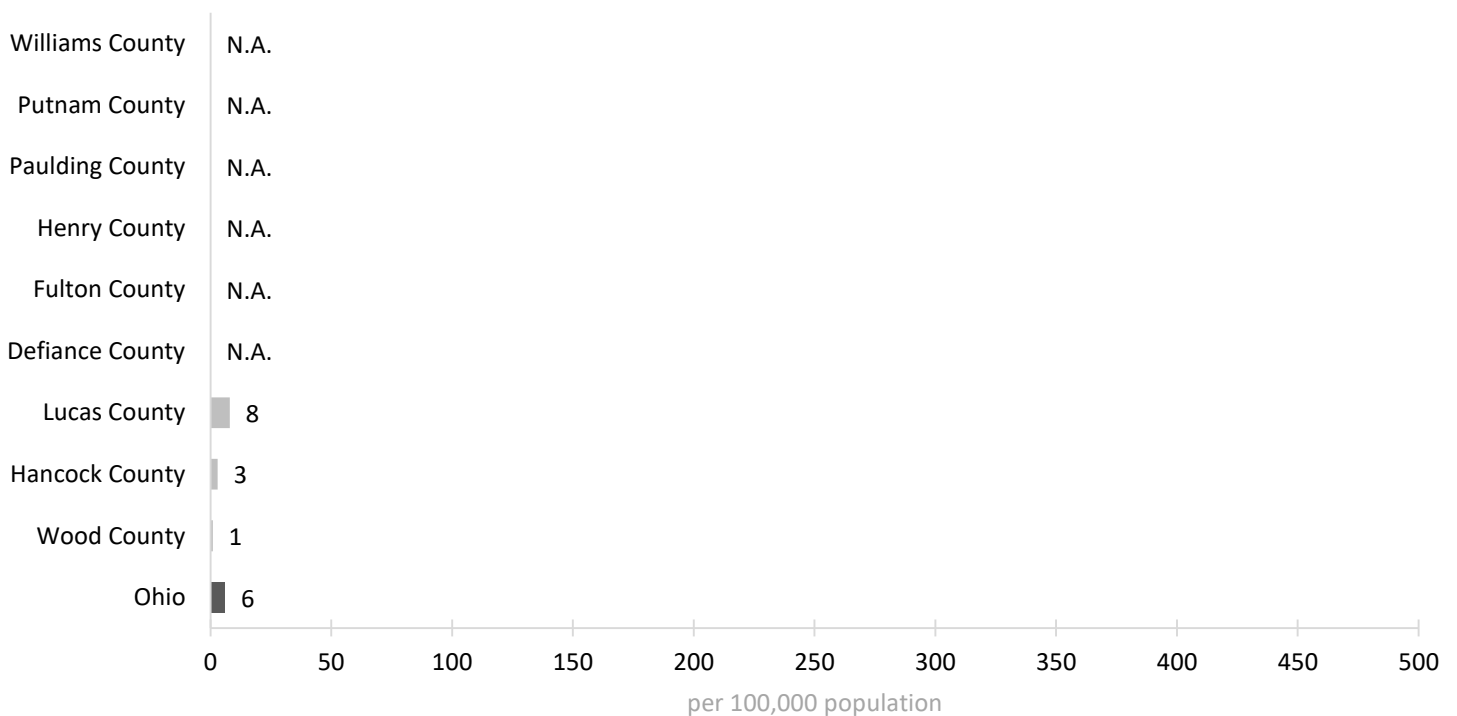


Figure 7.37 County Rankings in the Homicide Rate for Henry County and its Neighboring Counties and the State of Ohio. Data Source: County Health Rankings, Compressed Mortality File (CMF), 2011-2017

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

Measures of Mortality | Injury Death Rate

- **Injury Death Rate** is the number of deaths from planned (e.g. homicide or suicide) and unplanned (e.g. motor vehicle deaths) injuries per 100,000 population. This measure includes injuries from all causes and intents. Rates measure the number of events (i.e., deaths, births, etc.) in a given time period (generally one or more years) divided by the average number of people at risk during that period. Rates help us compare data across counties with different population sizes.

Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred. It is important to note that deaths are counted in the county of residence of the deceased. So, even in an injury death occurred across the state, the death is counted in the home county of the individual who died.

Measure Limitations. This measure is being used to estimate the overall risk of injury in a county. The overall burden of injuries is not captured by the injury mortality rate; injuries that are not fatal have large costs due to emergency room visits and time off work.

Numerator. The numerator is the number of injury deaths with an underlying cause of injury during the 5-year period

Denominator. The denominator is the aggregate annual population for the five-year period.

Injury Death Rate – Henry County and its Neighbors

- The injury death rate among Henry and neighboring counties ranges from a low of 55 per 100,000 population in Wood County to a high of 84 per 100,000 in Lucas County.
- Henry County had 73 per 100,000 injury deaths per 100,000 population. This is lower than the rate for the state of Ohio with 82 deaths per 100,000.

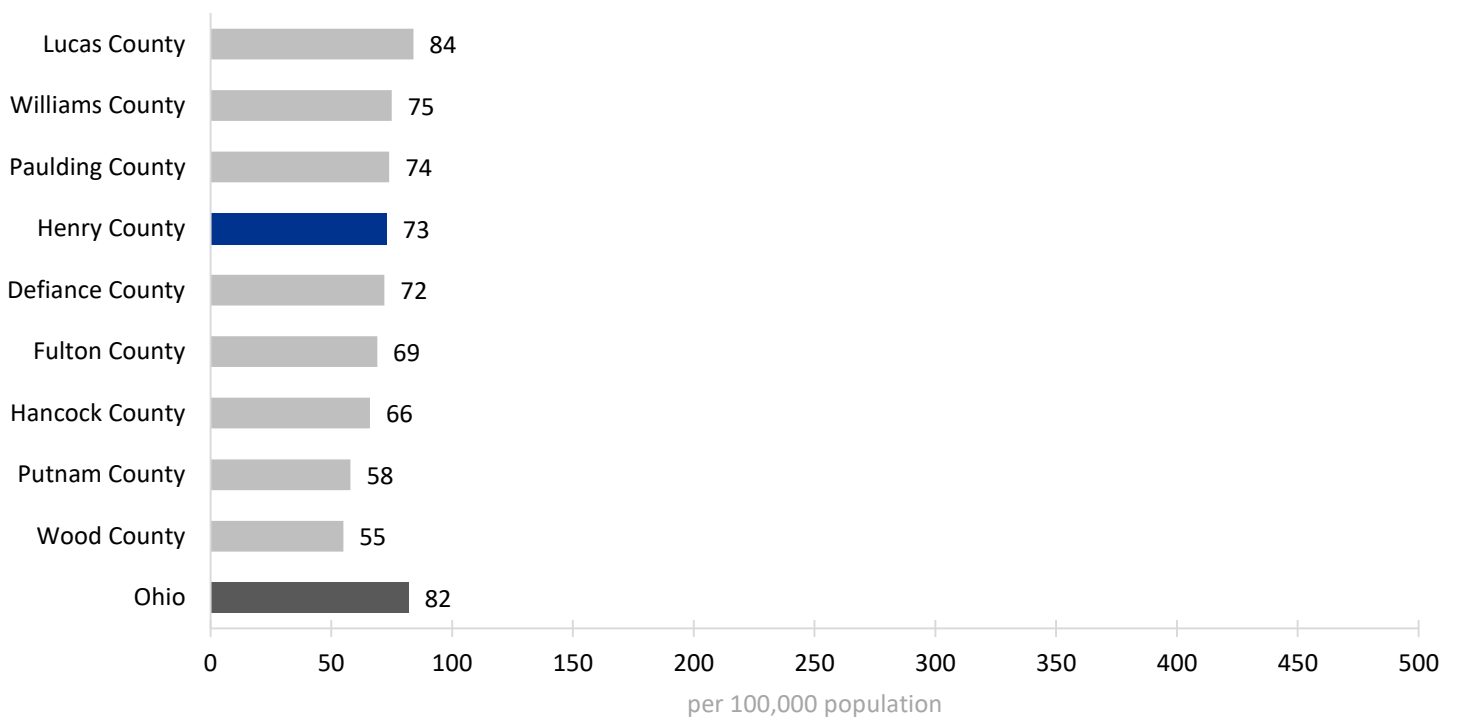


Figure 7.38 County Rankings in the Injury Death Rate for Henry County and its Neighboring Counties and the State of Ohio. Data Source: County Health Rankings, Compressed Mortality File (CMF), 2013-2017

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

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Measures of Mortality | Motor Vehicle Mortality Rate

- **Motor Vehicle Crash Death Rate** is the number of deaths due to traffic accidents involving a motor vehicle per 100,000 population. Rates measure the number of events (i.e., deaths, births, etc.) in a given time period (generally one or more years) divided by the average number of people at risk during that period. Rates help us compare health data across counties with different population sizes.

Deaths are counted in the county of residence for the person who died, rather than the county where the death occurred. It is important to note that deaths are counted in the county of residence of the deceased. So, even if a motor vehicle crash death occurred across the state, the death is counted in the home county of the individual who died.

Motor vehicle crash deaths methodology has changed. Starting in 2013, the County Health Rankings changed the definition of motor vehicle crash deaths to exclude non-traffic accidents to better align with Healthy People 2020.

Numerator. The numerator includes traffic accidents involving motorcycles, 3-wheel motor vehicles, cars, vans, trucks, buses, street cars, ATVs, industrial, agricultural, and construction vehicles, and bicyclists or pedestrians when colliding with any of these vehicles, over a 7-year period. Deaths due to boating accidents and airline crashes are not included in the numerator.

Denominator. The denominator is the aggregate annual population over the 7-year period.

Motor Vehicle Mortality Rate – Henry County and its Neighbors

- The motor vehicle mortality rate among Henry and neighboring counties ranges from a low of 11 per 100,000 population in Hancock County to a high of 23 per 100,000 in Paulding County.
- Henry County had 20 per 100,000 motor vehicle deaths per 100,000 population. This is twice the rate for the state of Ohio with 10 deaths per 100,000.

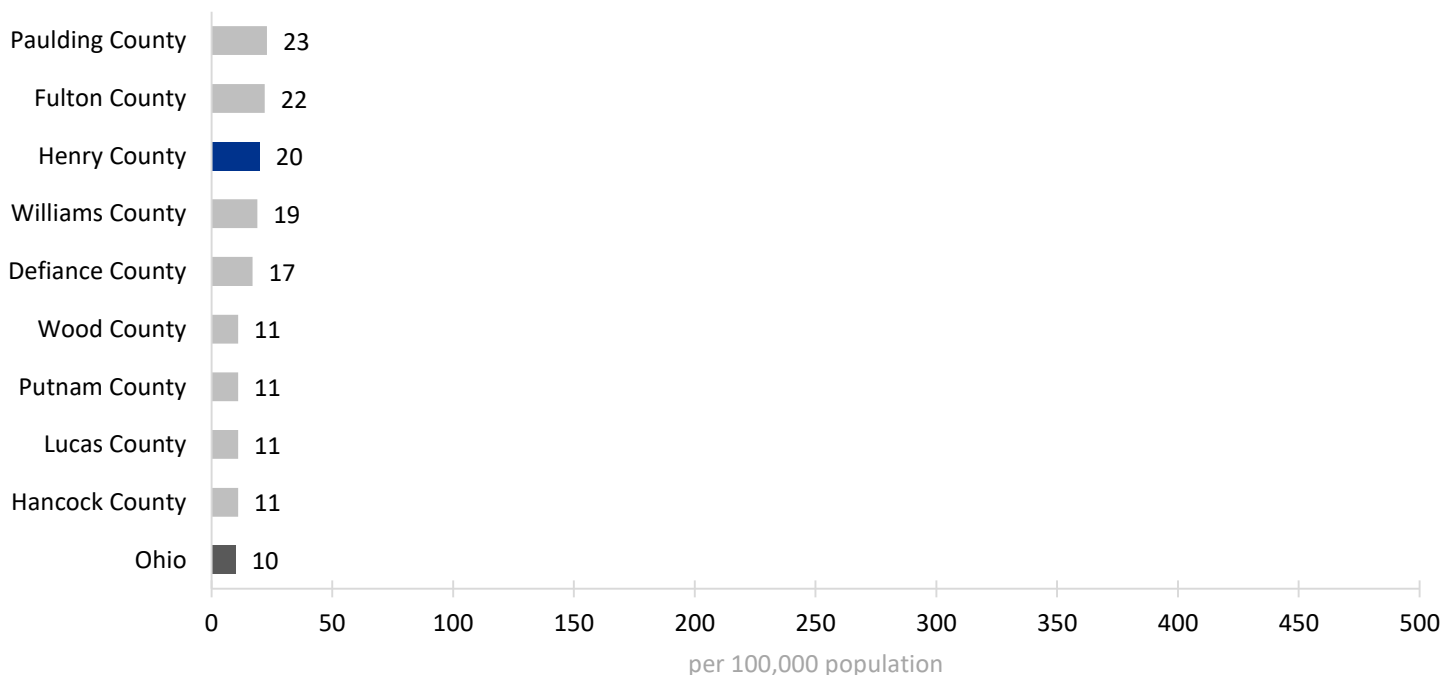


Figure 7.39 County Rankings in Motor Vehicle Mortality Rate for Henry County and its Neighboring Counties and the State of Ohio. Data Source: County Health Rankings, Compressed Mortality File (CMF), 2011-2017

SOCIAL DETERMINANTS OF HEALTH ASSESSMENT

Health Outcomes & Indicators

References & Data Sources

- Centers for Disease Control and Prevention, Interactive Atlas of Heart Disease and Stroke Tables. Retrieved from <https://nccd.cdc.gov/DHDSPAtlas/>
- Center for Disease Control and Prevention, National Cancer Institute. *State Cancer Profiles*. Retrieved from <https://statecancerprofiles.cancer.gov> on 11/11/2019 6:11 pm.
- Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. *BRFSS Prevalence & Trends Data* [online]. 2015.
- Centers for Disease Control and Prevention, The National Diabetes Surveillance System, Diabetes Atlas of the CDC's Behavioral Risk Factor Surveillance System data
- Centers for Disease Control and Prevention (1986). Premature mortality in the United States: Public health issues in the use of years of potential life lost. *Morb Mortal Wkly Rep.*, 35(suppl 2), 1S-11S.
- Dranger, E., & Remington, P. (2004). A Summary Measure of Premature Mortality Used in Measuring the Health of Communities. Madison, WI: University of Wisconsin Population Health Institute. *Issue Brief* 5(7).
- Eayres, D., & Williams, E. S. (2004). Evaluation of methodologies for small area life expectancy estimation. *J Epidemiol Community Health*;58(3), 243–9.
- Henry County Community Health Status Assessment Adult Survey.
- Henry County Community Health Status Assessment Adolescent Survey, 2019.
- Henry County Department of Health. *Resident Mortality Files, 2015-2018* [Data file].
- Ohio Department of Health, Ohio Public Health Information Warehouse. *The Infant Mortality dataset, 2007-2019* [Data file].
- Silcocks, P. B., Jenner D. A., Reza, R. (2001). Life expectancy as a summary of mortality in a population: statistical considerations and suitability for use by health authorities. *Journal of Epidemiology & Community Health*; 55(1), 38-43.
- University of Wisconsin Population Health Institute. *County Health Rankings, 2019*. Retrieved from <https://www.countyhealthrankings.org>
- Compressed Mortality File (CMF), 2015-2017
- Fatality Analysis Reporting System (FARS), 2013-2017
- National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP), 2015
- U.S. News and World Report—Healthiest Communities (2019). *Healthiest Communities County Rankings*. Retrieved from <https://www.usnews.com/news/healthiest-communities>