



Iowa Community Health Snapshot Series

*275 community reports prepared for the Iowa State University
Extension and Outreach Community and Economic
Development Unit*



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By Matthew Voss & Shawn Dorius

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Iowa Community Health Snapshot Series

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Health in Shenandoah: Overview

Dear Community Members & Stakeholders of Shenandoah,

We are pleased to share the Iowa Community Health Snapshot series, a set of reports designed in partnership with Iowa State University’s Community Economic Development to assess the overall landscape of health and well-being across Iowa. The following pages include the health snapshot for your community. The snapshot can be used to see how Shenandoah ranks across various health measures compared to the rest of the state and similarly-sized communities. This comparison allows us to identify Shenandoah’s strengths and opportunities for growth by leveraging the Centers for Disease Control and Prevention PLACES dataset.

The report includes 37 health measures organized topically by general health status, risky behavior, health outcomes, prevention, and disability. We provide a general overview of each health topic, followed by a description of each health measure. Health measure descriptions include crude and age-adjusted rates and a ranking that tells you how your community ranks compared to all Iowa communities and communities of similar size to Shenandoah. Crude rates tell you the raw, un-adjusted percent of the population experiencing the health measure. Age-adjusted rates account for the age distribution present in your community and presents what the rate would be if your community had a standard age distribution. Crude rates can provide a general comparison between communities and age-adjusted rates can give a fairer comparison between communities with different age structures.

Strengths

Take a look at the top strengths of your community! Below are unadjusted and age-adjusted health measures that represent your community’s strengths. We recommend using continued investment in these areas to maintain them as strengths, as well as building on them to improve in other health domains.

| Crude | | | Age-Adjusted | | |
|--|--------------------------|-------------------------|--|--------------------------|-------------------------|
| Health Domain | Statewide Community Rank | Midsized Community Rank | Health Domain | Statewide Community Rank | Midsized Community Rank |
| Binge Drinking | 110th | 9th | Cancer (except skin) | 74th | 11th |
| Annual Checkup | 111th | 4th | Binge Drinking | 108th | 25th |
| Taking BP Medication | 245th | 20th | Annual Checkup | 127th | 17th |
| Core preventive services for older men | 282nd | 26th | Core preventive services for older men | 228th | 27th |
| Cholesterol Screening | 451st | 33rd | Taking BP Medication | 298th | 42nd |

Opportunities

Below are health measures that represent potential areas for growth in your community. We recommend increasing investment in these areas to support community health and well-being.

| Crude | | | Age-Adjusted | | |
|---------------------|--------------------------------|-------------------------------|--------------------------------|--------------------------------|-------------------------------|
| Health Domain | Statewide Community Rank | Midsized Community Rank | Health Domain | Statewide Community Rank | Midsized Community Rank |
| Dental Visit | 914th | 88th | Sleep <7 hours | 884th | 96th |
| Obesity | 894th | 93rd | Obesity | 879th | 94th |
| Any Disability | 884th | 88th | High Cholesterol | 872nd | 101st |
| Mobility Disability | 879th | 90th | Dental Visit | 871st | 90th |
| High Blood Pressure | 878th | 100th | Colorectal Cancer Screening | 859th | 90th |

Please review the rest of the report to learn more about your community and reach out to us with questions about the report or for recommendations to improve the overall health and well-being in Shenandoah.

Sincerely,



Shawn F. Dorius, PhD
Iowa State University
Public Science Collaborative



IOWA STATE UNIVERSITY
Extension and Outreach
Community and Economic Development

This project was supported by funding from Iowa State University’s Extension and Outreach Community and Economic Development Unit, via an award from Iowa State University’s Presidential Strategic Initiative Plan 2022-2031.

How to Use this Report

The purpose of the Iowa Community Health Snapshot Series is to provide an overview of health in Shenandoah that can be used to help inform health-related interventions and programming. This report contains five sections, including the overall health status of Shenandoah, a review of risky behaviors in the community, and information on various health outcomes, prevention measures, and disability needs. Each section includes an overview of the health domain, a breakdown of its underlying health measures, and data to see how Shenandoah compares to the rest of the state and similarly-sized communities.

With a population of 4,930, Shenandoah’s similarly sized communities are defined as midsized communities. In Iowa, midsized communities have an average population of 4,787, and there are 102 communities that are considered midsized communities. To see all of the communities in this population group, please see Appendix 3 of this report.

| Group | Population Range | Number of Communities |
|------------|------------------|-----------------------|
| Large | 50,000+ | 11 |
| Mid-Large | 10,000-49,999 | 31 |
| Midsized | 2,500-9,999 | 102 |
| Small | 1,000-2,499 | 138 |
| Very Small | 0-999 | 676 |
| Total | | 958 |

Using Ames, IA as an Example

The graphic below is an example of the details included for each health measure. The table in the upper right shows your community’s crude and age-adjusted rate estimates alongside their averages across all Iowa communities and similarly-sized communities. The images below show the distribution of the health measure across communities. The vertical lines correspond with the values in the table to show the estimate for the specific community compared to communities across the state. The solid black line in each plot represents the community rate, with the dashed lines indicating the average rate for all Iowa communities and the dotted lines showing the average rate for similarly-sized communities.



Health Status

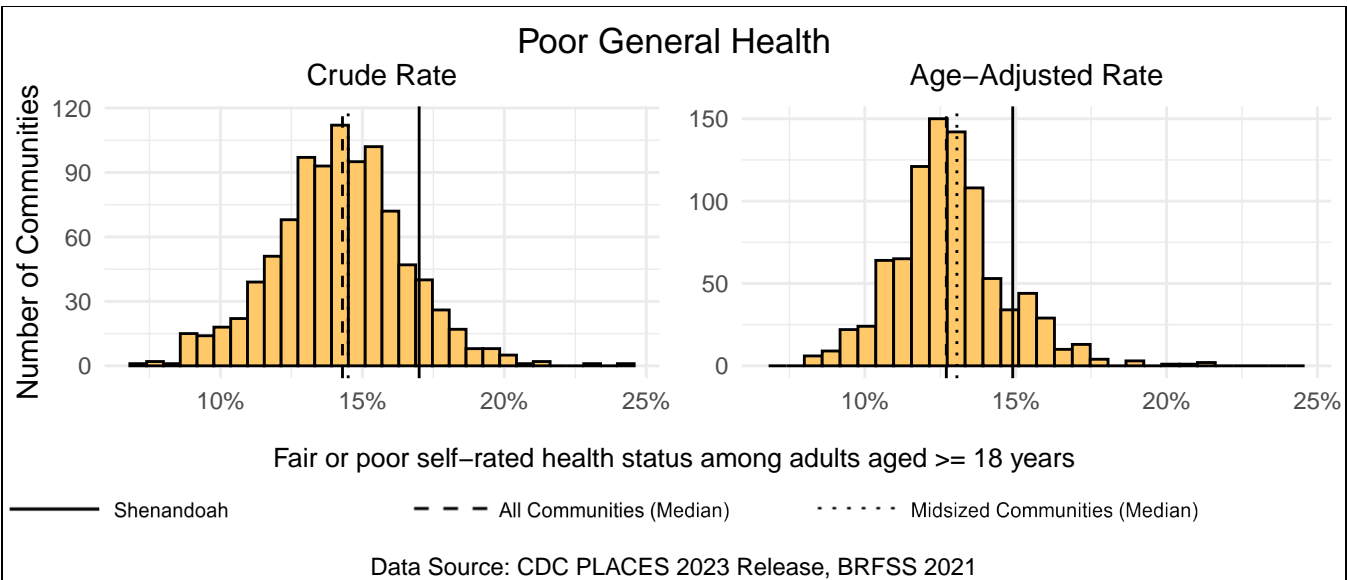
This section reflects measures for overall health, including general, physical, and mental health. These measures are a valuable way to see a simple summary of the health of a country’s population. The questions to calculate these measures ask respondents to evaluate their health status. General health is evaluated on a 5-point scale where respondents can report their health status as one of “excellent,” “very good,” “good,” “fair,” or “poor,” from which the respondents who answer “fair” or “poor” are included in the measure. Physical and mental health are evaluated as the rate of respondents who say they have had 14 or more days in the last 30 days in which their physical or mental health was not good. The URL below includes more information about each variable.

<https://www.cdc.gov/places/measure-definitions/health-status/index.html>

Poor General Health

Shenandoah has a crude rate of 17.0% for fair or poor self-rated health status among adults aged >= 18 years, which ranks 858th out of 958 Iowa communities (82nd out of 102 midsize communities). The age-adjusted rate for Shenandoah is 14.9%, which ranks 791st out of 905 Iowa communities (78th out of 102 midsize communities).

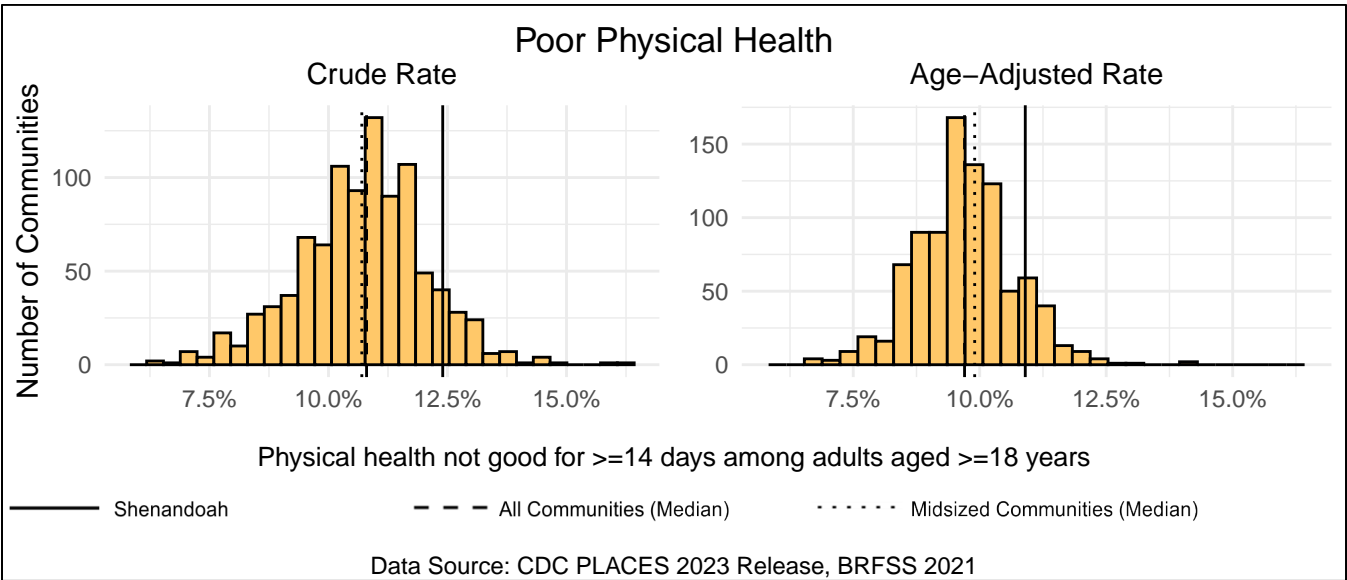
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 17.0% | 14.3% | 14.5% |
| Age-Adjusted | 14.9% | 12.7% | 13.0% |



Poor Physical Health

Shenandoah has a crude rate of 12.4% for physical health not good for >=14 days among adults aged >=18 years, which ranks 867th out of 958 Iowa communities (86th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 10.9%, which ranks 795th out of 905 Iowa communities (80th out of 102 midsize communities).

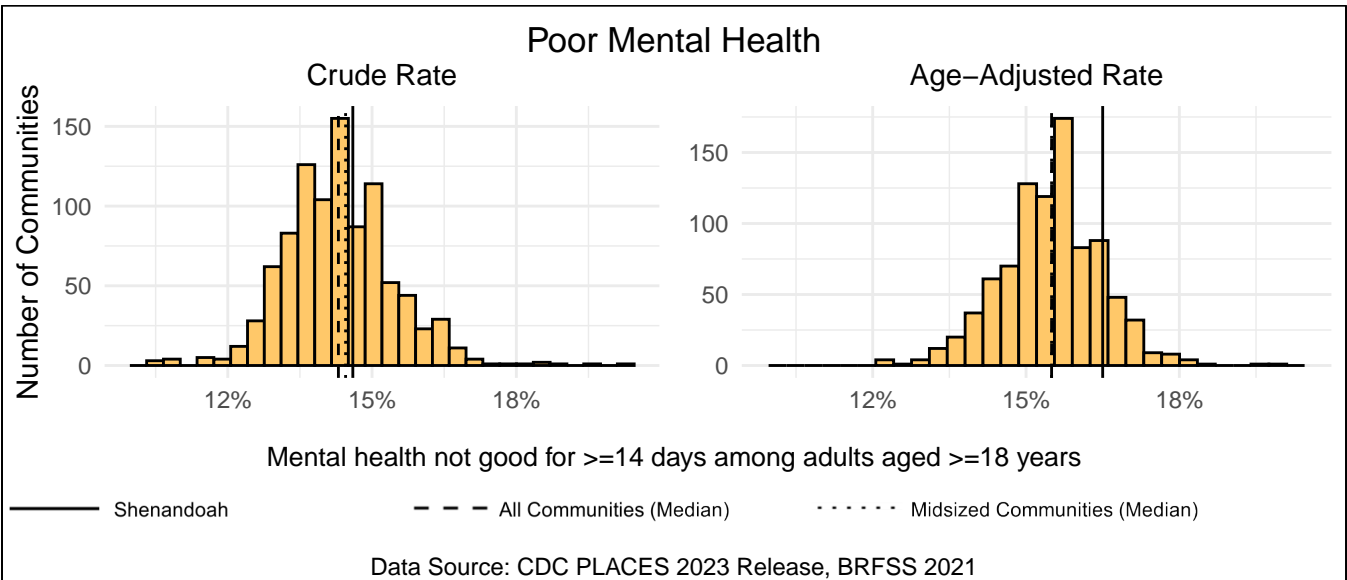
| Measure Type | Shenandoah | All Comm. | Midsize Comm. |
|--------------|------------|-----------|---------------|
| Crude | 12.4% | 10.8% | 10.7% |
| Age-Adjusted | 10.9% | 9.7% | 9.9% |



Poor Mental Health

Shenandoah has a crude rate of 14.6% for mental health not good for >=14 days among adults aged >=18 years, which ranks 587th out of 958 Iowa communities (55th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 16.5%, which ranks 765th out of 905 Iowa communities (80th out of 102 midsize communities).

| Measure Type | Shenandoah | All Comm. | Midsize Comm. |
|--------------|------------|-----------|---------------|
| Crude | 14.6% | 14.3% | 14.4% |
| Age-Adjusted | 16.5% | 15.5% | 15.5% |



Health Risk Behaviors

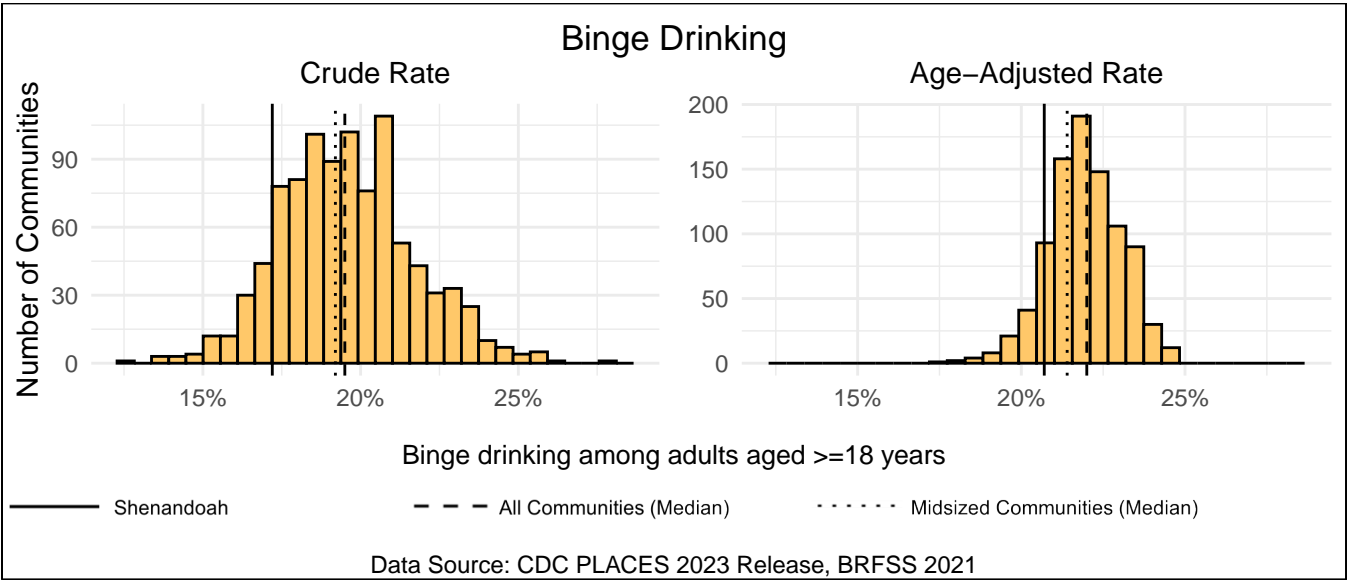
Health risk measures are measures of individual behaviors that can lead to poor health outcomes. These include binge drinking, current smoking, physical inactivity, and getting less than seven hours of nightly sleep. Risk behaviors are the most critical intervention points as they can help save lives and drastically improve health outcomes later in life. Each measure is calculated as the rate of respondents participating in a high level of risk behavior. The exact cutoff points for the behavior depend on the health area. The link below includes more information about each variable.

<https://www.cdc.gov/places/measure-definitions/unhealthy-behaviors/index.html>

Binge Drinking

Shenandoah has a crude rate of 17.2% for binge drinking among adults aged ≥ 18 years, which ranks 110th out of 958 Iowa communities (9th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 20.7%, which ranks 108th out of 905 Iowa communities (25th out of 102 midsize communities).

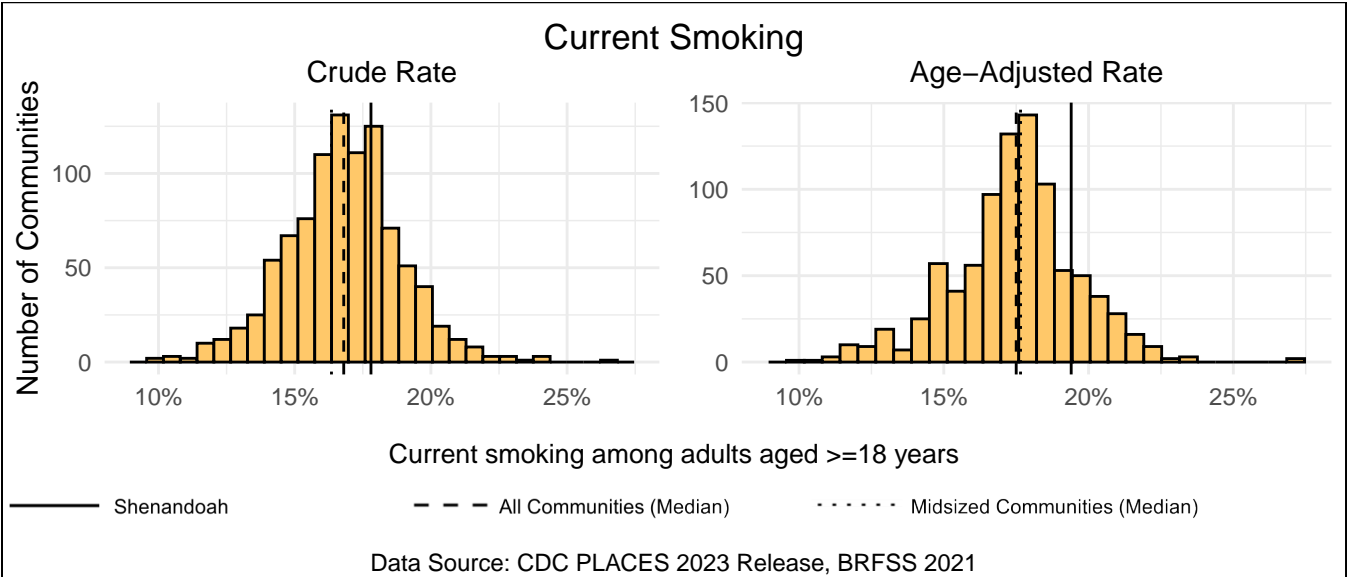
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 17.2% | 19.5% | 19.2% |
| Age-Adjusted | 20.7% | 22.0% | 21.4% |



Current Smoking

Shenandoah has a crude rate of 17.8% for current smoking among adults aged >=18 years, which ranks 656th out of 958 Iowa communities (78th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 19.4%, which ranks 750th out of 905 Iowa communities (79th out of 102 mid-sized communities).

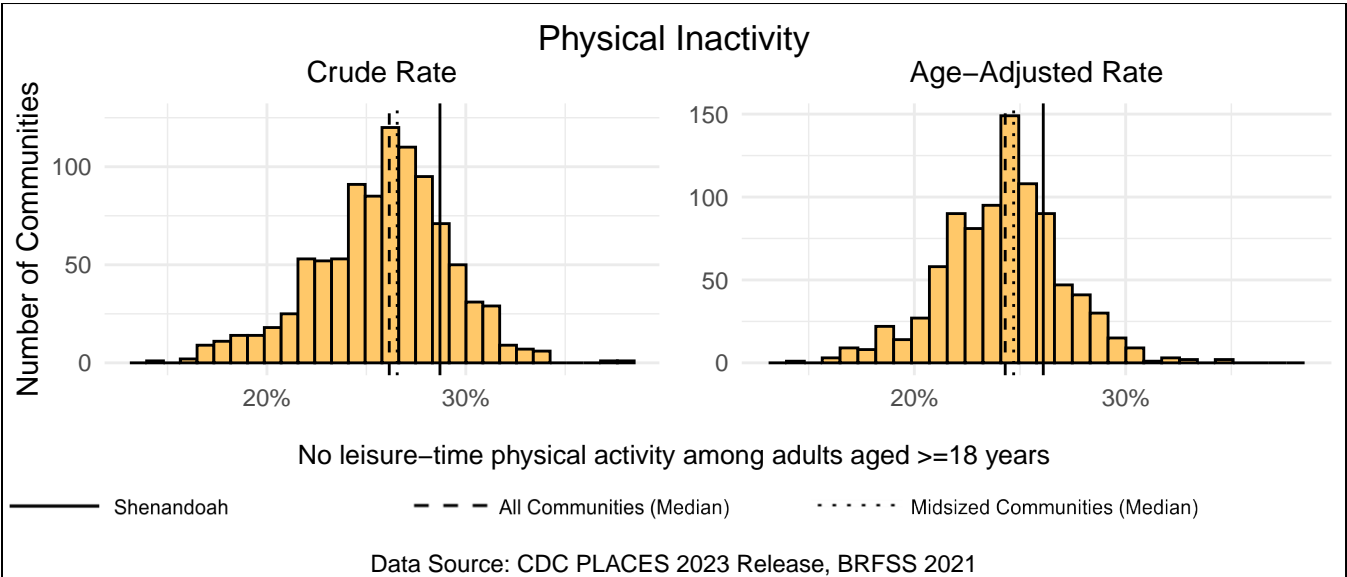
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 17.8% | 16.8% | 16.4% |
| Age-Adjusted | 19.4% | 17.5% | 17.6% |



Physical Inactivity

Shenandoah has a crude rate of 28.7% for no leisure-time physical activity among adults aged >=18 years, which ranks 781st out of 958 Iowa communities (75th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 26.1%, which ranks 702nd out of 905 Iowa communities (68th out of 102 mid-sized communities).

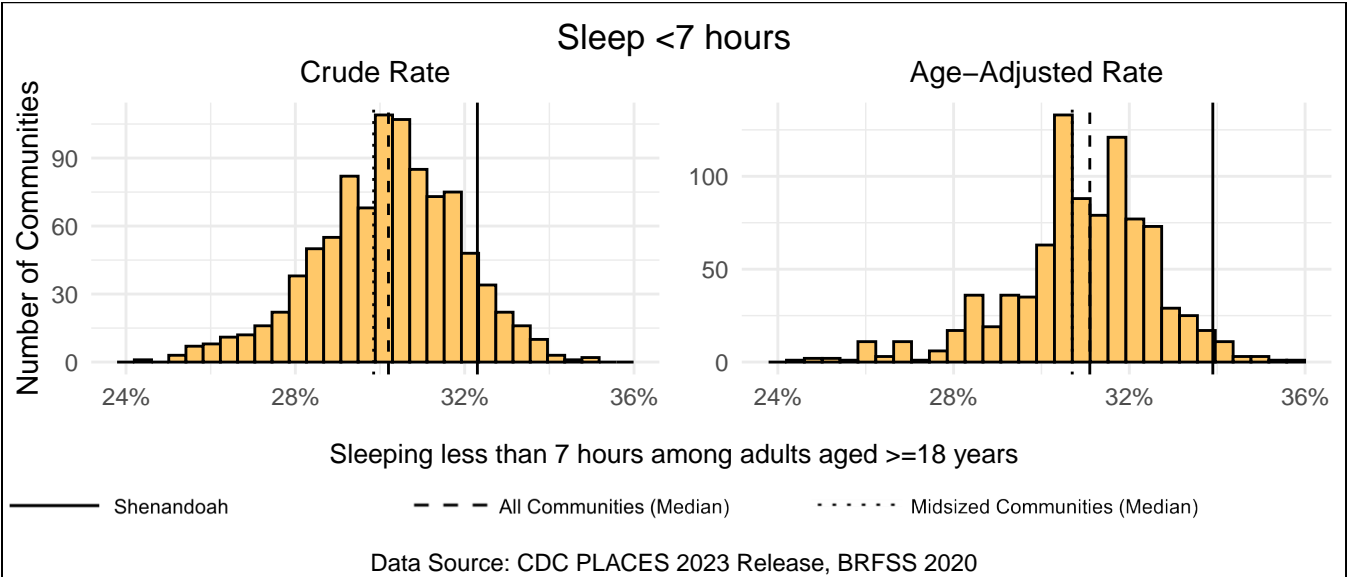
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 28.7% | 26.1% | 26.6% |
| Age-Adjusted | 26.1% | 24.3% | 24.7% |



Sleep <7 hours

Shenandoah has a crude rate of 32.3% for sleeping less than 7 hours among adults aged ≥ 18 years, which ranks 856th out of 958 Iowa communities (90th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 33.9%, which ranks 884th out of 905 Iowa communities (96th out of 102 mid-sized communities).

| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 32.3% | 30.2% | 29.8% |
| Age-Adjusted | 33.9% | 31.1% | 30.7% |



Health Outcomes

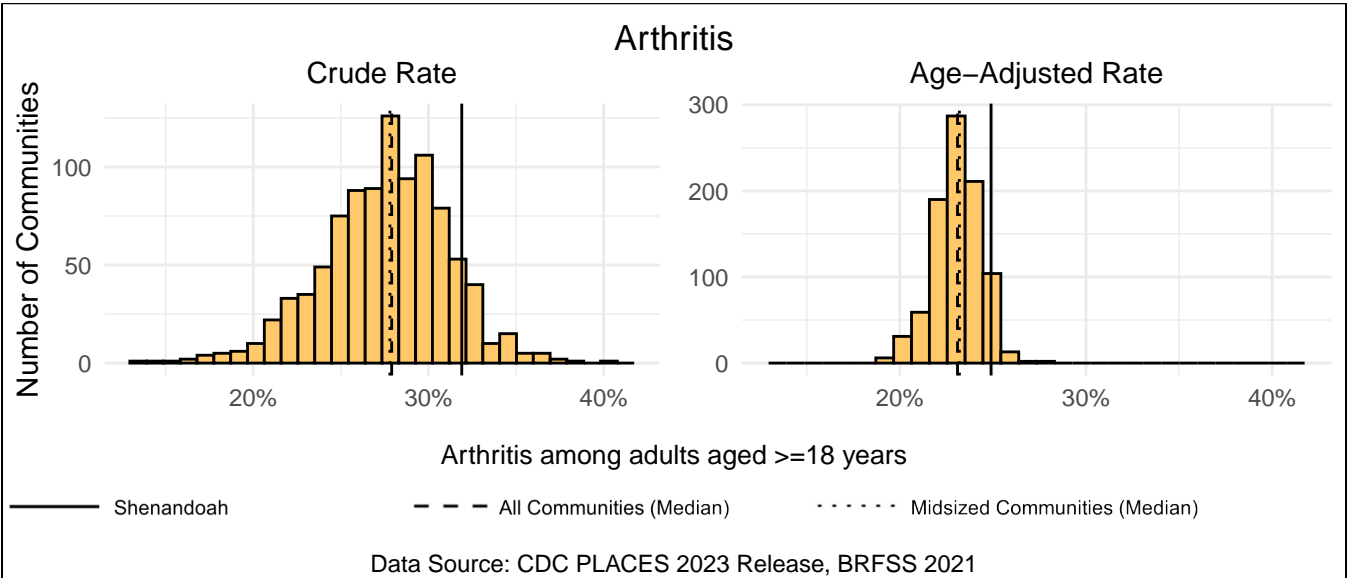
This section includes measures about specific health outcomes such as chronic illness, mental health conditions, and risk factors for future disease. Health outcome measures include but are not limited to arthritis, high blood pressure, cancer, depression, and obesity. Each measure is the percentage of respondents reporting receiving the diagnosis by a doctor, nurse, or other health professional. The link below includes more information about each variable.

<https://www.cdc.gov/places/measure-definitions/health-outcomes/index.html>

Arthritis

Shenandoah has a crude rate of 31.9% for arthritis among adults aged ≥ 18 years, which ranks 865th out of 958 Iowa communities (99th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 24.9%, which ranks 842nd out of 905 Iowa communities (90th out of 102 midsize communities).

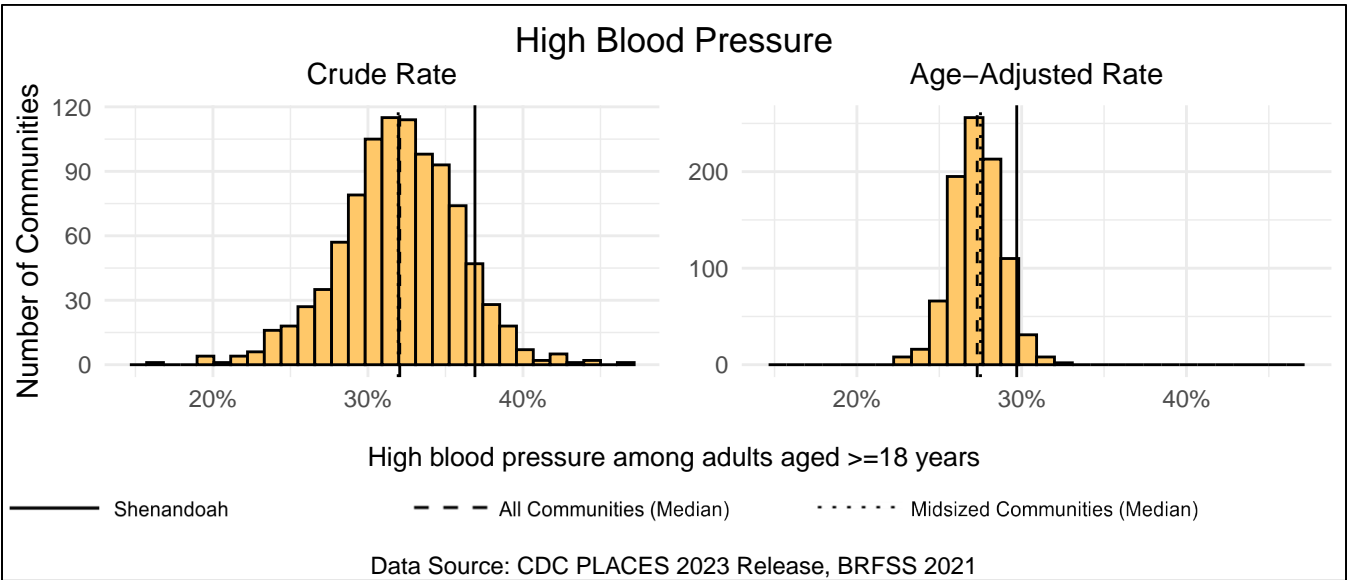
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 31.9% | 27.9% | 27.8% |
| Age-Adjusted | 24.9% | 23.1% | 23.2% |



High Blood Pressure

Shenandoah has a crude rate of 36.9% for high blood pressure among adults aged ≥ 18 years, which ranks 878th out of 958 Iowa communities (100th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 29.7%, which ranks 842nd out of 905 Iowa communities (85th out of 102 midsized communities).

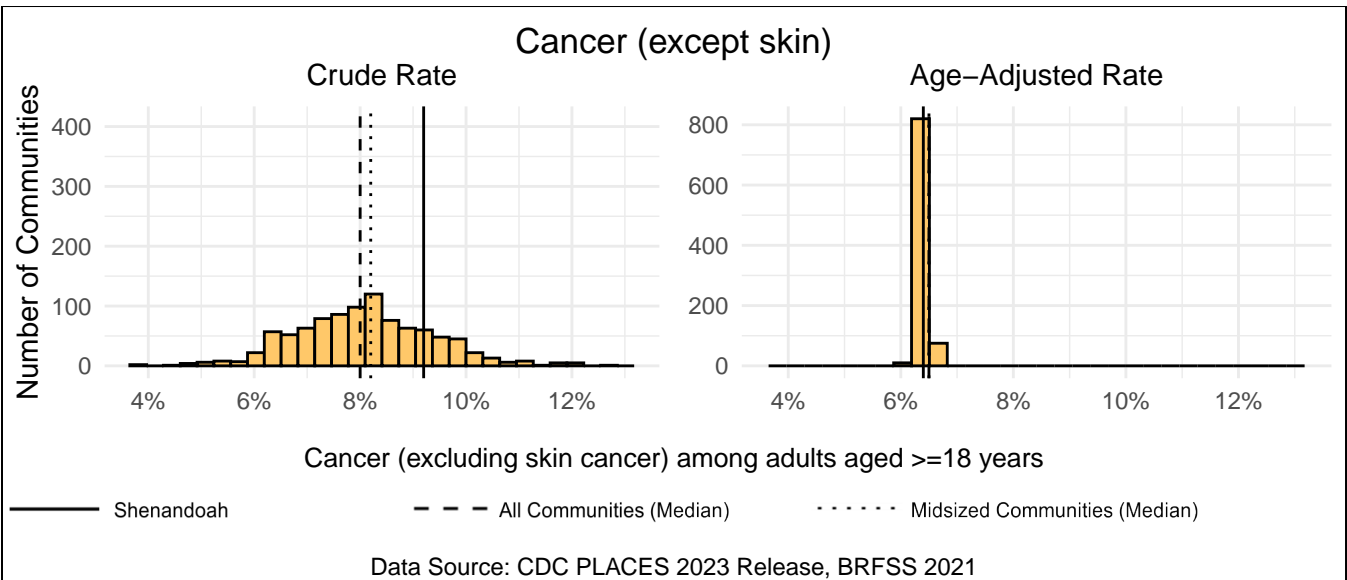
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 36.9% | 32.0% | 32.0% |
| Age-Adjusted | 29.7% | 27.3% | 27.5% |



Cancer (except skin)

Shenandoah has a crude rate of 9.2% for cancer (excluding skin cancer) among adults aged ≥ 18 years, which ranks 771st out of 958 Iowa communities (91st out of 102 midsized communities). The age-adjusted rate for Shenandoah is 6.4%, which ranks 74th out of 905 Iowa communities (11th out of 102 midsized communities).

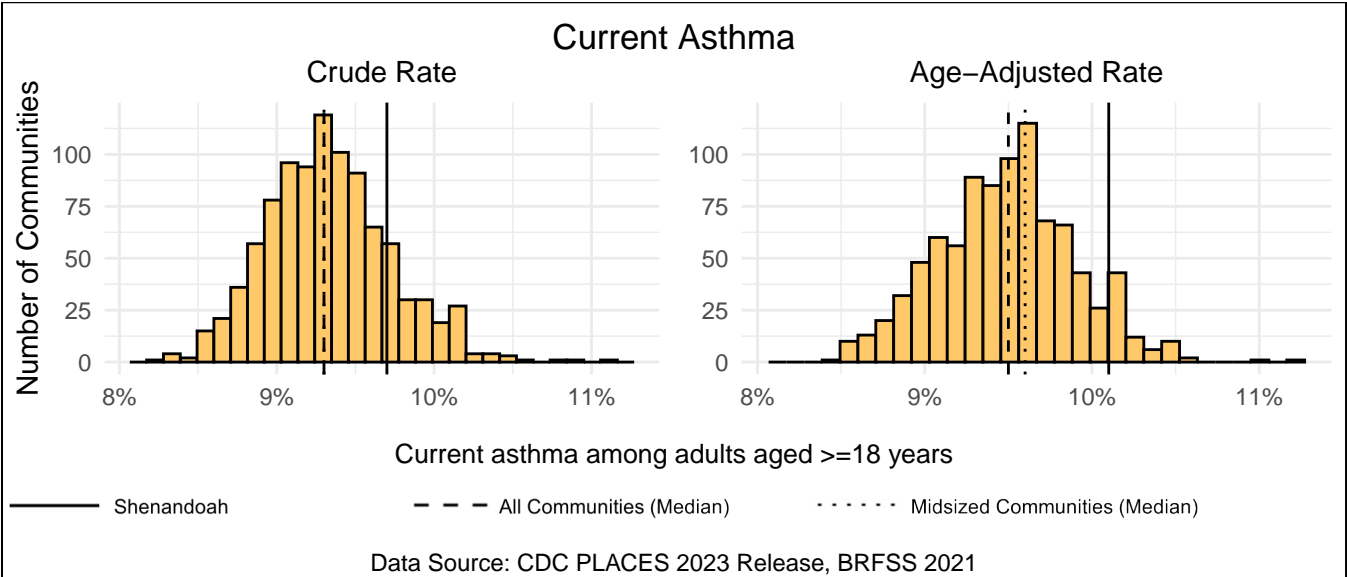
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 9.2% | 8.0% | 8.2% |
| Age-Adjusted | 6.4% | 6.5% | 6.5% |



Current Asthma

Shenandoah has a crude rate of 9.7% for current asthma among adults aged ≥ 18 years, which ranks 781st out of 958 Iowa communities (76th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 10.1%, which ranks 831st out of 905 Iowa communities (86th out of 102 midsize communities).

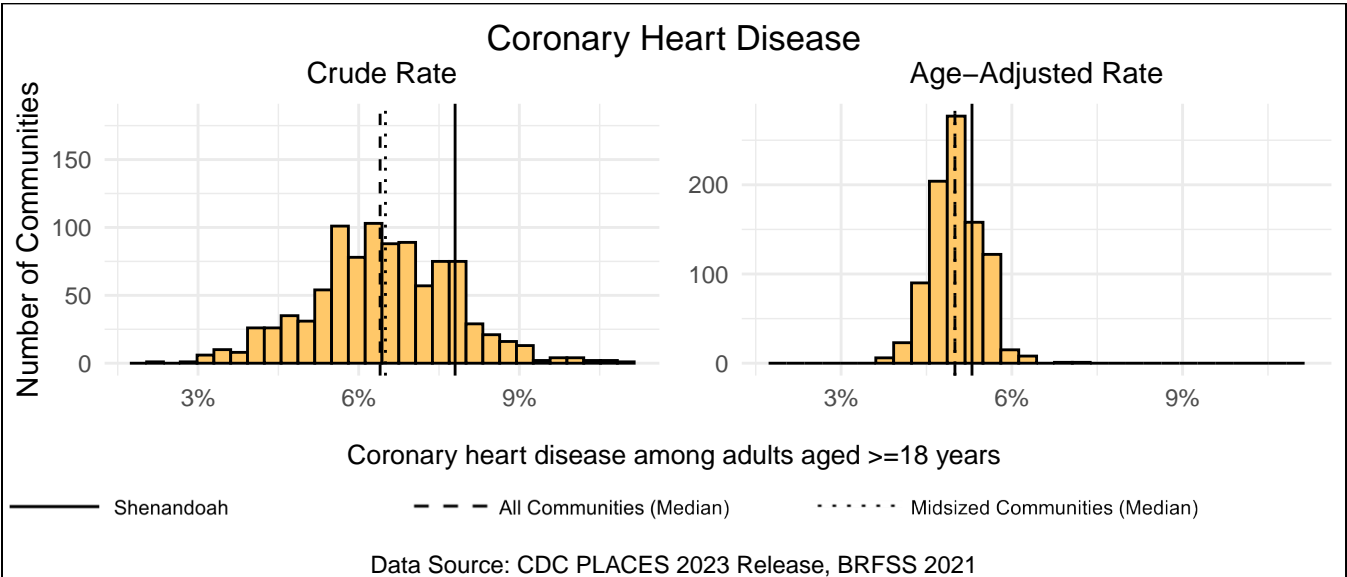
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 9.7% | 9.3% | 9.3% |
| Age-Adjusted | 10.1% | 9.5% | 9.6% |



Coronary Heart Disease

Shenandoah has a crude rate of 7.8% for coronary heart disease among adults aged ≥ 18 years, which ranks 811th out of 958 Iowa communities (89th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 5.3%, which ranks 674th out of 905 Iowa communities (71st out of 102 midsize communities).

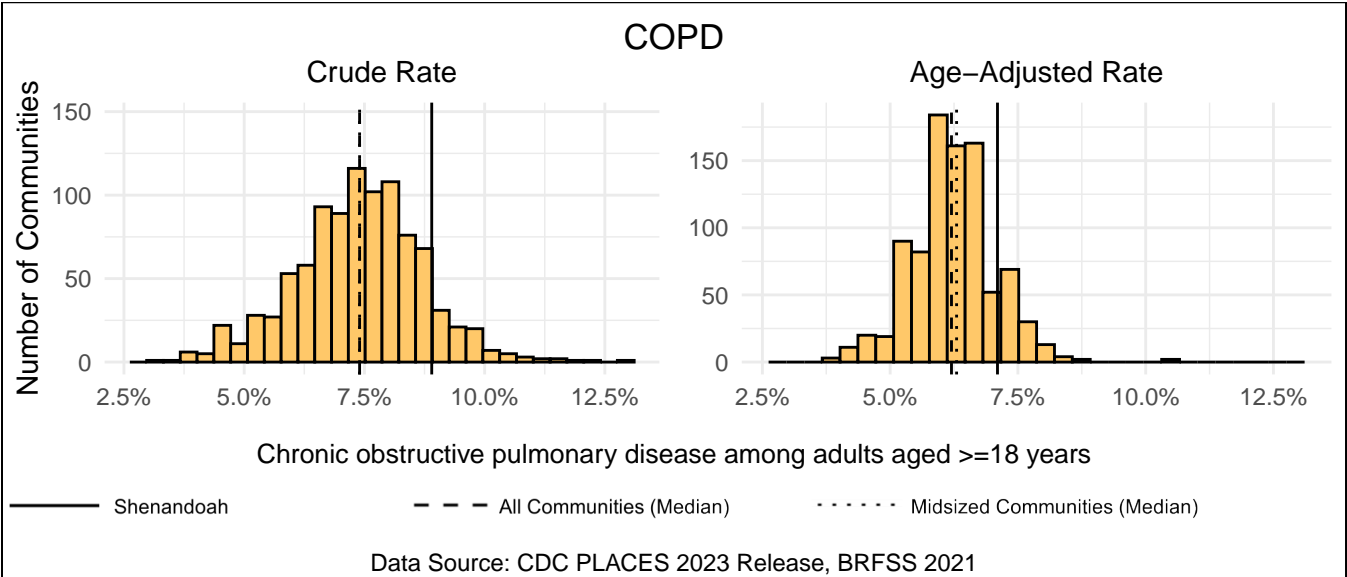
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 7.8% | 6.4% | 6.5% |
| Age-Adjusted | 5.3% | 5.0% | 5.0% |



COPD

Shenandoah has a crude rate of 8.9% for chronic obstructive pulmonary disease among adults aged ≥ 18 years, which ranks 847th out of 958 Iowa communities (86th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 7.1%, which ranks 765th out of 905 Iowa communities (75th out of 102 mid-sized communities).

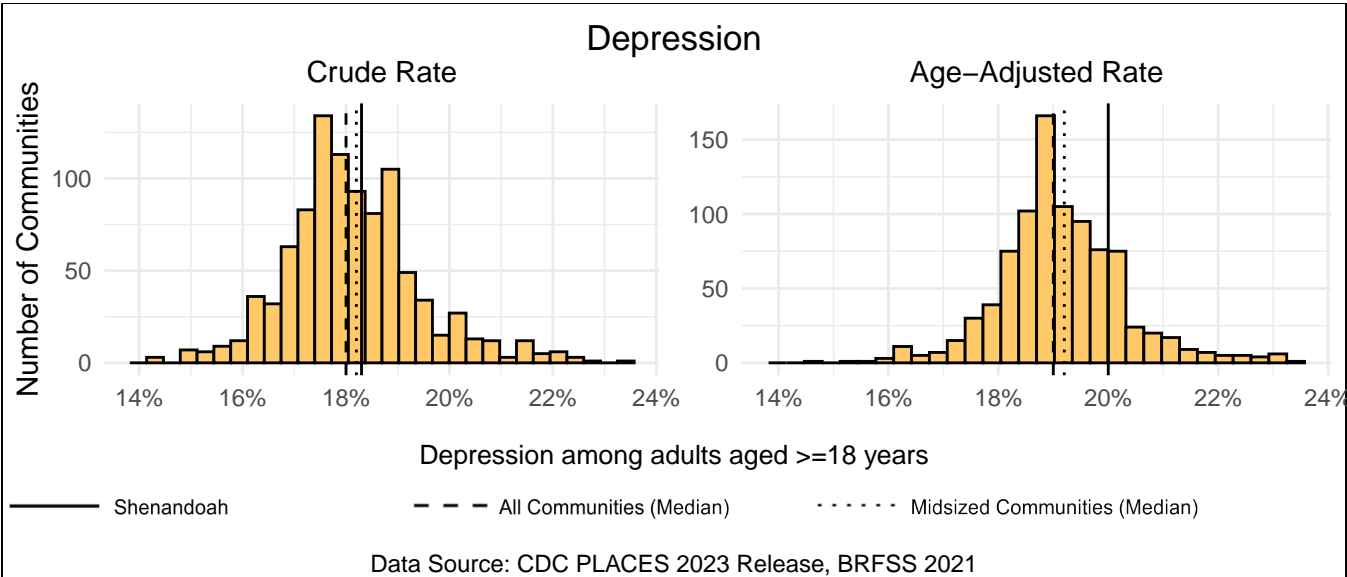
| Measure Type | Shenandoah | All Comm. | Mid-sized Comm. |
|--------------|------------|-----------|-----------------|
| Crude | 8.9% | 7.4% | 7.4% |
| Age-Adjusted | 7.1% | 6.2% | 6.3% |



Depression

Shenandoah has a crude rate of 18.3% for depression among adults aged ≥ 18 years, which ranks 568th out of 958 Iowa communities (53rd out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 20.0%, which ranks 733rd out of 905 Iowa communities (79th out of 102 mid-sized communities).

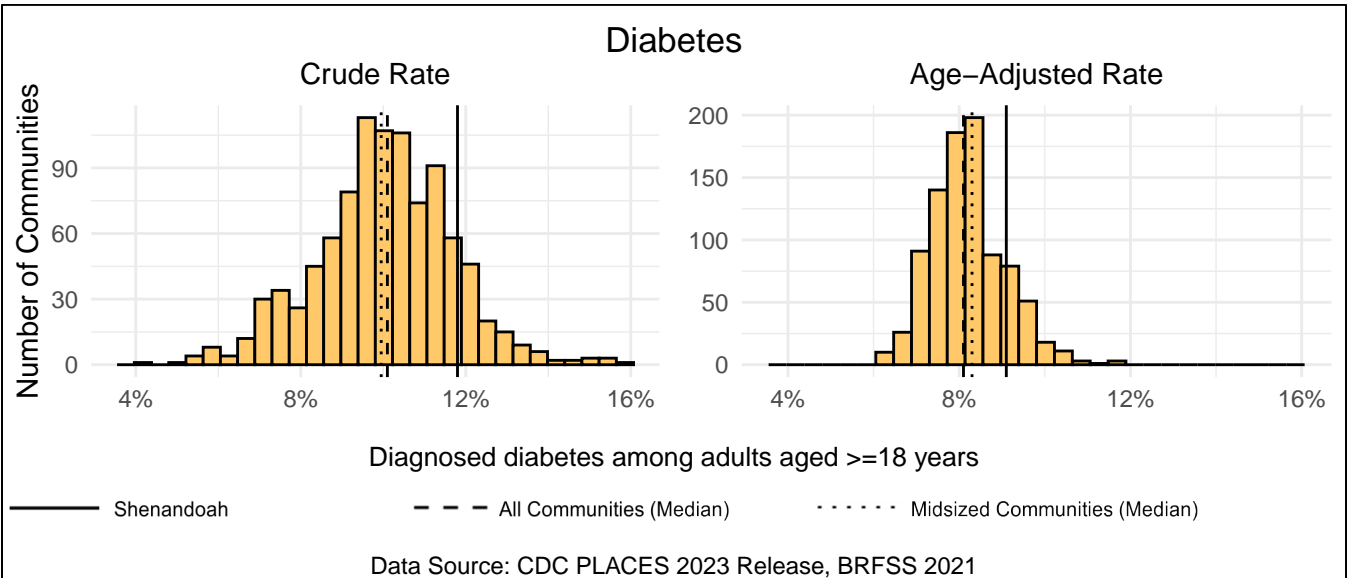
| Measure Type | Shenandoah | All Comm. | Mid-sized Comm. |
|--------------|------------|-----------|-----------------|
| Crude | 18.3% | 18.0% | 18.2% |
| Age-Adjusted | 20.0% | 19.0% | 19.2% |



Diabetes

Shenandoah has a crude rate of 11.8% for diagnosed diabetes among adults aged ≥ 18 years, which ranks 840th out of 958 Iowa communities (87th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 9.1%, which ranks 760th out of 905 Iowa communities (75th out of 102 midsized communities).

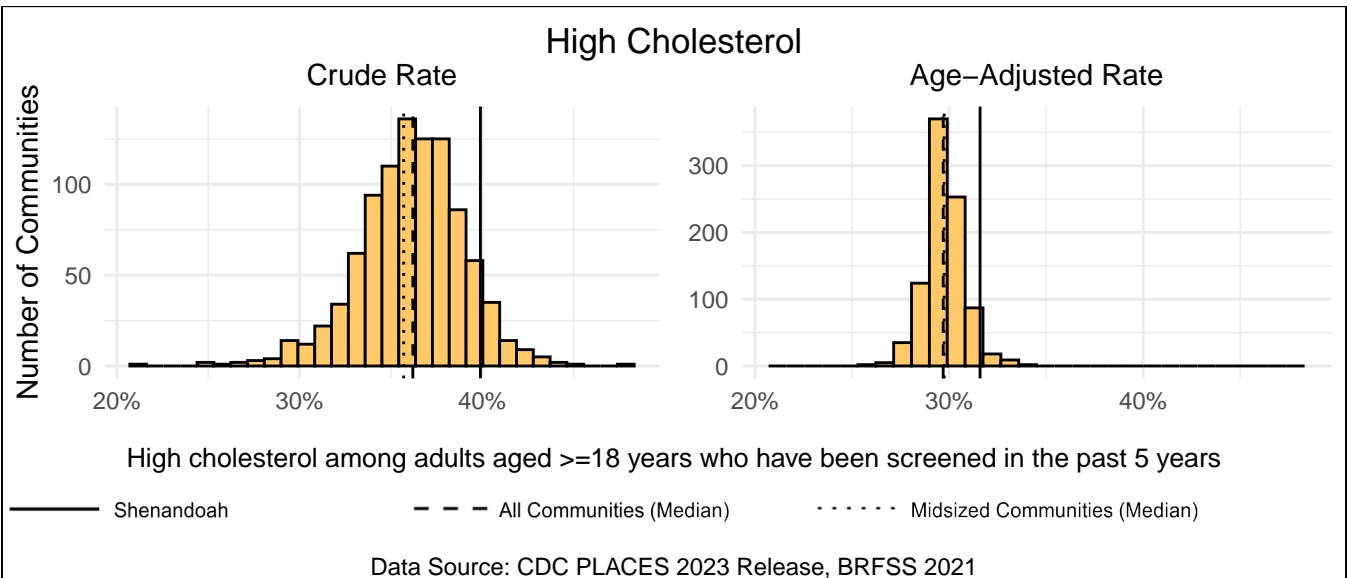
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 11.8% | 10.1% | 9.9% |
| Age-Adjusted | 9.1% | 8.1% | 8.3% |



High Cholesterol

Shenandoah has a crude rate of 39.9% for high cholesterol among adults aged ≥ 18 years who have been screened in the past 5 years, which ranks 877th out of 958 Iowa communities (102nd out of 102 midsized communities). The age-adjusted rate for Shenandoah is 31.6%, which ranks 872nd out of 905 Iowa communities (101st out of 102 midsized communities).

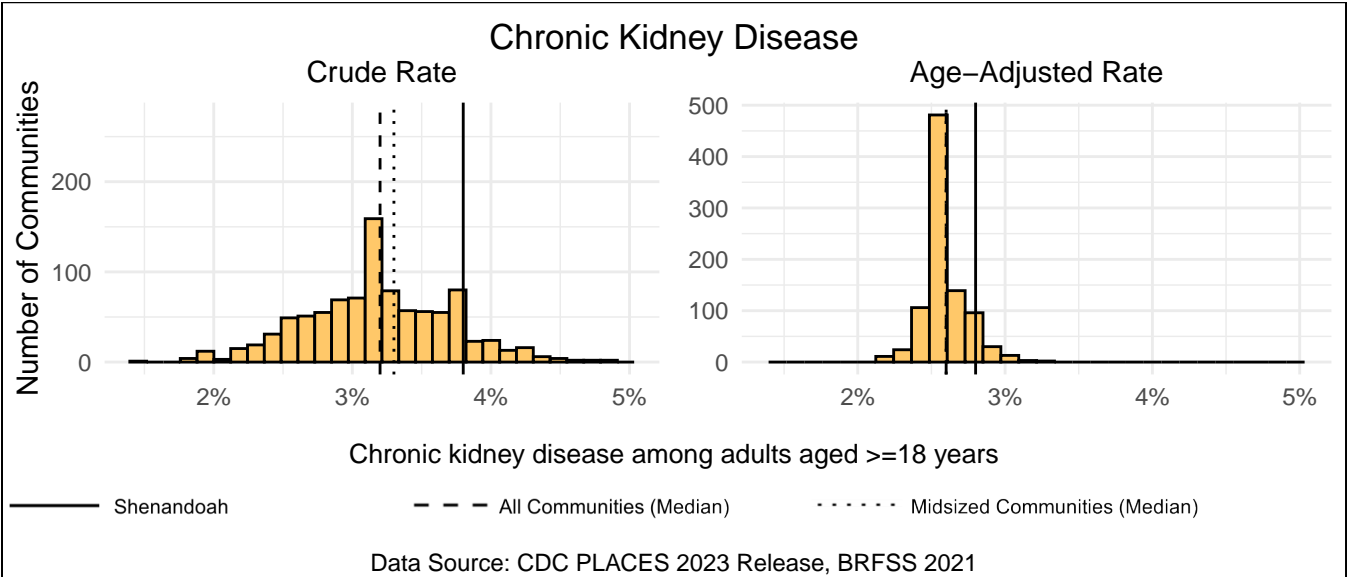
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 39.9% | 36.2% | 35.7% |
| Age-Adjusted | 31.6% | 29.7% | 29.8% |



Chronic Kidney Disease

Shenandoah has a crude rate of 3.8% for chronic kidney disease among adults aged ≥ 18 years, which ranks 832nd out of 958 Iowa communities (91st out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 2.8%, which ranks 762nd out of 905 Iowa communities (74th out of 102 mid-sized communities).

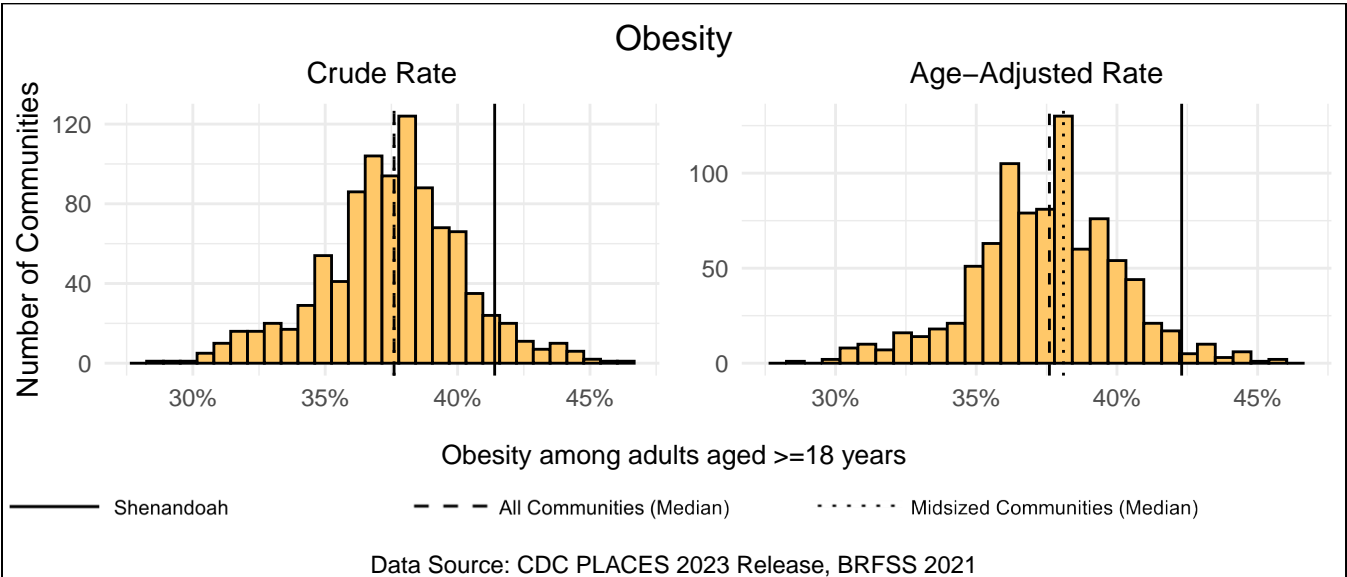
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 3.8% | 3.2% | 3.3% |
| Age-Adjusted | 2.8% | 2.6% | 2.6% |



Obesity

Shenandoah has a crude rate of 41.4% for obesity among adults aged ≥ 18 years, which ranks 894th out of 958 Iowa communities (93rd out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 42.3%, which ranks 879th out of 905 Iowa communities (94th out of 102 mid-sized communities).

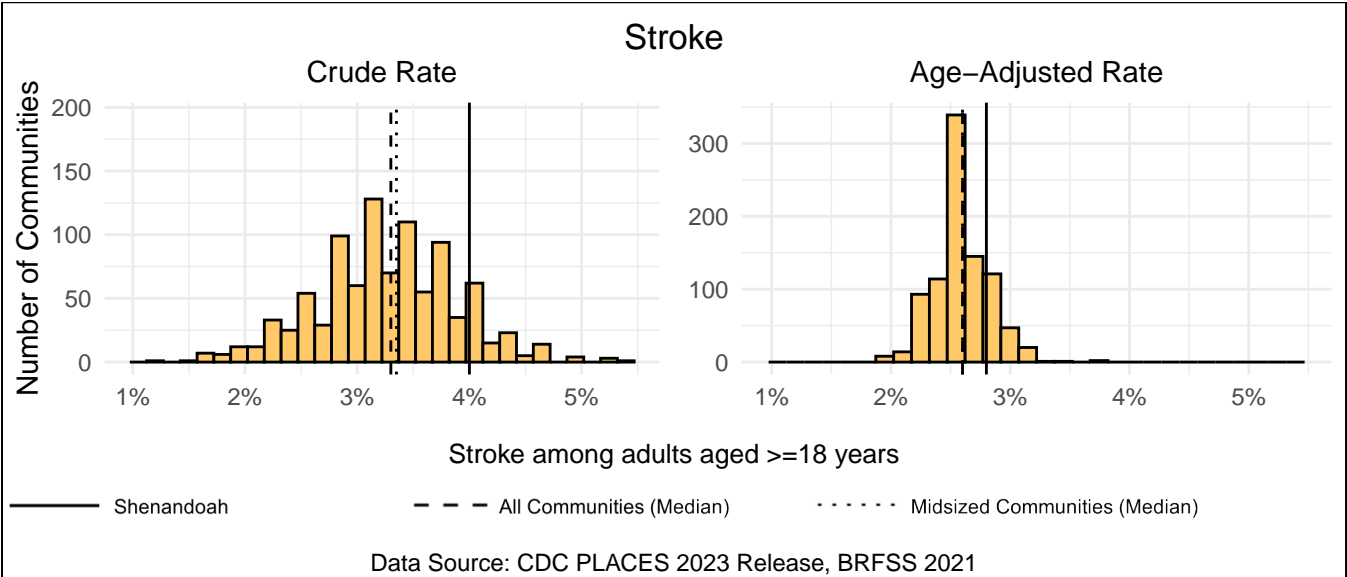
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 41.4% | 37.6% | 37.6% |
| Age-Adjusted | 42.3% | 37.6% | 38.1% |



Stroke

Shenandoah has a crude rate of 4.0% for stroke among adults aged ≥ 18 years, which ranks 832nd out of 958 Iowa communities (88th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 2.8%, which ranks 714th out of 905 Iowa communities (71st out of 102 midsize communities).

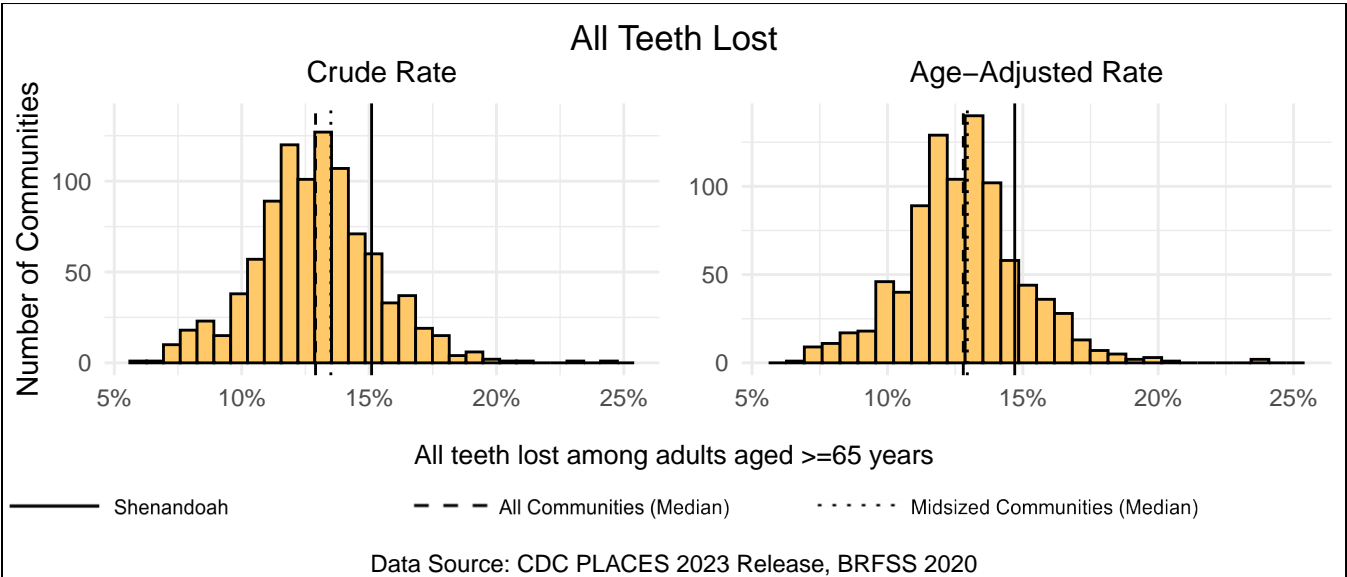
| Measure Type | Shenandoah | All Comm. | Midsize Comm. |
|--------------|------------|-----------|---------------|
| Crude | 4.0% | 3.3% | 3.3% |
| Age-Adjusted | 2.8% | 2.6% | 2.6% |



All Teeth Lost

Shenandoah has a crude rate of 15.1% for all teeth lost among adults aged ≥ 65 years, which ranks 797th out of 958 Iowa communities (75th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 14.7%, which ranks 748th out of 905 Iowa communities (75th out of 102 midsize communities).

| Measure Type | Shenandoah | All Comm. | Midsize Comm. |
|--------------|------------|-----------|---------------|
| Crude | 15.1% | 12.9% | 13.5% |
| Age-Adjusted | 14.7% | 12.8% | 12.9% |



Prevention

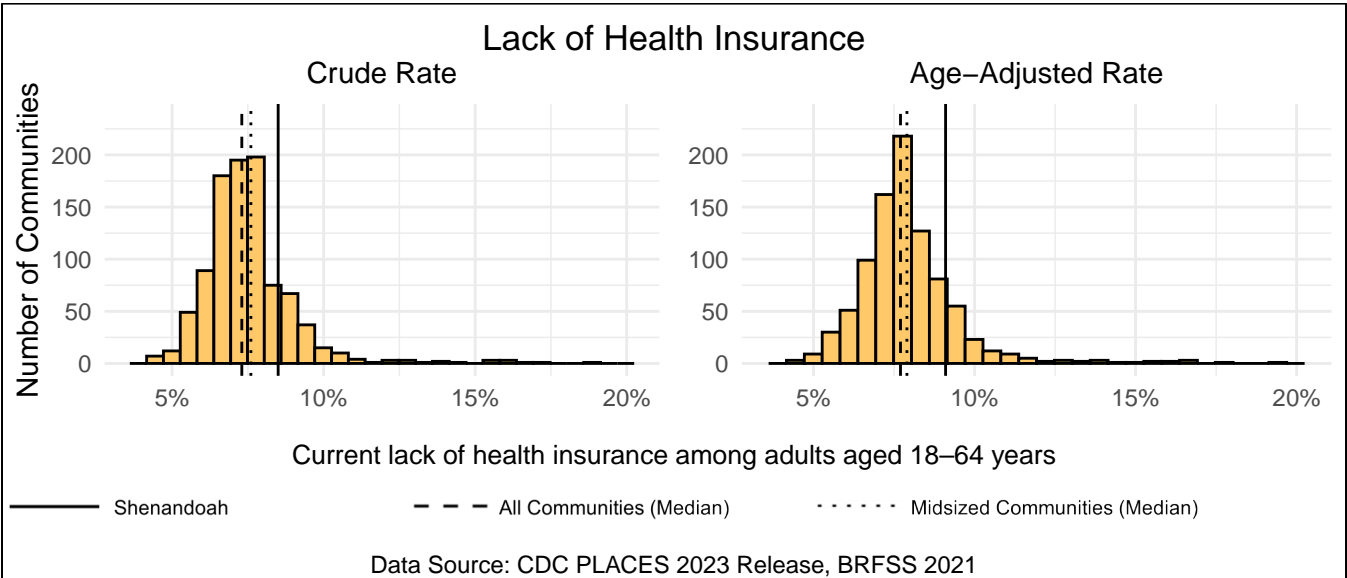
Preventive measures are another practical intervention point for public health professionals as they allow for the early detection of health conditions and improve overall treatment efficacy. This section includes a review of your community’s prevention measures, including preventive screenings and doctor visits. Besides the measure for lack of health insurance, all measures in this section are positive, where a higher rate is a strength for your community. The link below includes more information about each variable.

<https://www.cdc.gov/places/measure-definitions/prevention/index.html>

Lack of Health Insurance

Shenandoah has a crude rate of 8.5% for current lack of health insurance among adults aged 18–64 years, which ranks 795th out of 958 Iowa communities (66th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 9.1%, which ranks 772nd out of 905 Iowa communities (70th out of 102 midsized communities).

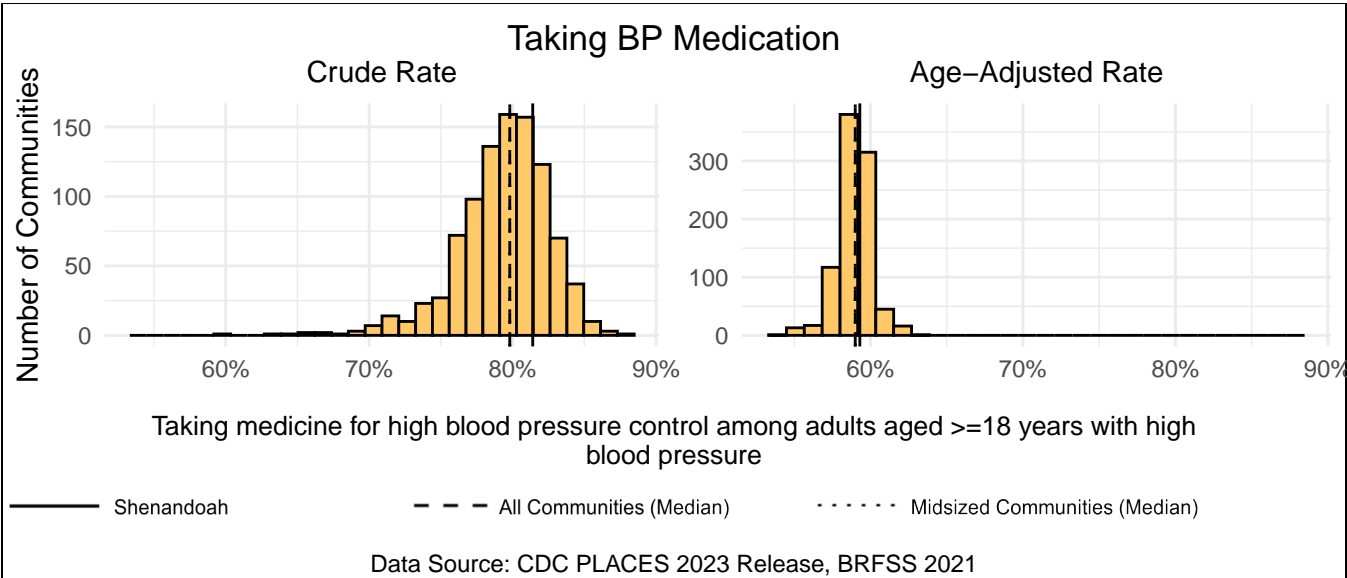
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 8.5% | 7.3% | 7.6% |
| Age-Adjusted | 9.1% | 7.7% | 7.9% |



Taking BP Medication

Shenandoah has a crude rate of 81.4% for taking medicine for high blood pressure control among adults aged >=18 years with high blood pressure, which ranks 245th out of 958 Iowa communities (20th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 59.3%, which ranks 298th out of 905 Iowa communities (42nd out of 102 midsize communities).

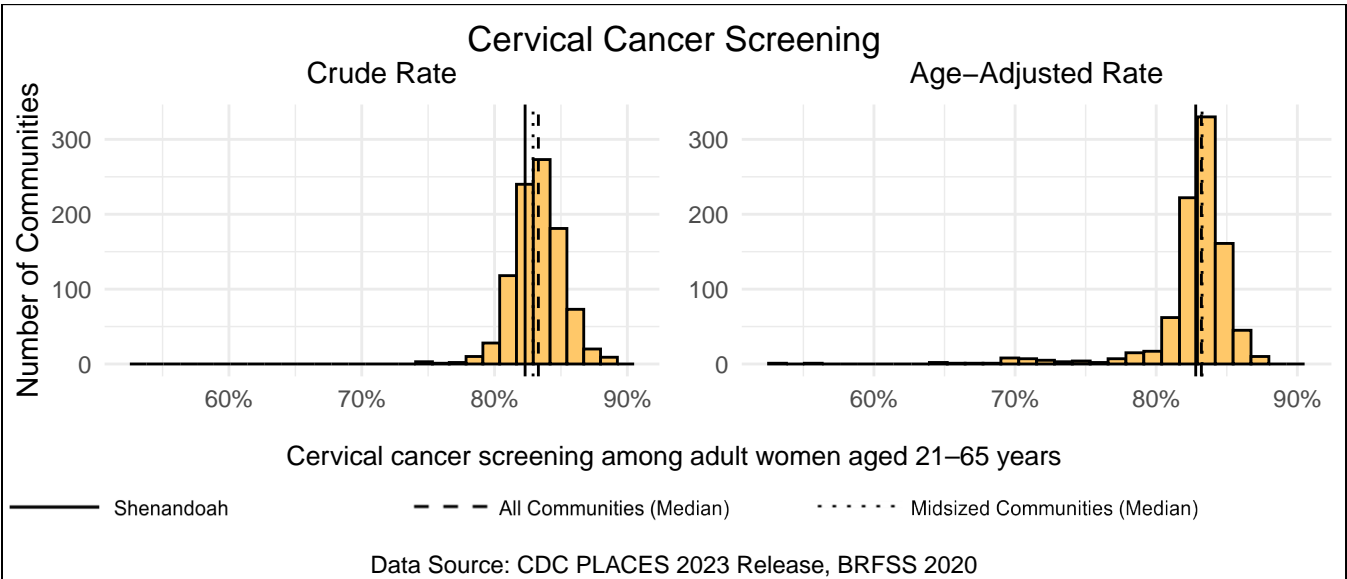
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 81.4% | 79.8% | 79.8% |
| Age-Adjusted | 59.3% | 59.0% | 59.0% |



Cervical Cancer Screening

Shenandoah has a crude rate of 82.3% for cervical cancer screening among adult women aged 21–65 years, which ranks 691st out of 958 Iowa communities (61st out of 102 midsize communities). The age-adjusted rate for Shenandoah is 82.8%, which ranks 579th out of 905 Iowa communities (65th out of 102 midsize communities).

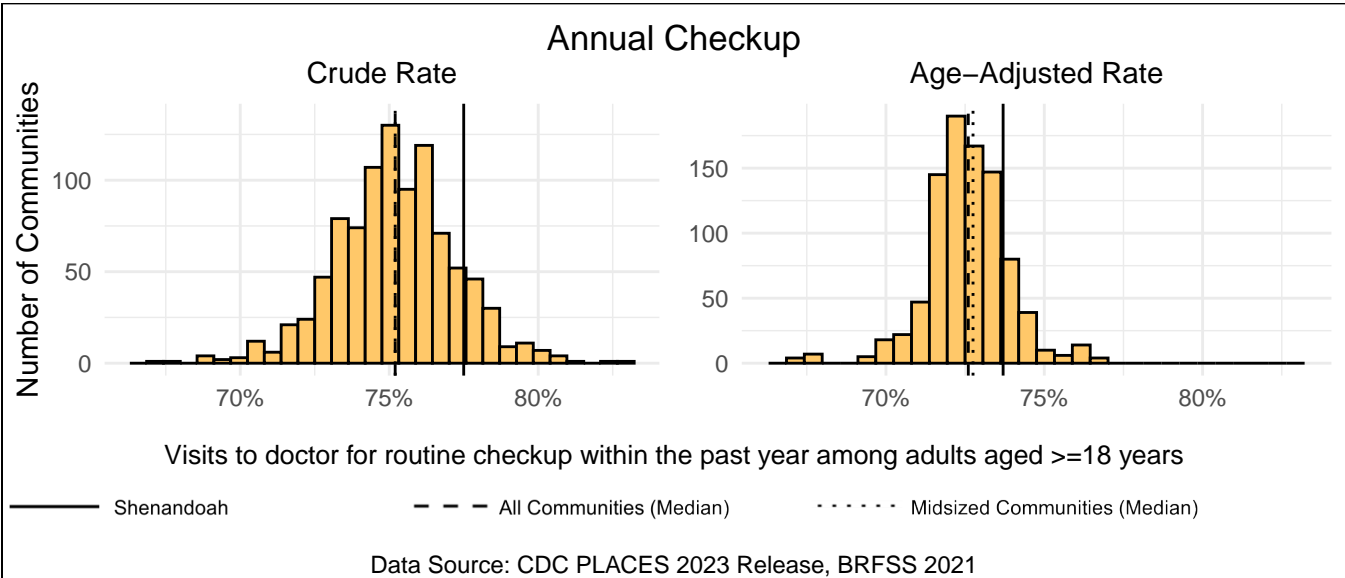
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 82.3% | 83.3% | 82.9% |
| Age-Adjusted | 82.8% | 83.2% | 83.2% |



Annual Checkup

Shenandoah has a crude rate of 77.5% for visits to doctor for routine checkup within the past year among adults aged ≥ 18 years, which ranks 111th out of 958 Iowa communities (4th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 73.7%, which ranks 127th out of 905 Iowa communities (17th out of 102 mid-sized communities).

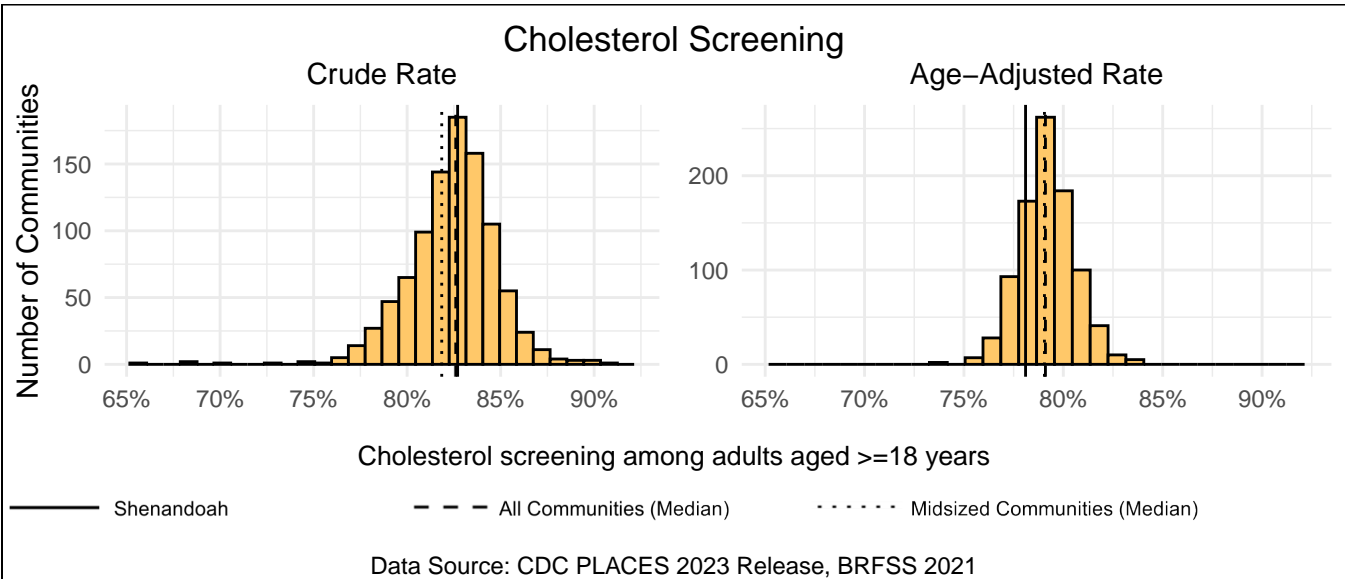
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 77.5% | 75.2% | 75.2% |
| Age-Adjusted | 73.7% | 72.6% | 72.8% |



Cholesterol Screening

Shenandoah has a crude rate of 82.7% for cholesterol screening among adults aged ≥ 18 years, which ranks 451st out of 958 Iowa communities (33rd out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 78.1%, which ranks 709th out of 905 Iowa communities (72nd out of 102 mid-sized communities).

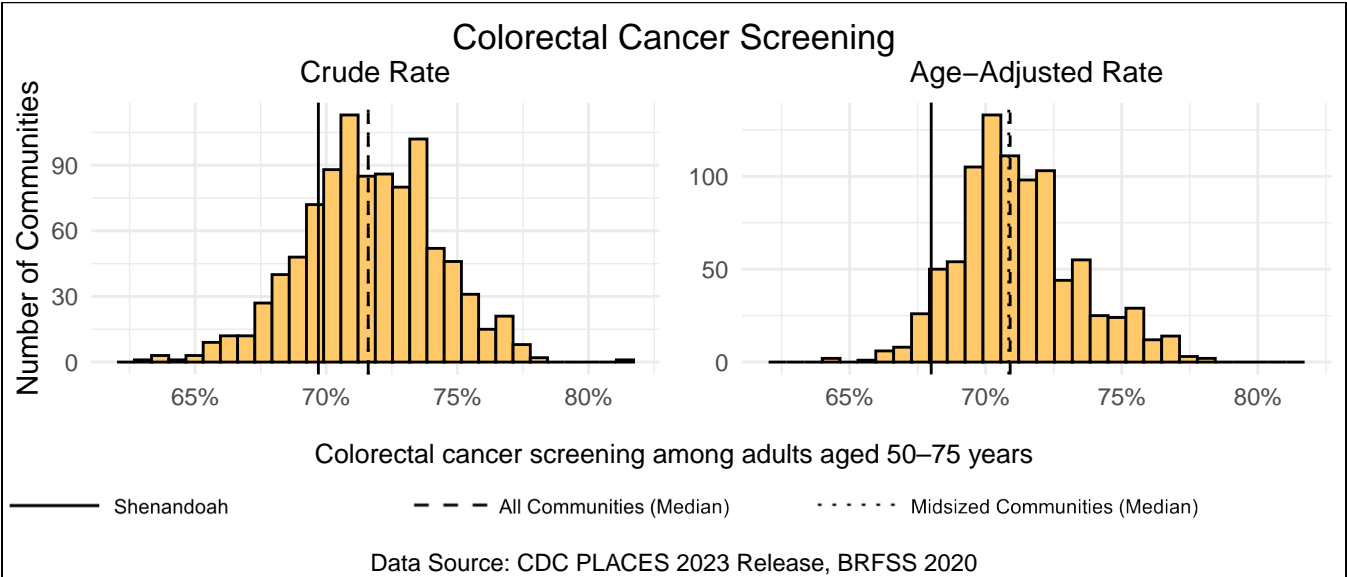
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 82.7% | 82.6% | 81.8% |
| Age-Adjusted | 78.1% | 79.1% | 79.0% |



Colorectal Cancer Screening

Shenandoah has a crude rate of 69.7% for colorectal cancer screening among adults aged 50–75 years, which ranks 746th out of 958 Iowa communities (78th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 68.0%, which ranks 859th out of 905 Iowa communities (90th out of 102 midsized communities).

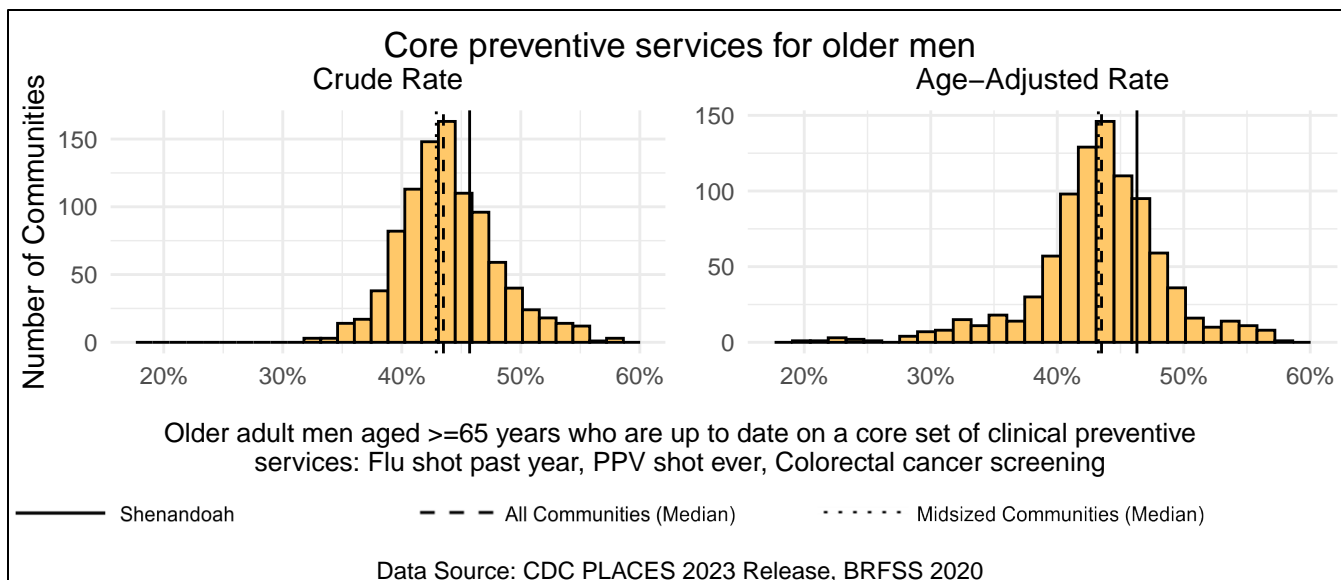
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 69.7% | 71.6% | 71.6% |
| Age-Adjusted | 68.0% | 70.9% | 70.8% |



Core preventive services for older men

Shenandoah has a crude rate of 45.7% for older adult men aged ≥ 65 years who are up to date on a core set of clinical preventive services: flu shot past year, ppv shot ever, colorectal cancer screening, which ranks 282nd out of 958 Iowa communities (26th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 46.3%, which ranks 228th out of 905 Iowa communities (27th out of 102 midsized communities).

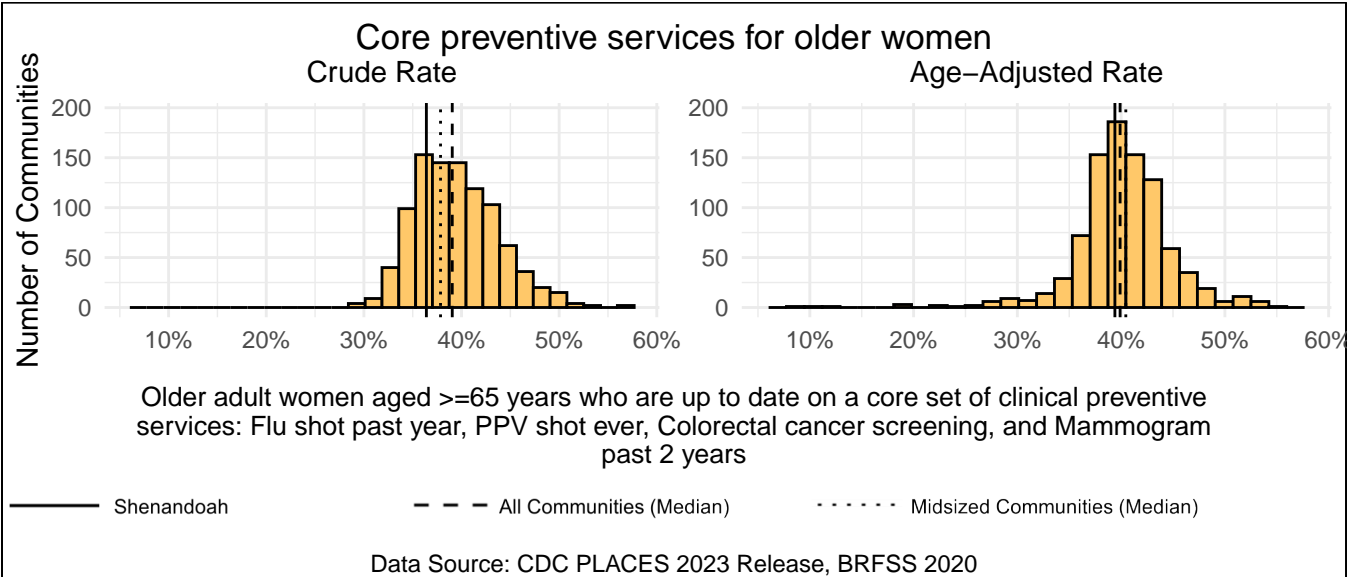
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 45.7% | 43.5% | 42.9% |
| Age-Adjusted | 46.3% | 43.5% | 43.2% |



Core preventive services for older women

Shenandoah has a crude rate of 36.4% for older adult women aged ≥ 65 years who are up to date on a core set of clinical preventive services: flu shot past year, ppv shot ever, colorectal cancer screening, and mammogram past 2 years, which ranks 717th out of 958 Iowa communities (63rd out of 102 midsized communities). The age-adjusted rate for Shenandoah is 39.4%, which ranks 521st out of 905 Iowa communities (59th out of 102 midsized communities).

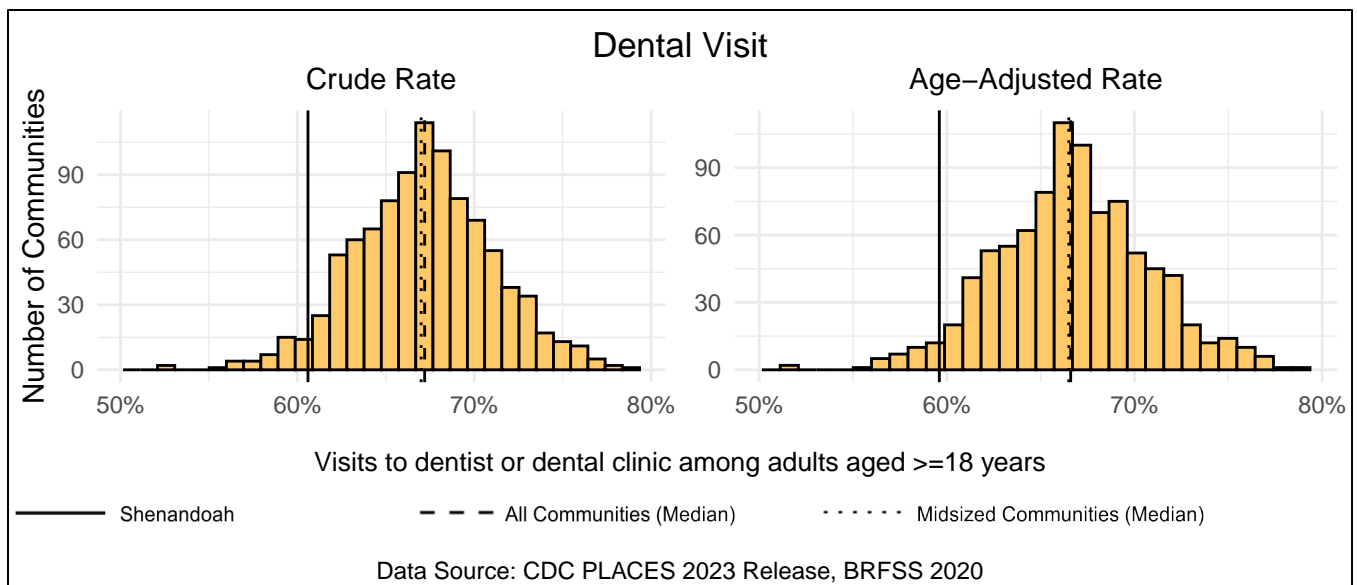
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 36.4% | 39.0% | 37.8% |
| Age-Adjusted | 39.4% | 39.9% | 40.4% |



Dental Visit

Shenandoah has a crude rate of 60.6% for visits to dentist or dental clinic among adults aged ≥ 18 years, which ranks 914th out of 958 Iowa communities (88th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 59.6%, which ranks 871st out of 905 Iowa communities (90th out of 102 midsized communities).

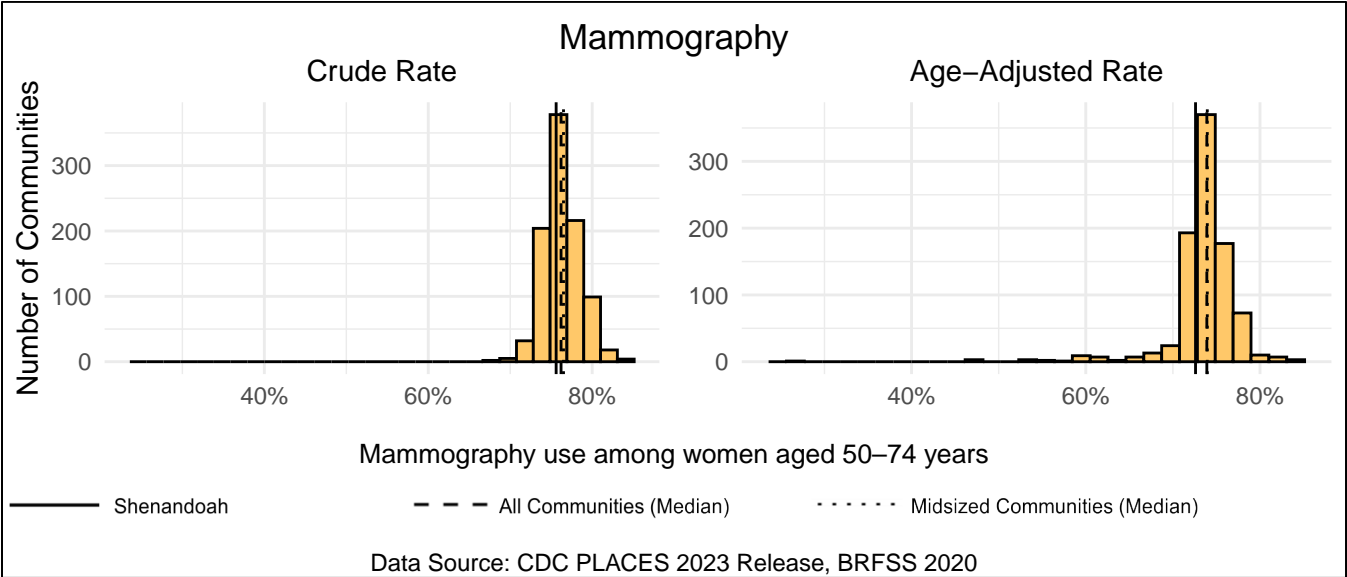
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 60.6% | 67.2% | 67.0% |
| Age-Adjusted | 59.6% | 66.6% | 66.5% |



Mammography

Shenandoah has a crude rate of 75.6% for mammography use among women aged 50–74 years, which ranks 585th out of 958 Iowa communities (67th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 72.6%, which ranks 669th out of 905 Iowa communities (80th out of 102 midsized communities).

| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 75.6% | 76.2% | 76.5% |
| Age-Adjusted | 72.6% | 73.9% | 74.0% |



Disability

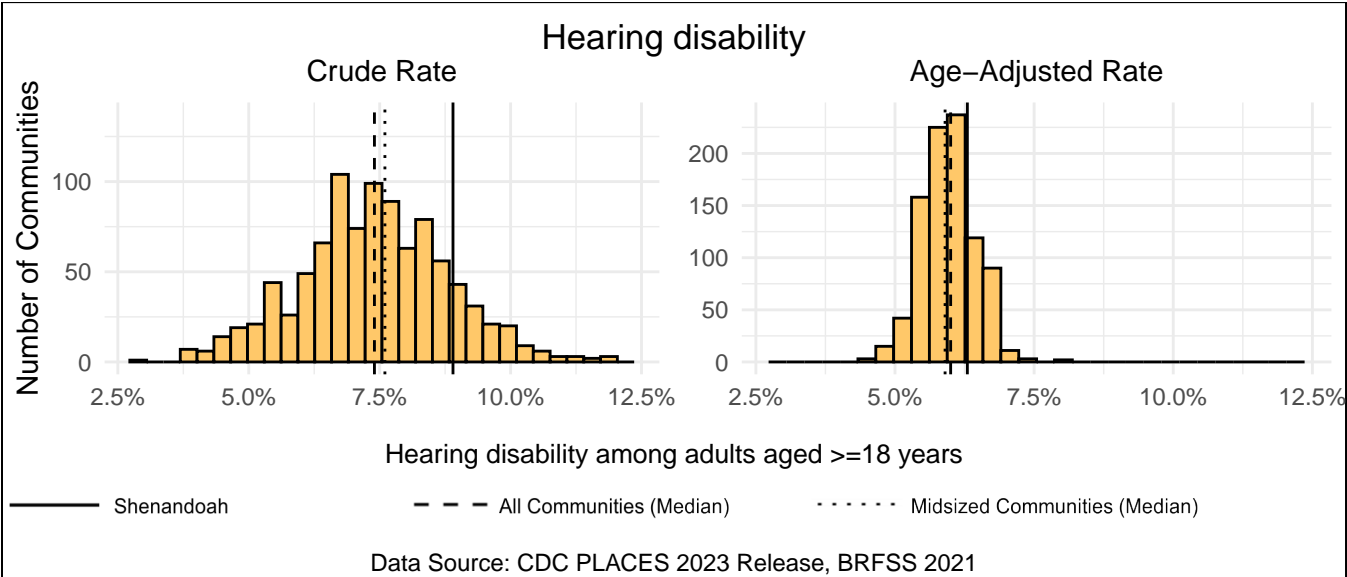
This section includes measures of physical and cognitive disabilities. Respondents were asked to report on six disabilities: hearing, vision, cognition, mobility, self-care, and independent living. The final measure reports the rate of respondents that answered yes to any of the previous six disabilities. The link below includes more information about each variable.

<https://www.cdc.gov/places/measure-definitions/unhealthy-behaviors/index.html>

Hearing disability

Shenandoah has a crude rate of 8.9% for hearing disability among adults aged ≥ 18 years, which ranks 818th out of 958 Iowa communities (92nd out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 6.3%, which ranks 681st out of 905 Iowa communities (72nd out of 102 mid-sized communities).

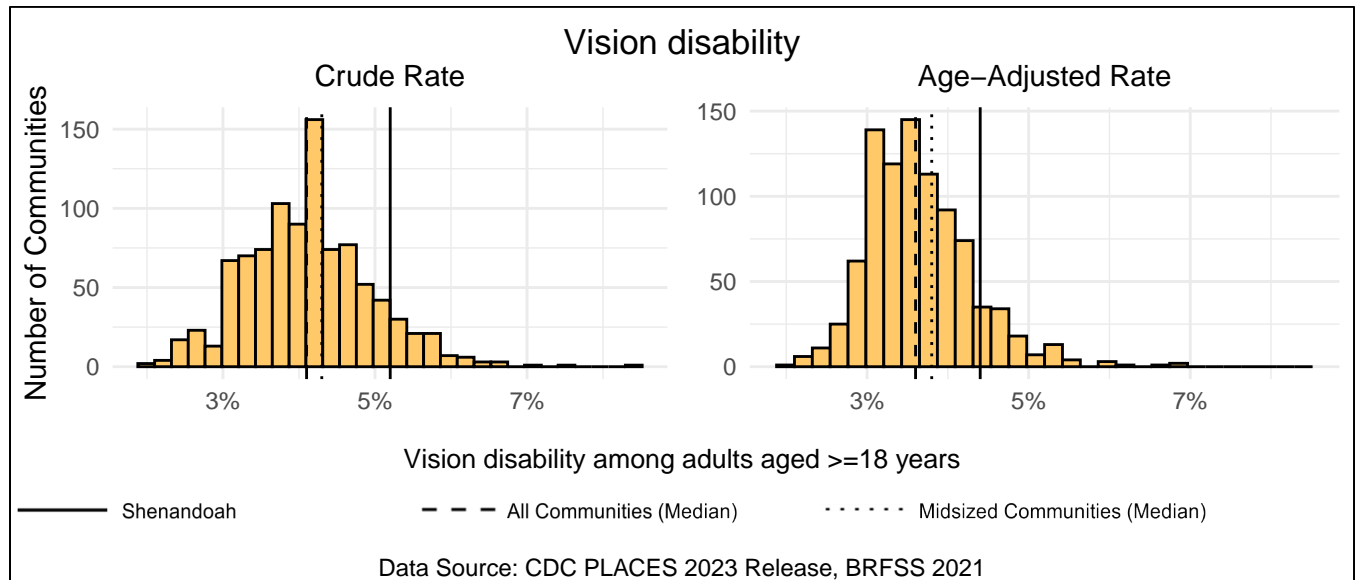
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 8.9% | 7.4% | 7.6% |
| Age-Adjusted | 6.3% | 6.0% | 5.9% |



Vision disability

Shenandoah has a crude rate of 5.2% for vision disability among adults aged ≥ 18 years, which ranks 865th out of 958 Iowa communities (79th out of 102 midsize communities). The age-adjusted rate for Shenandoah is 4.4%, which ranks 788th out of 905 Iowa communities (77th out of 102 midsize communities).

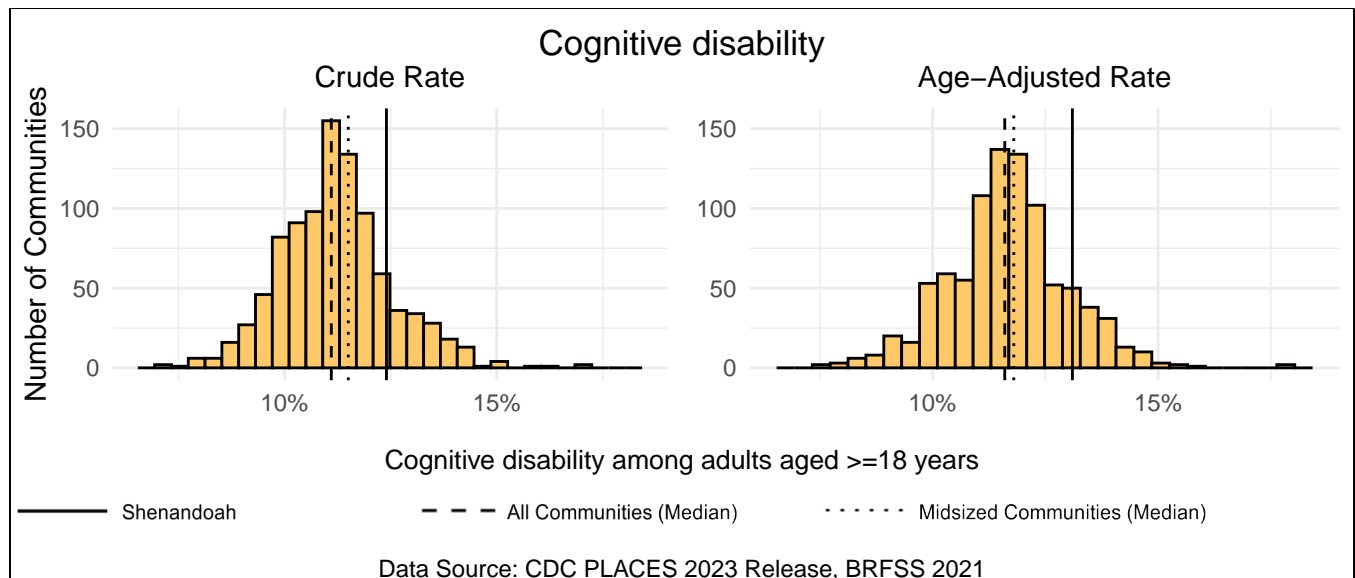
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 5.2% | 4.1% | 4.3% |
| Age-Adjusted | 4.4% | 3.6% | 3.8% |



Cognitive disability

Shenandoah has a crude rate of 12.4% for cognitive disability among adults aged ≥ 18 years, which ranks 804th out of 958 Iowa communities (72nd out of 102 midsize communities). The age-adjusted rate for Shenandoah is 13.1%, which ranks 788th out of 905 Iowa communities (77th out of 102 midsize communities).

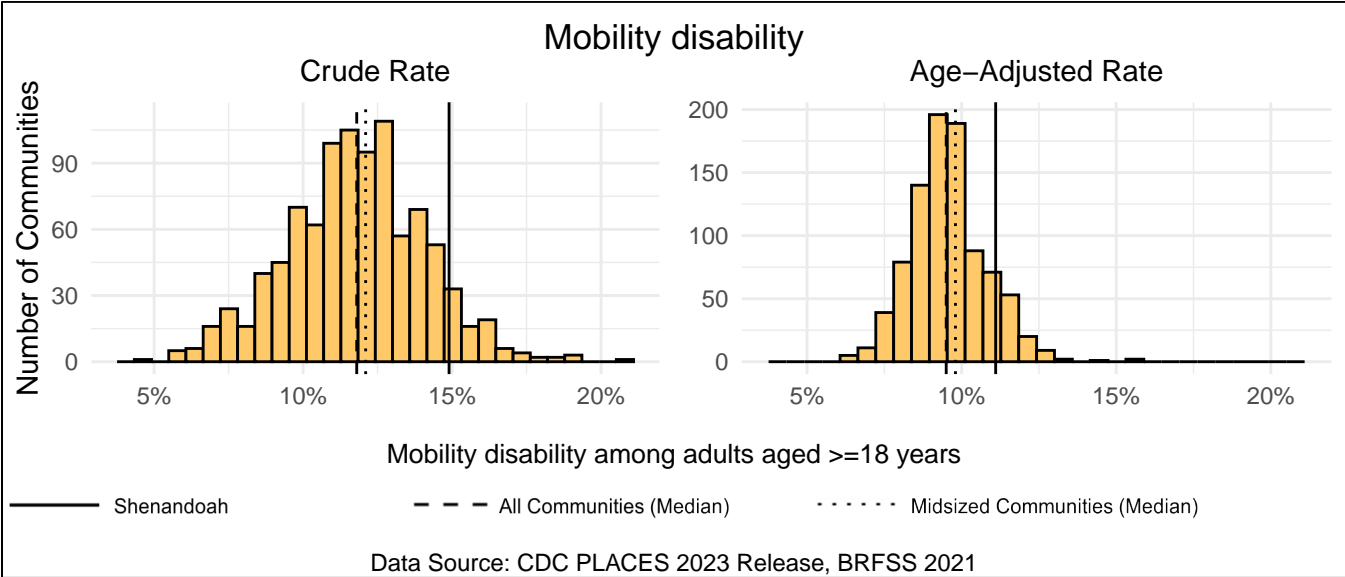
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 12.4% | 11.1% | 11.5% |
| Age-Adjusted | 13.1% | 11.6% | 11.8% |



Mobility disability

Shenandoah has a crude rate of 14.9% for mobility disability among adults aged ≥ 18 years, which ranks 879th out of 958 Iowa communities (90th out of 102 midsized communities). The age-adjusted rate for Shenandoah is 11.1%, which ranks 797th out of 905 Iowa communities (79th out of 102 midsized communities).

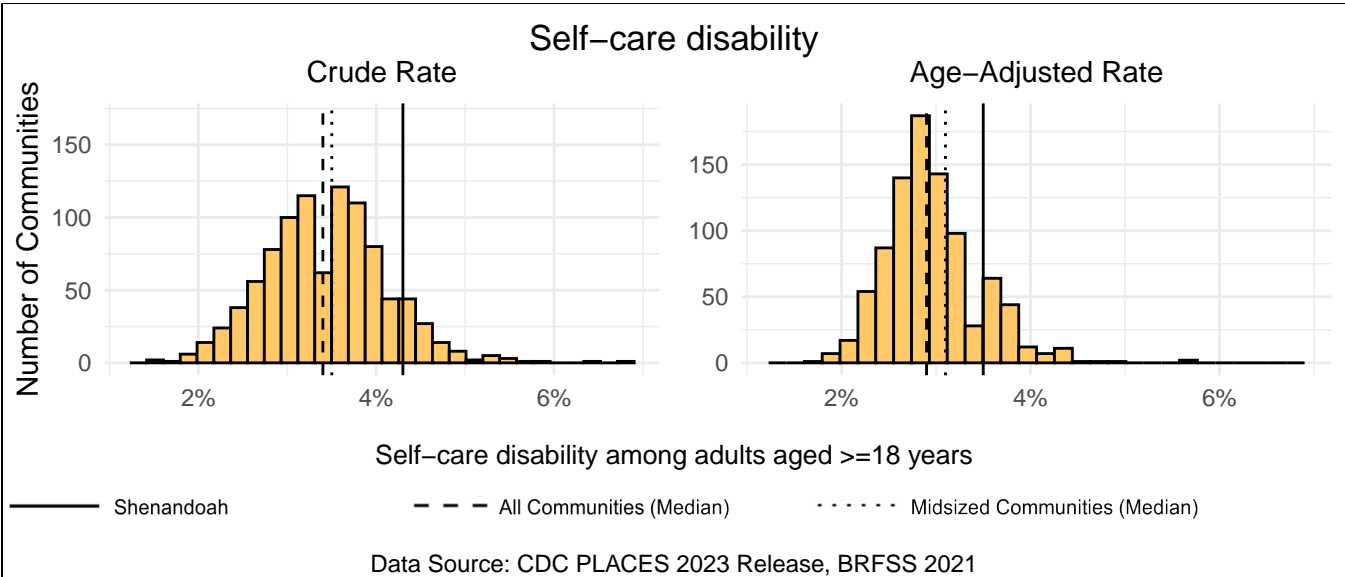
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 14.9% | 11.8% | 12.1% |
| Age-Adjusted | 11.1% | 9.5% | 9.8% |



Self-care disability

Shenandoah has a crude rate of 4.3% for self-care disability among adults aged ≥ 18 years, which ranks 852nd out of 958 Iowa communities (82nd out of 102 midsized communities). The age-adjusted rate for Shenandoah is 3.5%, which ranks 763rd out of 905 Iowa communities (75th out of 102 midsized communities).

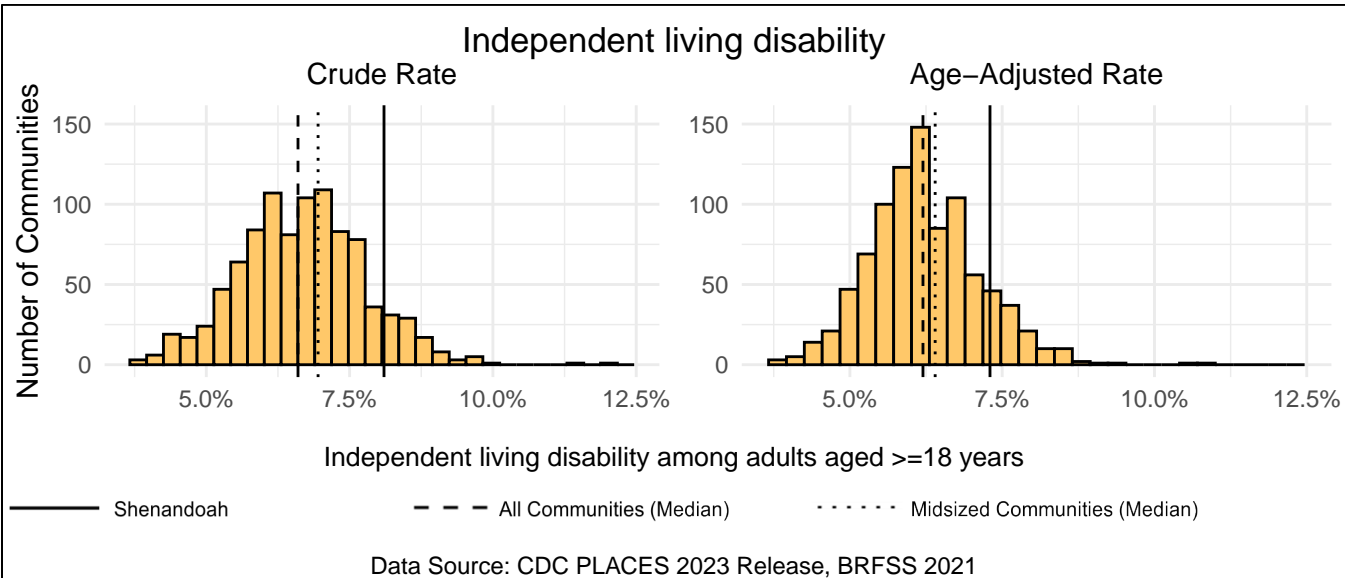
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 4.3% | 3.4% | 3.5% |
| Age-Adjusted | 3.5% | 2.9% | 3.1% |



Independent living disability

Shenandoah has a crude rate of 8.1% for independent living disability among adults aged ≥ 18 years, which ranks 863rd out of 958 Iowa communities (80th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 7.3%, which ranks 794th out of 905 Iowa communities (78th out of 102 mid-sized communities).

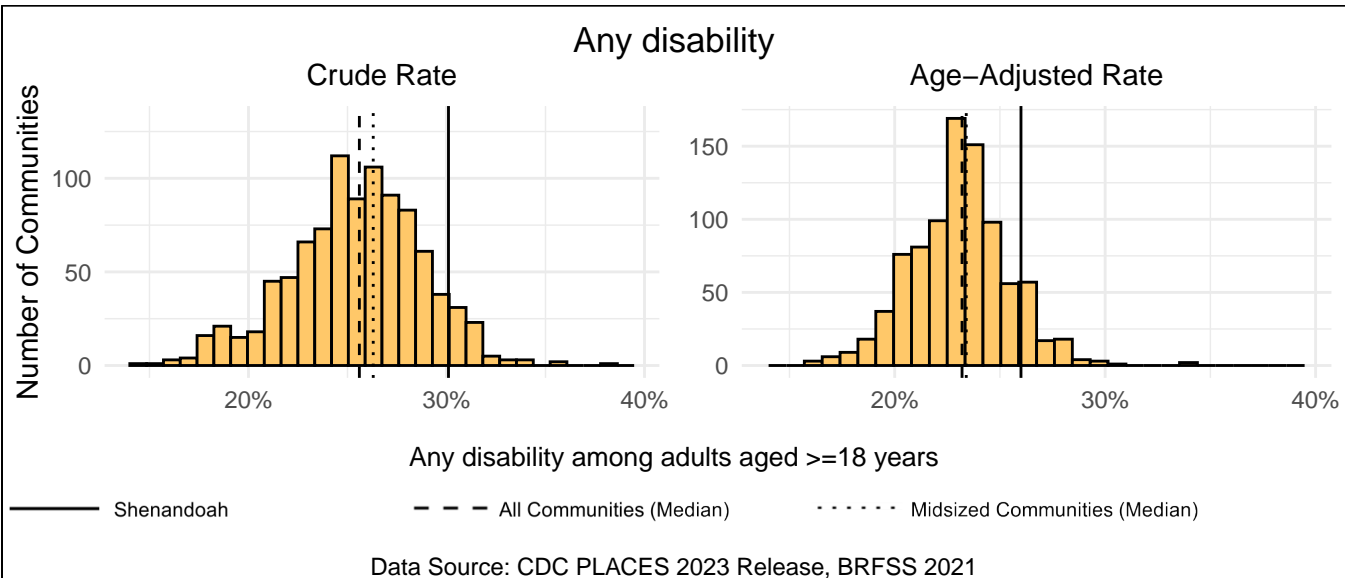
| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 8.1% | 6.6% | 7.0% |
| Age-Adjusted | 7.3% | 6.2% | 6.4% |



Any disability

Shenandoah has a crude rate of 30.1% for any disability among adults aged ≥ 18 years, which ranks 884th out of 958 Iowa communities (88th out of 102 mid-sized communities). The age-adjusted rate for Shenandoah is 26.0%, which ranks 807th out of 905 Iowa communities (80th out of 102 mid-sized communities).

| Measure Type | Shenandoah | All Comm. | Midsized Comm. |
|--------------|------------|-----------|----------------|
| Crude | 30.1% | 25.6% | 26.3% |
| Age-Adjusted | 26.0% | 23.2% | 23.4% |



Appendix 1: CDC PLACES Data

This report uses a novel dataset from the Centers for Disease Control and Prevention (CDC) called PLACES: Local Data for Better Health. The PLACES dataset uses small area estimation methods to provide estimates of health measures for counties, places, census tracts, and zip code tabulation areas. The estimates are created with a multilevel statistical modeling framework that utilizes CDC's Behavioral Risk Factor Surveillance System (BRFSS), Census population counts, and American Community Survey demographic and socioeconomic data.

Relevant links for CDC PLACES can be found below:

- [PLACES Homepage](#)
- [Measure Definitions](#)
- [Methodology](#)



Appendix 2: Shenandoah PLACES Data

| Category | Health Domain | Crude Rate Rank | Crude Rate (95% CI) | Age-Adj. Rate Rank | Age-Adj. Rate (95% CI) |
|-----------------------|--|-----------------|-----------------------|--------------------|------------------------|
| Health Status | Mental Health | 587 | 14.6% (12.6% - 16.6%) | 765 | 16.5% (14.3% - 18.7%) |
| Health Status | Physical Health | 867 | 12.4% (10.6% - 14.3%) | 795 | 10.9% (9.3% - 12.4%) |
| Health Status | General Health | 858 | 17.0% (14.4% - 19.8%) | 791 | 14.9% (12.6% - 17.4%) |
| Health Risk Behaviors | Sleep <7 hours | 856 | 32.3% (31.1% - 33.5%) | 884 | 33.9% (32.5% - 35.3%) |
| Health Risk Behaviors | Physical Inactivity | 781 | 28.7% (23.5% - 33.7%) | 702 | 26.1% (21.7% - 31.0%) |
| Health Risk Behaviors | Current Smoking | 656 | 17.8% (14.6% - 21.3%) | 750 | 19.4% (15.6% - 23.4%) |
| Health Risk Behaviors | Binge Drinking | 110 | 17.2% (14.1% - 20.4%) | 108 | 20.7% (17.1% - 24.5%) |
| Health Outcomes | Obesity | 894 | 41.4% (33.8% - 49.2%) | 879 | 42.3% (34.5% - 49.9%) |
| Health Outcomes | High Cholesterol | 877 | 39.9% (35.0% - 44.7%) | 872 | 31.6% (26.9% - 36.2%) |
| Health Outcomes | Arthritis | 865 | 31.9% (27.5% - 36.3%) | 842 | 24.9% (21.2% - 28.8%) |
| Health Outcomes | Cancer (except skin) | 771 | 9.2% (8.3% - 10.2%) | 74 | 6.4% (5.8% - 7.1%) |
| Health Outcomes | COPD | 847 | 8.9% (7.4% - 10.3%) | 765 | 7.1% (5.9% - 8.3%) |
| Health Outcomes | Diabetes | 840 | 11.8% (10.1% - 13.7%) | 760 | 9.1% (7.8% - 10.6%) |
| Health Outcomes | All Teeth Lost | 797 | 15.1% (10.5% - 20.5%) | 748 | 14.7% (10.5% - 19.5%) |
| Health Outcomes | High Blood Pressure | 878 | 36.9% (32.5% - 41.3%) | 842 | 29.7% (25.8% - 33.6%) |
| Health Outcomes | Chronic Kidney Disease | 832 | 3.8% (3.4% - 4.2%) | 762 | 2.8% (2.5% - 3.0%) |
| Health Outcomes | Current Asthma | 781 | 9.7% (8.5% - 11.0%) | 831 | 10.1% (8.8% - 11.3%) |
| Health Outcomes | Depression | 568 | 18.3% (14.9% - 21.9%) | 733 | 20.0% (16.4% - 23.7%) |
| Health Outcomes | Stroke | 832 | 4.0% (3.5% - 4.5%) | 714 | 2.8% (2.5% - 3.1%) |
| Health Outcomes | Coronary Heart Disease | 811 | 7.8% (6.7% - 8.9%) | 674 | 5.3% (4.6% - 6.1%) |
| Prevention | Taking BP Medication | 245 | 81.4% (78.1% - 84.0%) | 298 | 59.3% (54.1% - 64.0%) |
| Prevention | Core preventive services for older men | 282 | 45.7% (38.6% - 52.6%) | 228 | 46.3% (39.2% - 53.2%) |
| Prevention | Cervical Cancer Screening | 691 | 82.3% (80.4% - 84.4%) | 579 | 82.8% (81.0% - 84.9%) |
| Prevention | Colorectal Cancer Screening | 746 | 69.7% (67.1% - 72.1%) | 859 | 68.0% (65.3% - 70.5%) |
| Prevention | Cholesterol Screening | 451 | 82.7% (79.7% - 85.4%) | 709 | 78.1% (74.4% - 81.4%) |

| Category | Health Domain | Crude Rate Rank | Crude Rate (95% CI) | Age-Adj. Rate Rank | Age-Adj. Rate (95% CI) |
|------------|--|-----------------|-----------------------|--------------------|------------------------|
| Prevention | Dental Visit | 914 | 60.6% (57.5% - 64.0%) | 871 | 59.6% (56.4% - 62.9%) |
| Prevention | Core preventive services for older women | 717 | 36.4% (30.0% - 42.6%) | 521 | 39.4% (33.3% - 45.2%) |
| Prevention | Health Insurance | 795 | 8.5% (6.6% - 10.7%) | 772 | 9.1% (7.2% - 11.4%) |
| Prevention | Annual Checkup | 111 | 77.5% (72.8% - 81.6%) | 127 | 73.7% (68.3% - 78.3%) |
| Prevention | Mammography | 585 | 75.6% (72.1% - 78.8%) | 669 | 72.6% (68.9% - 76.3%) |
| Disability | Independent Living Disability | 863 | 8.1% (6.9% - 9.5%) | 794 | 7.3% (6.3% - 8.4%) |
| Disability | Vision Disability | 865 | 5.2% (4.5% - 6.1%) | 788 | 4.4% (3.8% - 5.0%) |
| Disability | Any Disability | 884 | 30.1% (25.9% - 34.3%) | 807 | 26.0% (22.2% - 30.0%) |
| Disability | Mobility Disability | 879 | 14.9% (12.7% - 17.3%) | 797 | 11.1% (9.4% - 12.9%) |
| Disability | Cognitive Disability | 804 | 12.4% (10.5% - 14.3%) | 788 | 13.1% (11.1% - 15.1%) |
| Disability | Hearing Disability | 818 | 8.9% (7.8% - 9.9%) | 681 | 6.3% (5.6% - 7.1%) |
| Disability | Self-care Disability | 852 | 4.3% (3.8% - 4.9%) | 763 | 3.5% (3.1% - 4.0%) |

The 95% confidence interval shown in parentheses represents the range of 95% of CDC area estimates under different model assumptions using Monte Carlo simulations.

Appendix 3: Midsized Communities (2,500-9,999)

Shenandoah falls into the group of midsized communities, which have a population of 2,500-9,999. In this data, 102 communities have a population in this range. The table below lists all communities in that group, sorted by the population estimate in the CDC PLACES dataset.

| Community | Population | Community | Population | Community | Population |
|----------------|------------|-----------------|------------|-----------------|------------|
| Keokuk | 9,868 | Red Oak | 5,563 | Dyersville | 4,318 |
| Grinnell | 9,511 | DeWitt | 5,508 | Forest City | 4,254 |
| Fairfield | 9,474 | Anamosa | 5,493 | Chariton | 4,203 |
| Mount Pleasant | 9,214 | Osceola | 5,455 | Jefferson | 4,190 |
| Denison | 8,316 | Algona | 5,443 | Carlisle | 4,116 |
| Sioux Center | 8,227 | Sheldon | 5,417 | Rock Valley | 4,045 |
| Perry | 7,875 | Spirit Lake | 5,409 | Monticello | 4,034 |
| Webster City | 7,787 | Centerville | 5,393 | Cresco | 3,899 |
| Clear Lake | 7,642 | Clarinda | 5,371 | West Liberty | 3,821 |
| Bondurant | 7,617 | Winterset | 5,366 | Waukon | 3,818 |
| Decorah | 7,611 | Windsor Heights | 5,200 | Carter Lake | 3,780 |
| Knoxville | 7,523 | Cherokee | 5,154 | Albia | 3,705 |
| Creston | 7,519 | Glenwood | 5,128 | Emmetsburg | 3,671 |
| Charles City | 7,364 | Manchester | 5,112 | Osage | 3,590 |
| Washington | 7,329 | Iowa Falls | 5,095 | Eagle Grove | 3,589 |
| Hiawatha | 7,179 | Sergeant Bluff | 5,007 | New Hampton | 3,473 |
| Nevada | 6,933 | Vinton | 4,953 | Robins | 3,356 |
| Atlantic | 6,770 | Shenandoah | 4,930 | Story City | 3,352 |
| Eldridge | 6,693 | Harlan | 4,897 | Williamsburg | 3,332 |
| Orange City | 6,278 | Tiffin | 4,845 | Milford | 3,295 |
| Maquoketa | 6,123 | Humboldt | 4,774 | West Burlington | 3,184 |
| Independence | 6,106 | Le Claire | 4,679 | Tipton | 3,130 |
| Adel | 6,090 | Evansdale | 4,561 | Tama | 3,073 |
| Oelwein | 5,934 | Camanche | 4,546 | Garner | 3,065 |
| Asbury | 5,890 | Mount Vernon | 4,529 | Solon | 3,020 |
| Estherville | 5,881 | Huxley | 4,331 | Wilton | 2,939 |
| Polk City | 5,604 | Hampton | 4,328 | Onawa | 2,876 |

| Community | Population |
|-----------------|------------|
| Saylorville | 2,837 |
| Park View | 2,835 |
| Sibley | 2,830 |
| Fairfax | 2,814 |
| Marengo | 2,812 |
| Clarion | 2,799 |
| Grundy Center | 2,792 |
| Madrid | 2,784 |
| Missouri Valley | 2,692 |
| Bloomfield | 2,687 |
| Hawarden | 2,673 |
| Postville | 2,653 |
| Eldora | 2,645 |
| Kalona | 2,637 |
| Rock Rapids | 2,631 |
| Center Point | 2,573 |
| Hudson | 2,557 |
| Belmond | 2,512 |
| Mitchellville | 2,506 |
| West Branch | 2,503 |
| Jesup | 2,502 |
