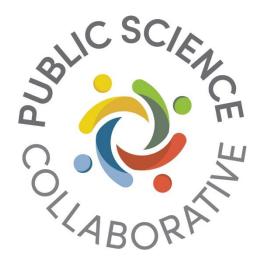


# **Iowa County Health Snapshot Series**

99 county reports prepared for the Iowa State University Extension and Outreach Community and Economic Development Unit



May 2024

# By Matthew Voss & Shawn Dorius

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.

# **Iowa County Health Snapshot Series**

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# **Health in Appanoose County: Overview**

Dear Community Members & Stakeholders of Appanoose County,

We are pleased to share the lowa County Health Snapshot series, a set of reports designed in partnership with lowa State University's Community Economic Development to assess the overall landscape of health and well-being across lowa's 99 counties. The following pages include the health snapshot for your county. The snapshot can be used to see how Appanoose County ranks across various health measures compared to the rest of the state and similarly-sized counties. This comparison allows us to identify Appanoose County's strengths and opportunities for growth by leveraging data from 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 county ranks compared to all lowa counties and counties of similar size to Appanoose County. 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 county and presents what the rate would be if your county had a standard age distribution. Crude rates can provide a general comparison between counties and age-adjusted rates can give a fairer comparison between counties with different age structures.

# **Strengths**

Take a look at the top strengths of your county! Below are unadjusted and age-adjusted health measures that represent your county'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 County Rank	Rural County Rank	Health Domain	Statewide County Rank	Rural County Rank	
Binge Drinking	1st	1st	Binge Drinking	8th	3rd	
Taking BP Medication	10th	9th	Taking BP Medication	13th	7th	
Annual Checkup	20th	15th	Cancer (except skin)	26th	14th	
Core preventive services for older women	50th	23rd	Annual Checkup	44th	25th	
Obesity	72nd	41st	Core preventive services for older women	63rd	34th	

# **Opportunities**

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

	Crude			Age-Adjusted	
Health Domain	Statewide County Rank	Rural County Rank	Health Domain	Statewide County Rank	Rural County Rank
Hearing Disability	99th	63rd	Sleep <7 hours	99th	63rd
Arthritis	99th	63rd	Mental Health	99th	63rd
Sleep <7 hours	99th	63rd	Independent Living Disability	98th	62nd
Independent Living Disability	99th	63rd	High Blood Pressure	98th	62nd
Mobility Disability	99th	63rd	Current Asthma	98th	63rd

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

Sincerely,

Show

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**

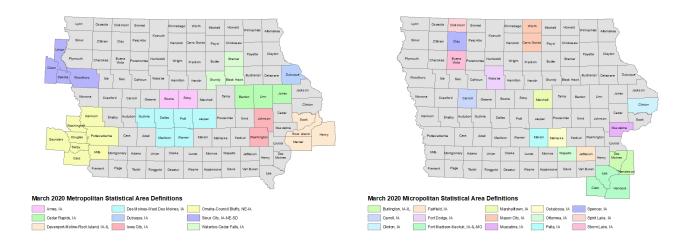
The purpose of the Iowa County Health Snapshot Series is to provide an overview of health in Appanoose County that can be used to help inform health-related interventions and programming. This report contains five sections, including the overall health status of Appanoose County, a review of risky behaviors in the county, 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 Appanoose County compares to the rest of the state and similarly-sized counties.

With a population of 12,257, Appanoose County's similarly sized counties are defined as rural counties. In lowa, rural counties have an average population of 12,547, and there are 63 counties that are considered rural counties. To learn more about the county population classifications used in this report, please see the information below the table as well as Appendix 3.

Group	Population Avg.	Number of Counties
Metropolitan Core	175,797	9
Micropolitan	30,839	15
Metropolitan Non-Core	29,821	12
Rural	12,547	63
Total		99

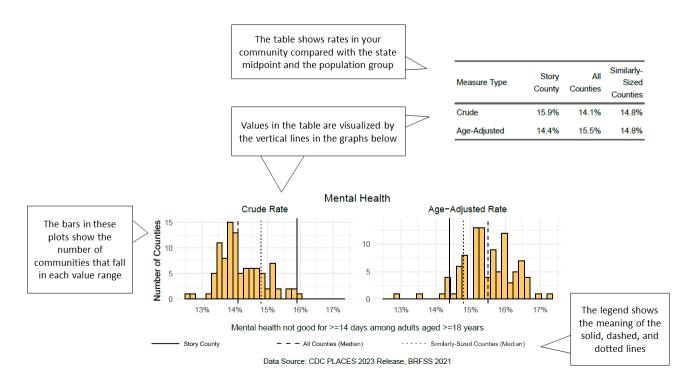
The counties included in each category above are determined by the United States Office of Management and Budget. Iowa has counties in nine metropolitan statistical areas and 15 micropolitan statistical areas. The counties identified as metropolitan and micropolitan can be found in the link and the maps below. Metropolitan core counties are those counties in metropolitan areas that have the city that defines the metropolitan area (e.g., Des Moines and Polk County for the Des Moines Metropolitan Area). Metropolitan non-core counties are those that fall within the metropolitan area, but do not have the core city of the metropolitan area (e.g., Dallas and Jasper Counties in the Des Moines Metropolitan Area).

https://www.icip.iastate.edu/maps/refmaps/cofips



# **Using Story County 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 county's crude and age-adjusted rate estimates alongside their averages across all lowa counties and similarly-sized counties. The images below show the distribution of the health measure across counties. The vertical lines correspond with the values in the table to show the estimate for the specific county compared to counties across the state. The solid black line in each plot represents the county rate, with the dashed lines indicating the average rate for all lowa counties and the dotted lines showing the average rate for similarly-sized counties.



The example graphic above displays the poor mental health rate in Story County, Iowa. The left plot shows the crude rate of poor mental health in the county. Crude rates are the raw, un-adjusted percent of the population experiencing the health measure. Notice how the solid black line is closer to the right of the plot than the dashed and dotted lines; this indicates that Story County has a higher crude rate of poor mental health than most counties in the state. However, the age-adjusted rate plot on the right shows the solid line closer to the peak of the distribution and averages for the state and similarly-sized counties, indicating that when accounting for Story County's unique age distribution, Story County's poor mental health rate is not a significant outlier, and is estimated to be lower than the statewide average. Accounting for crude and age-adjusted rates is critical to help inform health interventions as age-adjusted rates can help contextualize the health measure within the population.

# **Health Status**

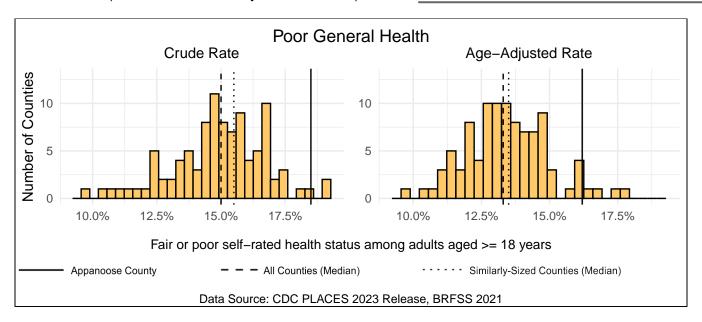
This section reflects measures for overall health, including general, physical, and mental health. These measures are a valuable way to see a simple summary of the health of a country's population. The questions to calculate these measures ask respondents to evaluate their health status. General health 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**

Appanoose County has a crude rate of 18.5% for fair or poor self-rated health status among adults aged >= 18 years, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 16.2%, which ranks 95th out of 99 lowa counties (61st out of 63 similarly-sized counties).

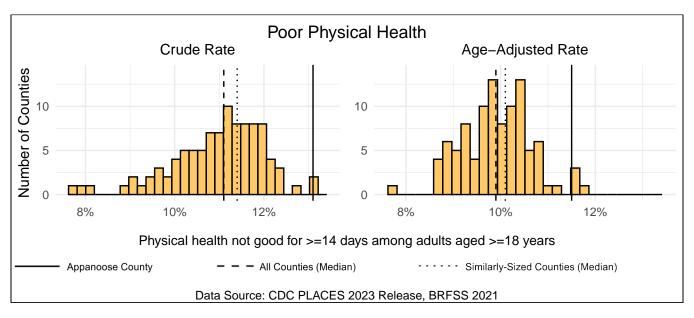
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	18.5%	15.0%	15.5%
Age-Adjusted	16.2%	13.3%	13.5%



# **Poor Physical Health**

Appanoose County has a crude rate of 13.1% for physical health not good for >=14 days among adults aged >=18 years, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 11.5%, which ranks 96th out of 99 lowa counties (60th out of 63 similarly-sized counties).

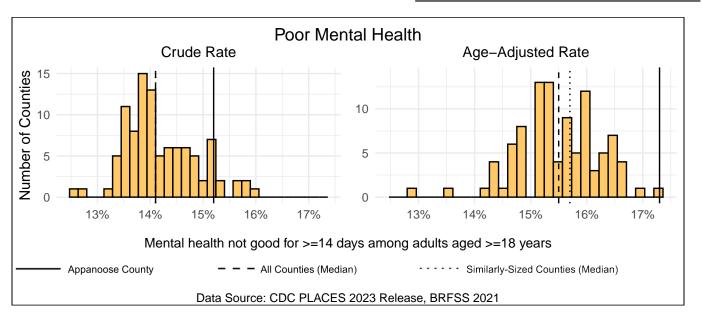
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	13.1%	11.1%	11.4%
Age-Adjusted	11.5%	9.9%	10.1%



#### **Poor Mental Health**

Appanoose County has a crude rate of 15.2% for mental health not good for >=14 days among adults aged >=18 years, which ranks 88th out of 99 lowa counties (58th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 17.3%, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties).

Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	15.2%	14.1%	14.1%
Age-Adjusted	17.3%	15.5%	15.7%



# **Health Risk Behaviors**

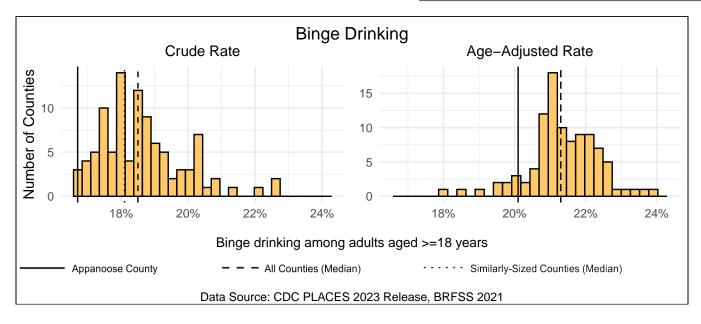
Health risk measures are measures of individual behaviors that can lead to poor health outcomes. These include binge drinking, current smoking, physical inactivity, and getting less than seven hours of nightly sleep. Risk behaviors are the most critical intervention points as they can help save lives 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**

Appanoose County has a crude rate of 16.7% for binge drinking among adults aged >=18 years, which ranks 1st out of 99 lowa counties (1st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 20.1%, which ranks 8th out of 99 lowa counties (3rd out of 63 similarly-sized counties).

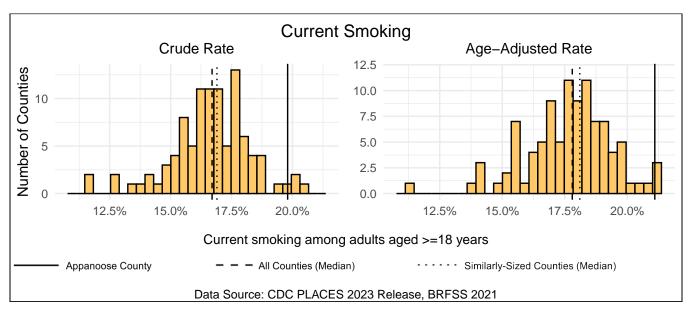
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	16.7%	18.5%	18.1%
Age-Adjusted	20.1%	21.3%	21.3%



# **Current Smoking**

Appanoose County has a crude rate of 19.8% for current smoking among adults aged >=18 years, which ranks 96th out of 99 lowa counties (61st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 21.1%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

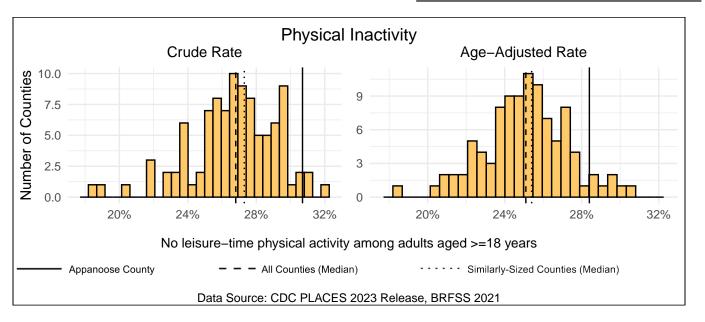
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	19.8%	16.7%	16.9%
Age-Adjusted	21.1%	17.8%	18.1%



# **Physical Inactivity**

Appanoose County has a crude rate of 30.7% for no leisure-time physical activity among adults aged >=18 years, which ranks 96th out of 99 lowa counties (60th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 28.4%, which ranks 93rd out of 99 lowa counties (60th out of 63 similarly-sized counties).

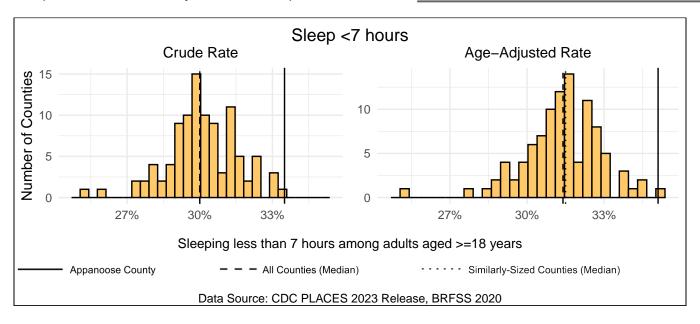
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	30.7%	26.8%	27.3%
Age-Adjusted	28.4%	25.1%	25.4%



# Sleep <7 hours

Appanoose County has a crude rate of 33.5% for sleeping less than 7 hours among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 35.1%, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties).

Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	33.5%	30.0%	30.0%
Age-Adjusted	35.1%	31.4%	31.5%



# **Health Outcomes**

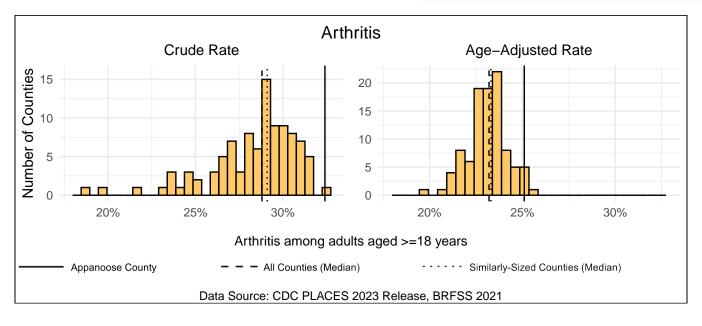
This section includes measures about specific health outcomes such as chronic illness, mental health conditions, and risk factors for future disease. Health outcome measures include but are not limited to arthritis, high blood pressure, cancer, depression, and obesity. Each measure is the percentage 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**

Appanoose County has a crude rate of 32.4% for arthritis among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 25.1%, which ranks 96th out of 99 lowa counties (63rd out of 63 similarly-sized counties).

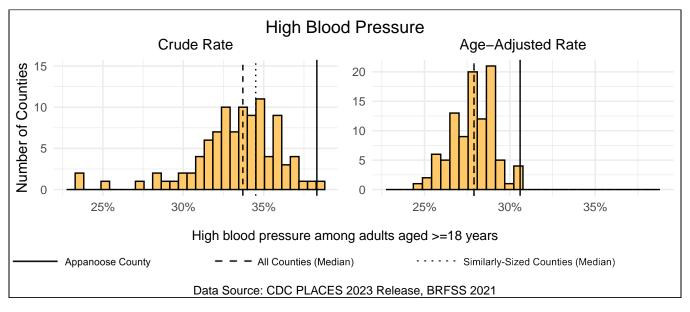
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	32.4%	28.8%	29.1%
Age-Adjusted	25.1%	23.2%	23.3%



# **High Blood Pressure**

Appanoose County has a crude rate of 38.3% for high blood pressure among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 30.6%, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties).

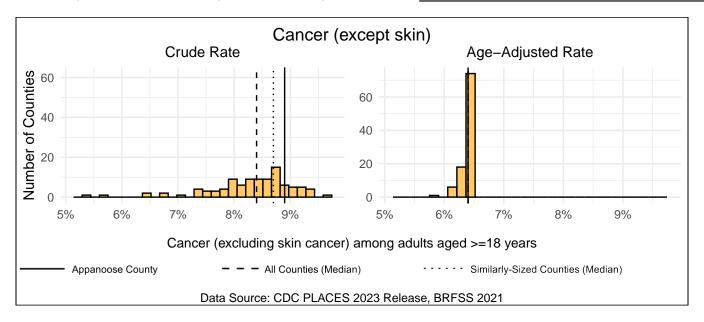
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	38.3%	33.7%	34.5%
Age-Adjusted	30.6%	27.9%	27.9%



#### Cancer (except skin)

Appanoose County has a crude rate of 8.9% for cancer (excluding skin cancer) among adults aged >=18 years, which ranks 79th out of 99 lowa counties (45th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 6.4%, which ranks 26th out of 99 lowa counties (14th out of 63 similarly-sized counties).

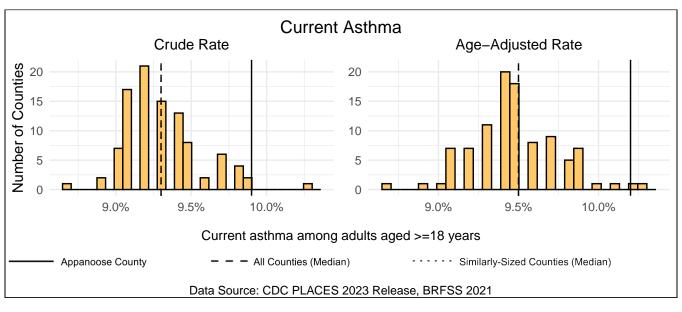
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	8.9%	8.4%	8.7%
Age-Adjusted	6.4%	6.4%	6.4%



#### **Current Asthma**

Appanoose County has a crude rate of 9.9% for current asthma among adults aged >=18 years, which ranks 97th out of 99 lowa counties (62nd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 10.2%, which ranks 98th out of 99 lowa counties (63rd out of 63 similarly-sized counties).

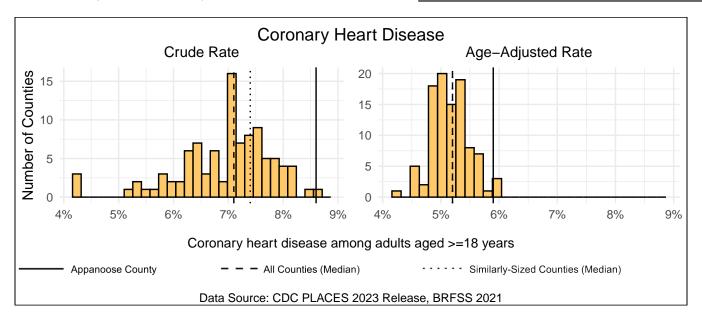
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	9.9%	9.3%	9.3%
Age-Adjusted	10.2%	9.5%	9.5%



#### **Coronary Heart Disease**

Appanoose County has a crude rate of 8.6% for coronary heart disease among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 5.9%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

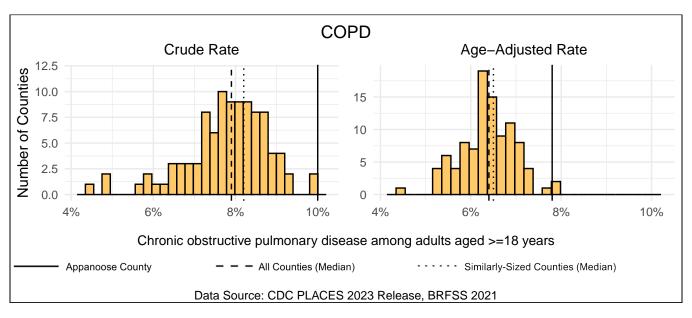
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	8.6%	7.1%	7.4%
Age-Adjusted	5.9%	5.2%	5.2%



#### COPD

Appanoose County has a crude rate of 10.0% for chronic obstructive pulmonary disease among adults aged >=18 years, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 7.8%, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties).

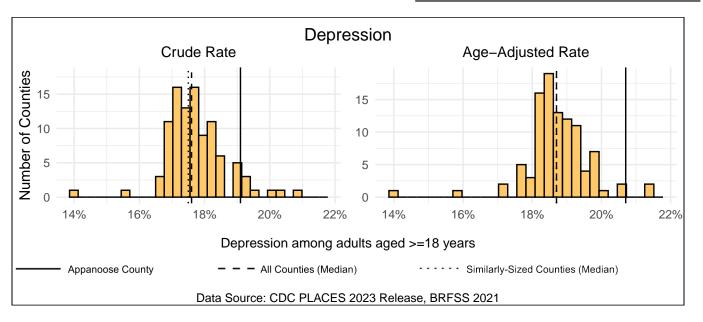
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	10.0%	7.9%	8.2%
Age-Adjusted	7.8%	6.4%	6.5%



#### **Depression**

Appanoose County has a crude rate of 19.1% for depression among adults aged >=18 years, which ranks 92nd out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 20.7%, which ranks 97th out of 99 lowa counties (63rd out of 63 similarly-sized counties).

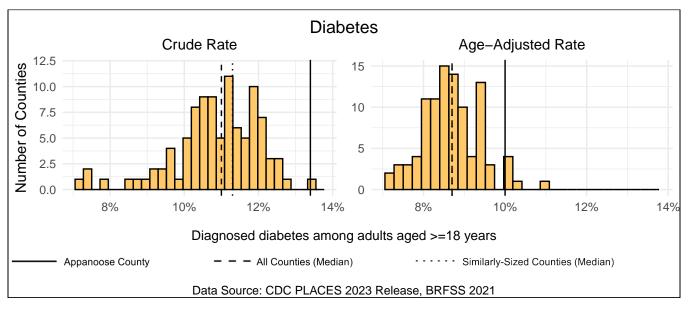
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	19.1%	17.6%	17.5%
Age-Adjusted	20.7%	18.7%	18.7%



#### **Diabetes**

Appanoose County has a crude rate of 13.4% for diagnosed diabetes among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 10.0%, which ranks 94th out of 99 lowa counties (61st out of 63 similarly-sized counties).

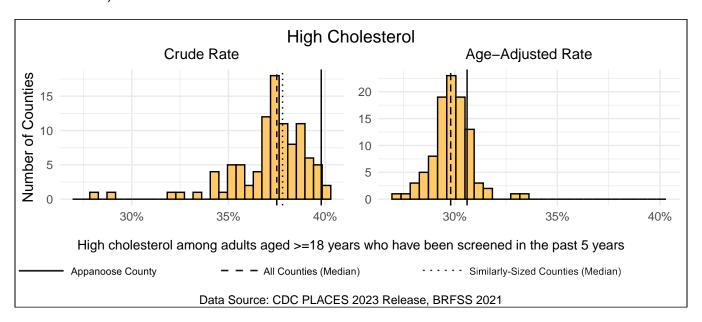
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	13.4%	11.0%	11.3%
Age-Adjusted	10.0%	8.7%	8.7%



# **High Cholesterol**

Appanoose County has a crude rate of 39.8% for high cholesterol among adults aged >=18 years who have been screened in the past 5 years, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 30.6%, which ranks 81st out of 99 lowa counties (54th out of 63 similarly-sized counties).

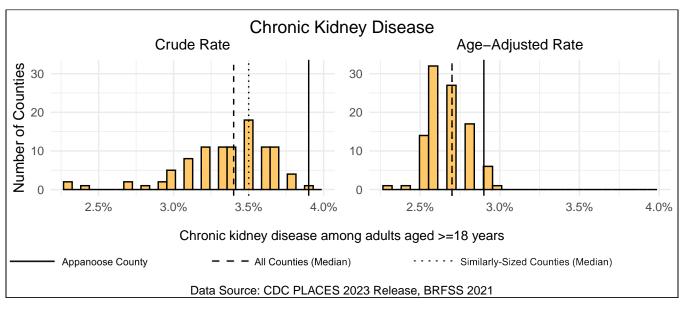
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	39.8%	37.5%	37.8%
Age-Adjusted	30.6%	29.8%	29.8%



# **Chronic Kidney Disease**

Appanoose County has a crude rate of 3.9% for chronic kidney disease among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 2.9%, which ranks 93rd out of 99 lowa counties (60th out of 63 similarly-sized counties).

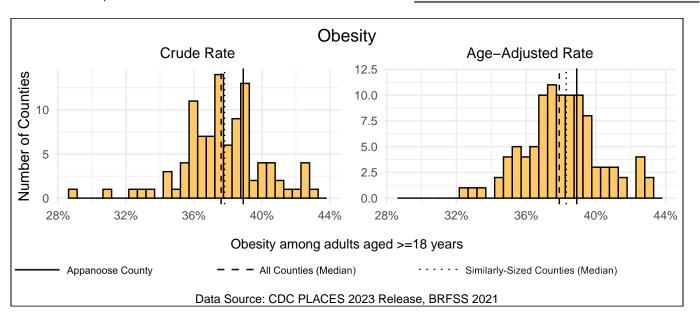
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	3.9%	3.4%	3.5%
Age-Adjusted	2.9%	2.7%	2.7%



# Obesity

Appanoose County has a crude rate of 38.9% for obesity among adults aged >=18 years, which ranks 72nd out of 99 lowa counties (41st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 38.9%, which ranks 66th out of 99 lowa counties (36th out of 63 similarly-sized counties).

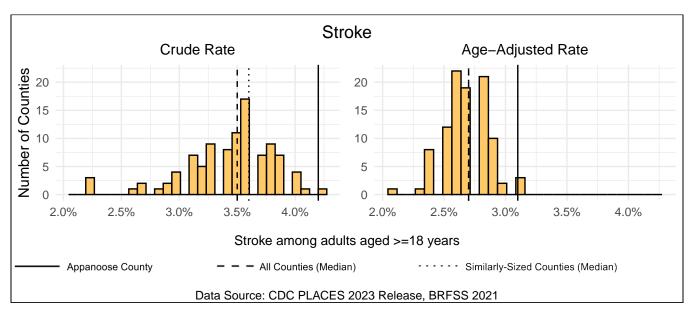
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	38.9%	37.6%	37.8%
Age-Adjusted	38.9%	37.9%	38.3%



#### **Stroke**

Appanoose County has a crude rate of 4.2% for stroke among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 3.1%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

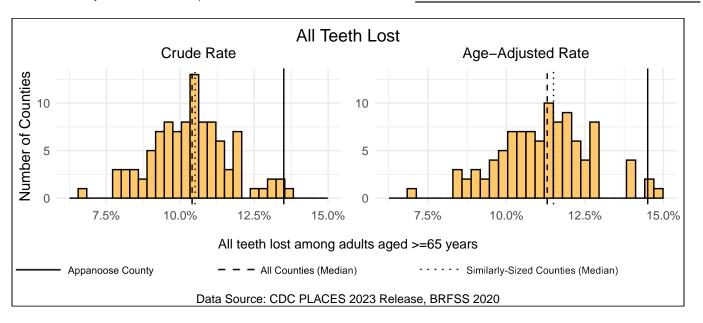
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	4.2%	3.5%	3.6%
Age-Adjusted	3.1%	2.7%	2.7%



#### **All Teeth Lost**

Appanoose County has a crude rate of 13.5% for all teeth lost among adults aged >=65 years, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 14.5%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	13.5%	10.4%	10.5%
Age-Adjusted	14.5%	11.3%	11.5%



# **Prevention**

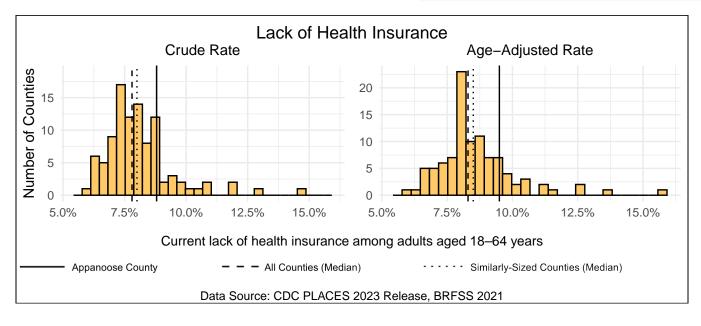
Preventive measures are another practical intervention point for public health professionals as they allow for the early detection of health conditions and improve overall treatment efficacy. This section includes a review of your county's prevention measures, including preventive screenings and doctor 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 county. The link below includes more information about each variable.

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

#### **Lack of Health Insurance**

Appanoose County has a crude rate of 8.8% for current lack of health insurance among adults aged 18–64 years, which ranks 80th out of 99 lowa counties (50th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 9.5%, which ranks 82nd out of 99 lowa counties (51st out of 63 similarly-sized counties).

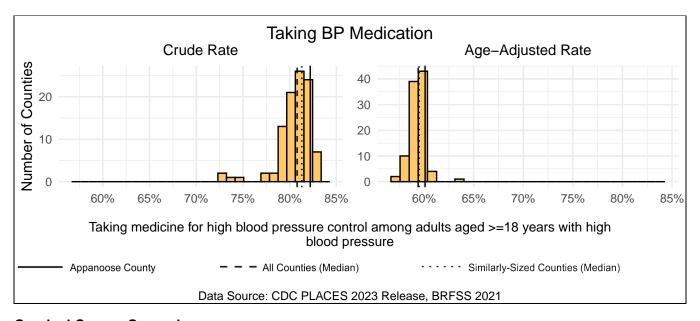
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	8.8%	7.8%	8.0%
Age-Adjusted	9.5%	8.3%	8.5%



# **Taking BP Medication**

Appanoose County has a crude rate of 82.2% for taking medicine for high blood pressure control among adults aged >=18 years with high blood pressure, which ranks 10th out of 99 lowa counties (9th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 60.1%, which ranks 13th out of 99 lowa counties (7th out of 63 similarly-sized counties).

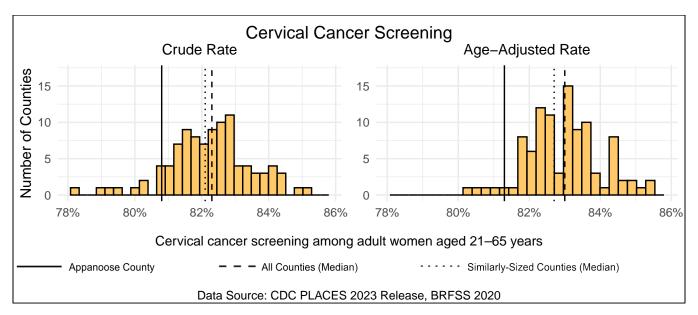
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	82.2%	80.8%	81.3%
Age-Adjusted	60.1%	59.4%	59.5%



# **Cervical Cancer Screening**

Appanoose County has a crude rate of 80.8% for cervical cancer screening among adult women aged 21–65 years, which ranks 91st out of 99 lowa counties (59th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 81.3%, which ranks 95th out of 99 lowa counties (60th out of 63 similarly-sized counties).

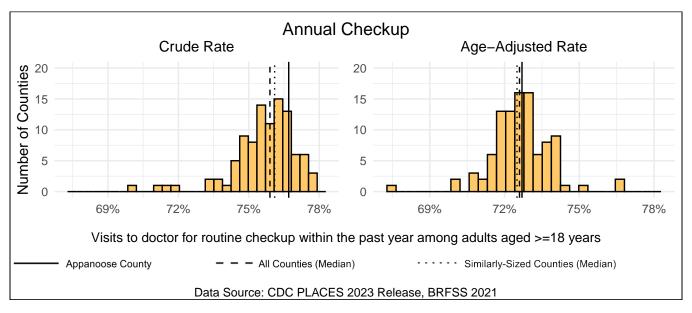
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	80.8%	82.3%	82.1%
Age-Adjusted	81.3%	83.0%	82.7%



# **Annual Checkup**

Appanoose County has a crude rate of 76.7% for visits to doctor for routine checkup within the past year among adults aged >=18 years, which ranks 20th out of 99 lowa counties (15th out of 63 similarly-sized counties). The ageadjusted rate for Appanoose County is 72.7%, which ranks 44th out of 99 lowa counties (25th out of 63 similarly-sized counties).

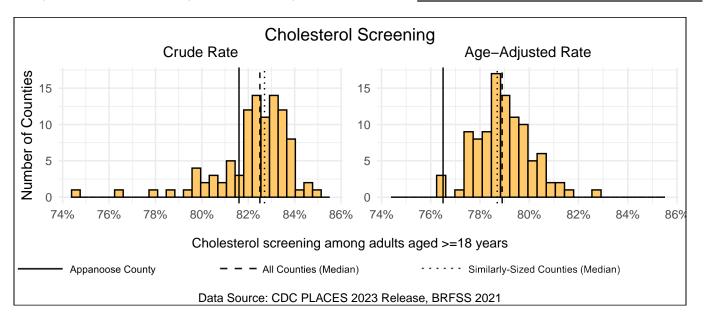
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	76.7%	75.9%	76.1%
Age-Adjusted	72.7%	72.6%	72.5%



# **Cholesterol Screening**

Appanoose County has a crude rate of 81.6% for cholesterol screening among adults aged >=18 years, which ranks 77th out of 99 lowa counties (53rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 76.5%, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties).

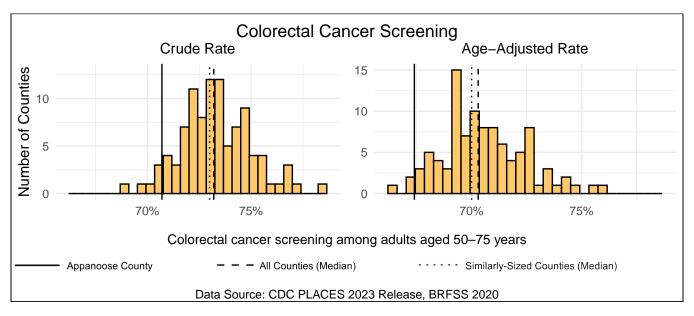
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	81.6%	82.5%	82.7%
Age-Adjusted	76.5%	78.9%	78.7%



# **Colorectal Cancer Screening**

Appanoose County has a crude rate of 70.7% for colorectal cancer screening among adults aged 50–75 years, which ranks 94th out of 99 lowa counties (60th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 67.4%, which ranks 97th out of 99 lowa counties (63rd out of 63 similarly-sized counties).

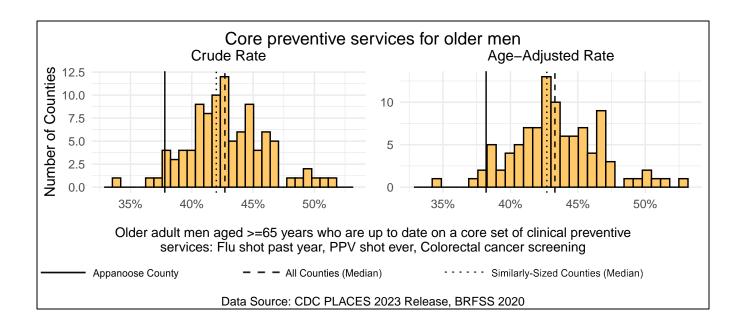
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	70.7%	73.2%	73.0%
Age-Adjusted	67.4%	70.3%	70.0%



#### Core preventive services for older men

Appanoose County has a crude rate of 37.8% 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 95th out of 99 lowa counties (60th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 38.2%, which ranks 96th out of 99 lowa counties (61st out of 63 similarly-sized counties).

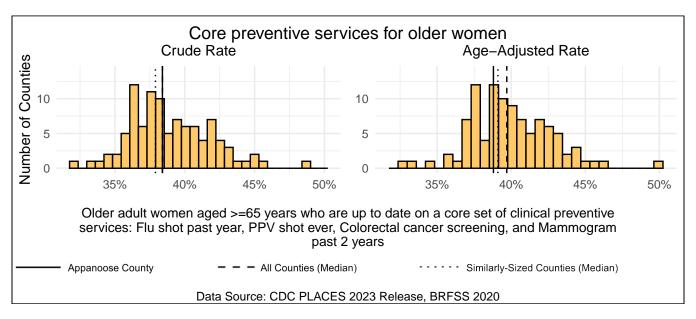
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	37.8%	42.7%	42.0%
Age-Adjusted	38.2%	43.3%	42.7%



#### Core preventive services for older women

Appanoose County has a crude rate of 38.4% 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 50th out of 99 lowa counties (23rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 38.8%, which ranks 63rd out of 99 lowa counties (34th out of 63 similarly-sized counties).

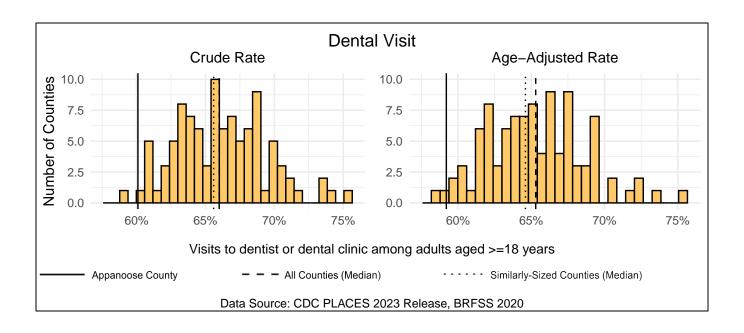
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	38.4%	38.4%	37.9%
Age-Adjusted	38.8%	39.7%	39.1%



#### **Dental Visit**

Appanoose County has a crude rate of 60.1% for visits to dentist or dental clinic among adults aged >=18 years, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 59.2%, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties).

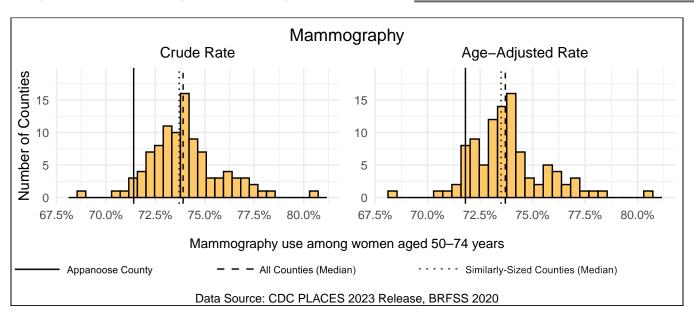
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	60.1%	66.0%	65.6%
Age-Adjusted	59.2%	65.3%	64.6%



# **Mammography**

Appanoose County has a crude rate of 71.4% for mammography use among women aged 50–74 years, which ranks 94th out of 99 lowa counties (59th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 71.8%, which ranks 92nd out of 99 lowa counties (58th out of 63 similarly-sized counties).

Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	71.4%	73.9%	73.7%
Age-Adjusted	71.8%	73.7%	73.5%



# **Disability**

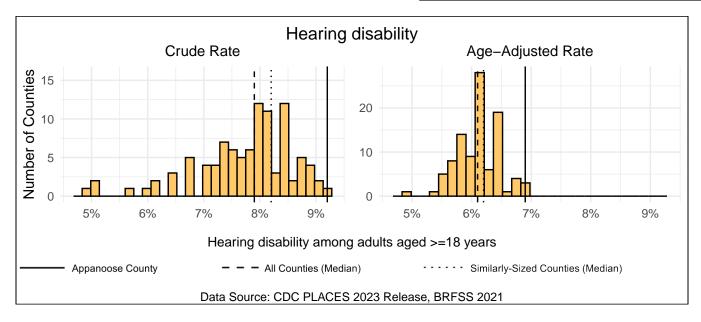
This section includes measures of physical and cognitive disabilities. Respondents were asked to report on six disabilities: hearing, vision, cognition, mobility, self-care, and independent living. The final measure reports the rate of respondents that answered yes to any of the previous six disabilities.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

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

# **Hearing disability**

Appanoose County has a crude rate of 9.2% for hearing disability among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 6.9%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

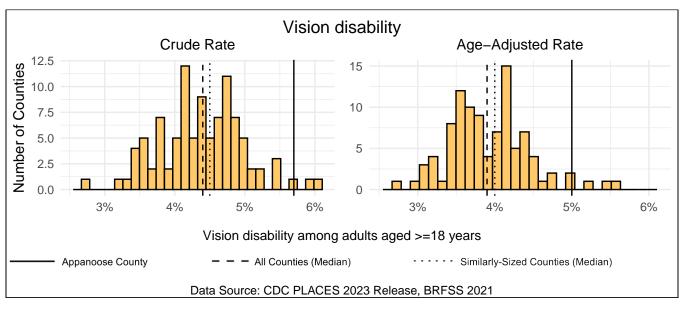
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties
Crude	9.2%	7.9%	8.2%
Age-Adjusted	6.9%	6.1%	6.2%



# Vision disability

Appanoose County has a crude rate of 5.7% for vision disability among adults aged >=18 years, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 5.0%, which ranks 95th out of 99 lowa counties (61st out of 63 similarly-sized counties).

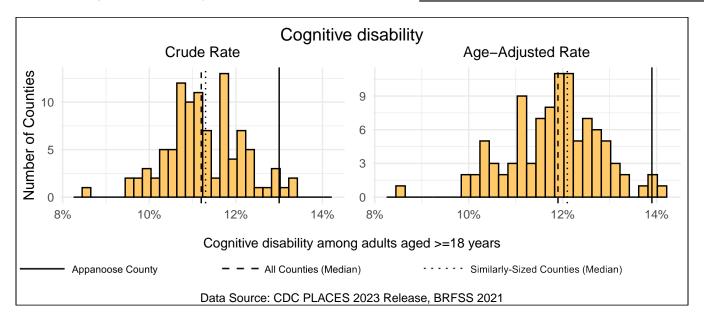
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties	
Crude	5.7%	4.4%	4.5%	
Age-Adjusted	5.0%	3.9%	4.0%	



# Cognitive disability

Appanoose County has a crude rate of 13.0% for cognitive disability among adults aged >=18 years, which ranks 95th out of 99 lowa counties (60th out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 13.9%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

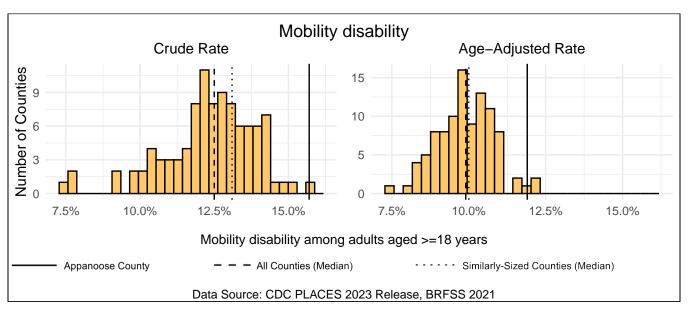
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties	
Crude	13.0%	11.2%	11.3%	
Age-Adjusted	13.9%	11.9%	12.1%	



# **Mobility disability**

Appanoose County has a crude rate of 15.7% for mobility disability among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 11.9%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

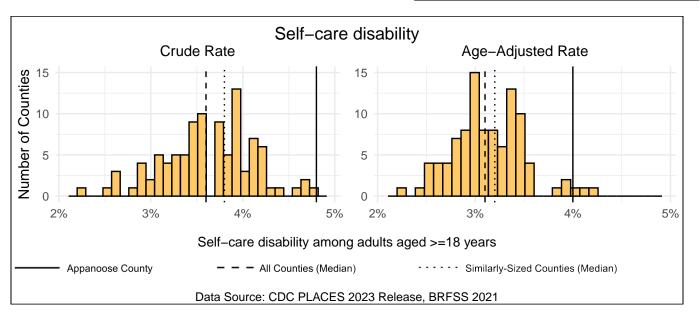
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties	
Crude	15.7%	12.5%	13.1%	
Age-Adjusted	11.9%	9.9%	10.0%	



# Self-care disability

Appanoose County has a crude rate of 4.8% for self-care disability among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 4.0%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

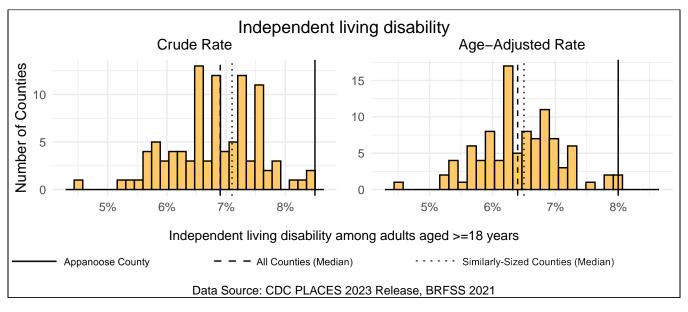
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties	
Crude	4.8%	3.6%	3.8%	
Age-Adjusted	4.0%	3.1%	3.2%	



# Independent living disability

Appanoose County has a crude rate of 8.5% for independent living disability among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 8.0%, which ranks 98th out of 99 lowa counties (62nd out of 63 similarly-sized counties).

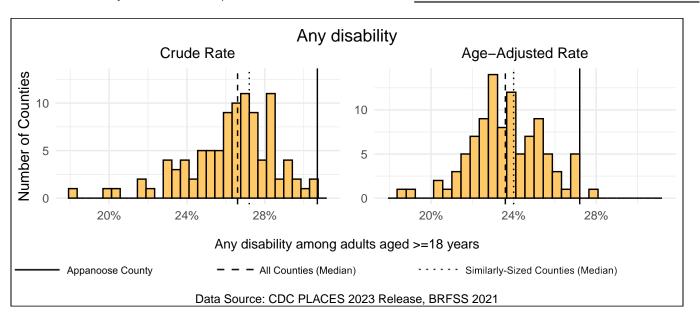
Measure Type	Appanoose County	All Counties	Similarly- Sized Counties	
Crude	8.5%	6.9%	7.1%	
Age-Adjusted	8.0%	6.4%	6.5%	



# Any disability

Appanoose County has a crude rate of 30.7% for any disability among adults aged >=18 years, which ranks 99th out of 99 lowa counties (63rd out of 63 similarly-sized counties). The age-adjusted rate for Appanoose County is 27.2%, which ranks 97th out of 99 lowa counties (61st out of 63 similarly-sized counties).

Measure Type	Appanoose County	All Counties	Similarly- Sized Counties	
Crude	30.7%	26.6%	27.2%	
Age-Adjusted	27.2%	23.6%	24.0%	



# **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: Appanoose County PLACES Data**

Category	Health Domain	Crude Rate Rank	Crude Rate (95% CI)	Age-Adj. Rate Rank	Age-Adj. Rate (95% CI)
Health Status	General Health	97	18.5% (15.3% - 21.9%)	95	16.2% (13.3% - 19.2%)
Health Status	Physical Health	98	13.1% (11.1% - 15.1%)	96	11.5% (9.8% - 13.3%)
Health Status	Mental Health	88	15.2% (13.2% - 17.5%)	99	17.3% (14.9% - 19.8%)
Health Risk Behaviors	Sleep <7 hours	99	33.5% (31.9% - 35.1%)	99	35.1% (33.3% - 36.9%)
Health Risk Behaviors	Physical Inactivity	96	30.7% (25.1% - 36.3%)	93	28.4% (23.2% - 33.9%)
Health Risk Behaviors	Binge Drinking	1	16.7% (13.6% - 20.0%)	8	20.1% (16.4% - 24.1%)
Health Risk Behaviors	Current Smoking	96	19.8% (15.7% - 24.0%)	97	21.1% (16.5% - 25.9%)
Health Outcomes	High Blood Pressure	99	38.3% (34.0% - 42.9%)	98	30.6% (26.6% - 34.9%)
Health Outcomes	Current Asthma	97	9.9% (8.7% - 11.2%)	98	10.2% (9.0% - 11.6%)
Health Outcomes	Coronary Heart Disease	99	8.6% (7.3% - 9.8%)	97	5.9% (5.1% - 6.8%)
Health Outcomes	Arthritis	99	32.4% (28.1% - 37.2%)	96	25.1% (21.5% - 29.2%)
Health Outcomes	All Teeth Lost	97	13.5% (8.9% - 18.5%)	97	14.5% (9.5% - 19.9%)
Health Outcomes	COPD	98	10.0% (8.1% - 11.9%)	98	7.8% (6.5% - 9.3%)
Health Outcomes	Diabetes	99	13.4% (11.4% - 15.6%)	94	10.0% (8.5% - 11.6%)
Health Outcomes	Cancer (except skin)	79	8.9% (8.0% - 9.9%)	26	6.4% (5.7% - 7.1%)
Health Outcomes	Obesity	72	38.9% (31.4% - 47.0%)	66	38.9% (31.2% - 47.1%)
Health Outcomes	Chronic Kidney Disease	99	3.9% (3.5% - 4.3%)	93	2.9% (2.6% - 3.2%)
Health Outcomes	High Cholesterol	97	39.8% (34.8% - 44.9%)	81	30.6% (26.1% - 35.3%)
Health Outcomes	Depression	92	19.1% (15.8% - 22.8%)	97	20.7% (17.1% - 24.6%)
Health Outcomes	Stroke	99	4.2% (3.6% - 4.8%)	97	3.1% (2.7% - 3.5%)
Prevention	Dental Visit	98	60.1% (56.2% - 64.1%)	98	59.2% (54.9% - 63.4%)
Prevention	Mammography	94	71.4% (66.5% - 75.8%)	92	71.8% (66.7% - 76.2%)
Prevention	Core preventive services for older women	50	38.4% (30.9% - 46.0%)	63	38.8% (31.5% - 46.6%)
Prevention	Annual Checkup	20	76.7% (71.7% - 81.1%)	44	72.7% (67.1% - 77.7%)
Prevention	Core preventive services for older men	95	37.8% (29.7% - 46.3%)	96	38.2% (30.3% - 46.5%)
Prevention	Cholesterol Screening	77	81.6% (78.5% - 84.5%)	98	76.5% (72.5% - 80.0%)

Category	Health Domain	Crude Rate Rank	Crude Rate (95% CI)	Age-Adj. Rate Rank	Age-Adj. Rate (95% CI)
Prevention	Cervical Cancer Screening	91	80.8% (77.9% - 83.7%)	95	81.3% (78.6% - 84.1%)
Prevention	Colorectal Cancer Screening	94	70.7% (67.4% - 73.7%)	97	67.4% (63.8% - 70.7%)
Prevention	Health Insurance	80	8.8% (6.8% - 11.3%)	82	9.5% (7.2% - 12.3%)
Prevention	Taking BP Medication	10	82.2% (79.1% - 84.9%)	13	60.1% (55.0% - 64.8%)
Disability	Hearing Disability	99	9.2% (8.1% - 10.5%)	97	6.9% (6.0% - 7.8%)
Disability	Cognitive Disability	95	13.0% (10.8% - 15.2%)	97	13.9% (11.6% - 16.6%)
Disability	Independent Living Disability	99	8.5% (7.1% - 10.0%)	98	8.0% (6.7% - 9.4%)
Disability	Mobility Disability	99	15.7% (13.0% - 18.3%)	97	11.9% (10.0% - 14.0%)
Disability	Self-care Disability	99	4.8% (4.1% - 5.7%)	97	4.0% (3.4% - 4.7%)
Disability	Any Disability	99	30.7% (26.0% - 35.3%)	97	27.2% (22.7% - 31.8%)
Disability	Vision Disability	97	5.7% (4.8% - 6.8%)	95	5.0% (4.2% - 5.8%)

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

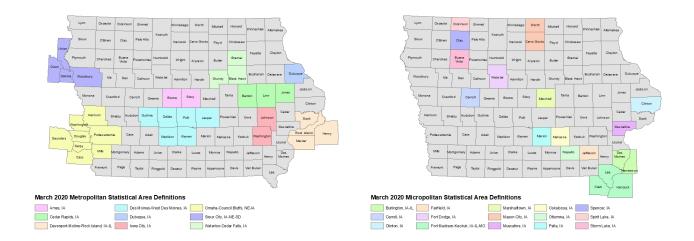
# **Appendix 3: Rural Counties**

Appanoose County falls into the group of rural counties. In this data, 63 counties fall into this group. The table below lists all counties in the group, sorted by the population estimate in the CDC PLACES dataset.

County	Population	County	Population	County	Population
Sioux County	35,893	Lyon County	12,011	Pocahontas County	7,074
Boone County	26,723	Chickasaw County	11,887	Ida County	6,956
Plymouth County	25,650	Shelby County	11,770	Fremont County	6,567
Buchanan County	20,657	Cherokee County	11,503	Wayne County	6,508
Henry County	20,387	Louisa County	10,749	Osceola County	6,159
Winneshiek County	19,892	Hancock County	10,663	Taylor County	5,868
Jackson County	19,368	Winnebago County	10,656	Audubon County	5,635
Fayette County	19,258	Mitchell County	10,555	Ringgold County	4,639
Poweshiek County	18,586	Montgomery County	10,322	Adams County	3,641
Cedar County	18,410	Franklin County	9,952		
Delaware County	17,510	Calhoun County	9,915		
Clayton County	16,998	Keokuk County	9,914		
Tama County	16,867	Clarke County	9,785		
Hardin County	16,708	Sac County	9,752		
Iowa County	16,568	Humboldt County	9,634		
Crawford County	16,193	Howard County	9,478		
Floyd County	15,413	Emmet County	9,321		
Page County	15,197	Davis County	9,138		
Hamilton County	14,887	Palo Alto County	8,906		
Kossuth County	14,529	Greene County	8,717		
Butler County	14,332	Lucas County	8,710		
O'Brien County	14,015	Monona County	8,574		
Allamakee County	13,926	Decatur County	7,659		
Cass County	13,050	Monroe County	7,610		
Wright County	12,785	Adair County	7,541		
Appanoose County	12,257	Worth County	7,385		
Union County	12,018	Van Buren County	7,243		

Metropolitan and micropolitan areas can be found in the link and the maps below.

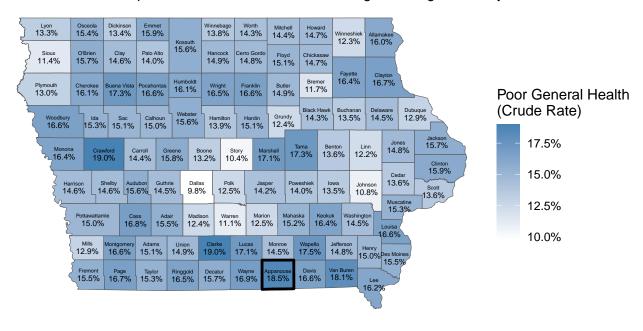
# https://www.icip.iastate.edu/maps/refmaps/cofips



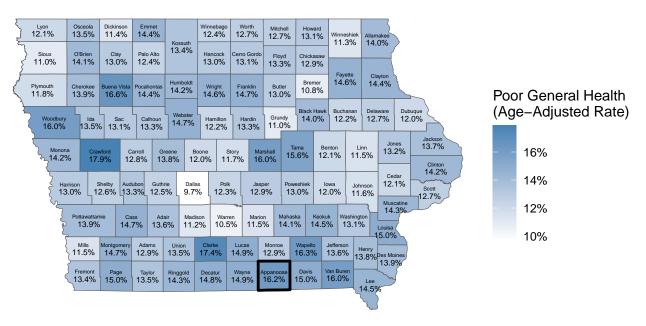
# **Appendix 4: County Maps**

Poor General Health

Fair or poor self-rated health status among adults aged >= 18 years

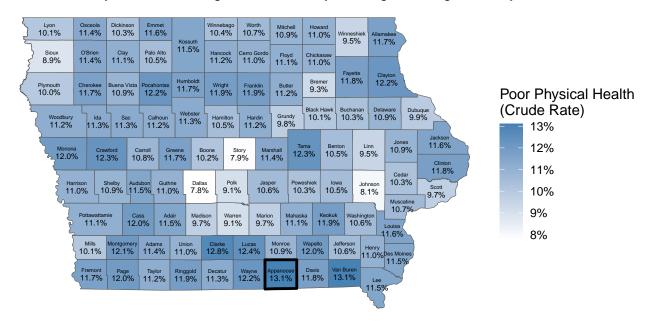


Data Source: CDC PLACES 2023 Release, BRFSS 2021

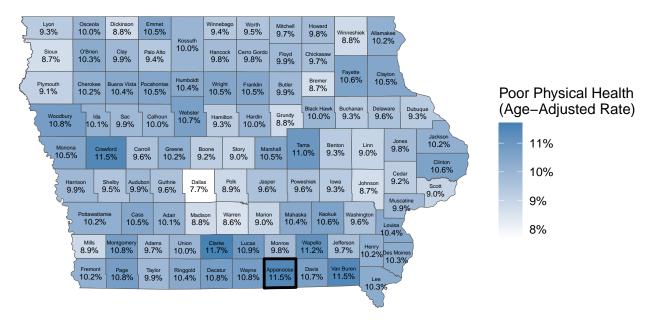


### Poor Physical Health

Physical health not good for >=14 days among adults aged >=18 years

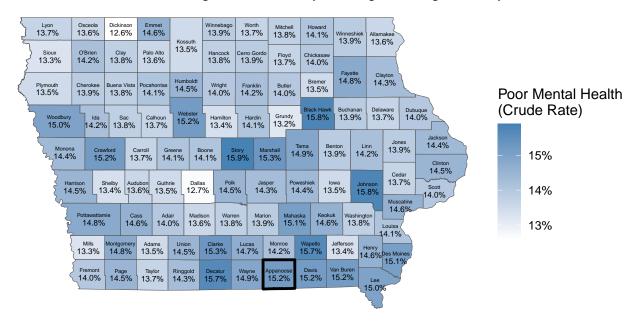


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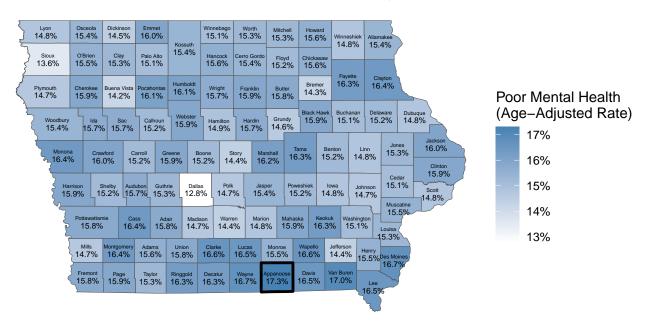


#### Poor Mental Health

#### Mental health not good for >=14 days among adults aged >=18 years

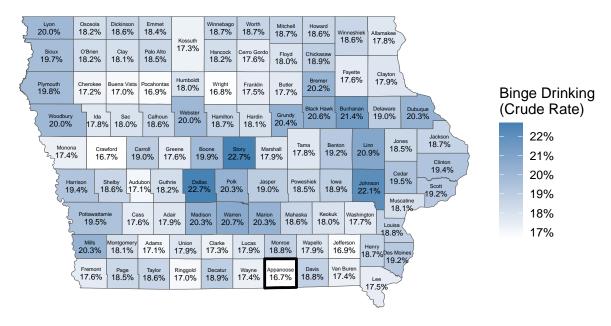


Data Source: CDC PLACES 2023 Release, BRFSS 2021

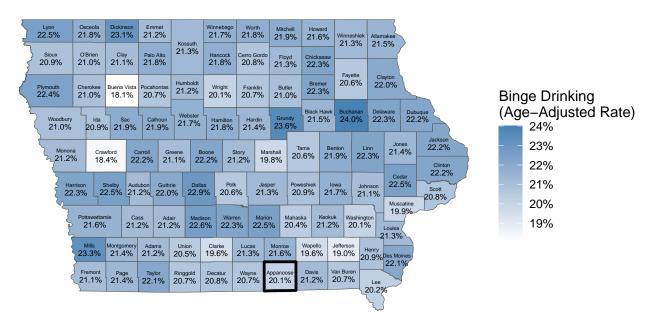


Binge Drinking

#### Binge drinking among adults aged >=18 years

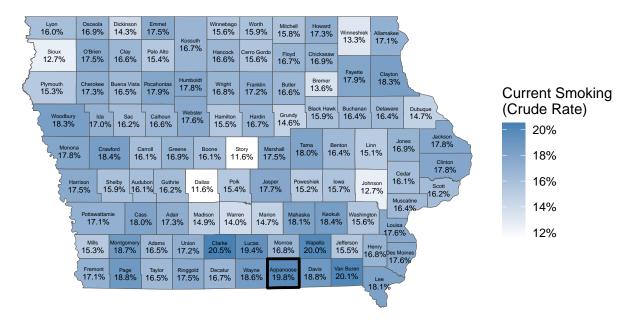


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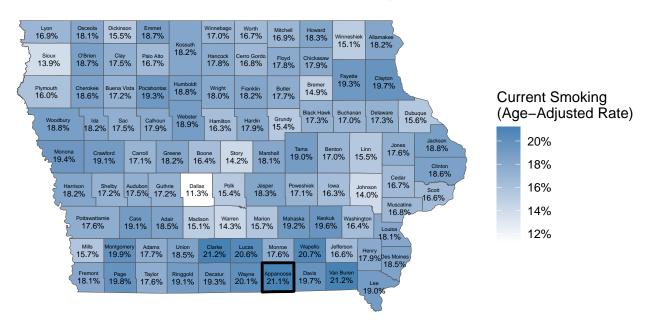


### **Current Smoking**

#### Current smoking among adults aged >=18 years

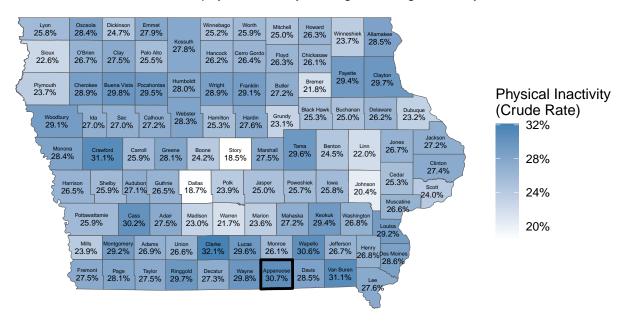


Data Source: CDC PLACES 2023 Release, BRFSS 2021

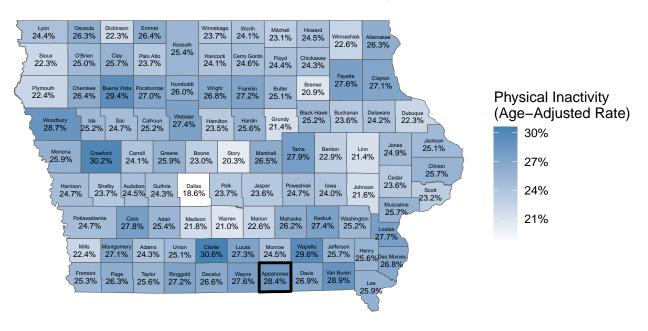


### **Physical Inactivity**

No leisure–time physical activity among adults aged >=18 years

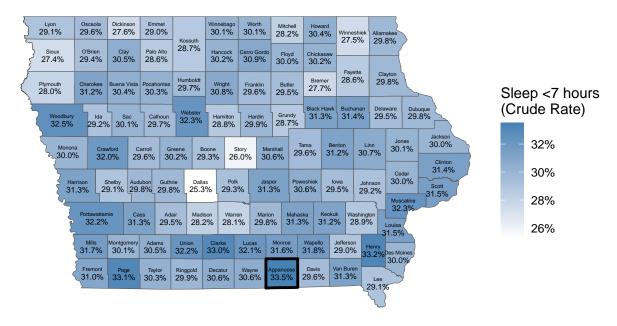


Data Source: CDC PLACES 2023 Release, BRFSS 2021

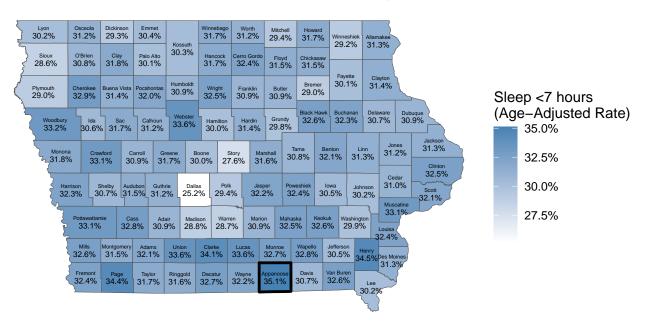


Sleep <7 hours

#### Sleeping less than 7 hours among adults aged >=18 years

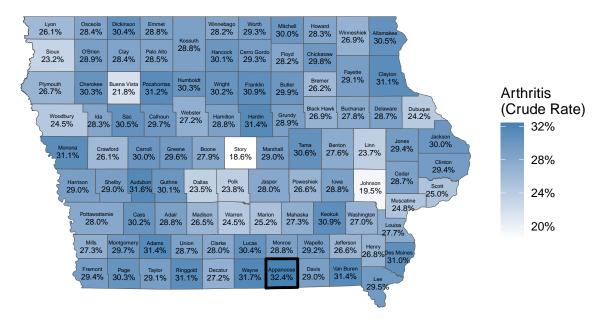


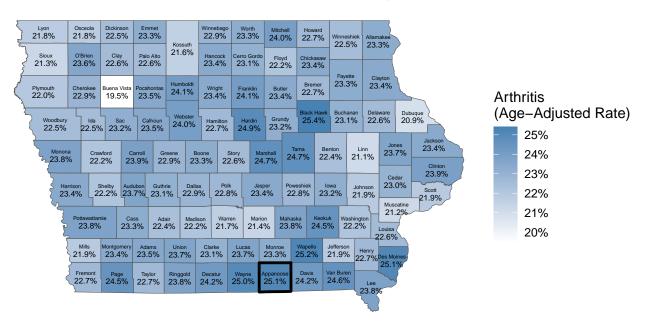
Data Source: CDC PLACES 2023 Release, BRFSS 2020



Arthritis

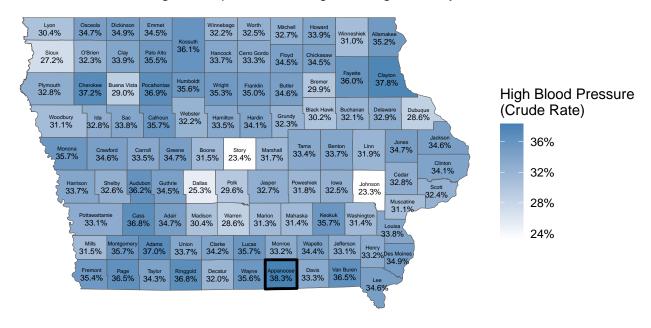
Arthritis among adults aged >=18 years



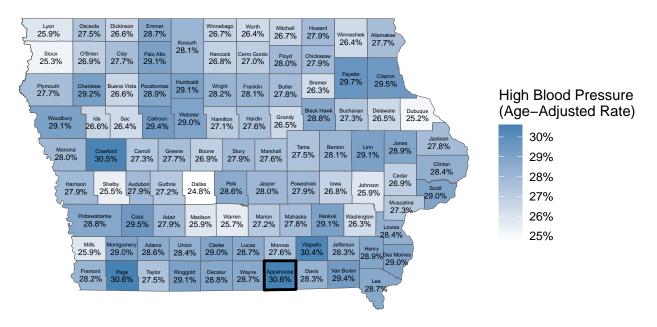


## High Blood Pressure

High blood pressure among adults aged >=18 years

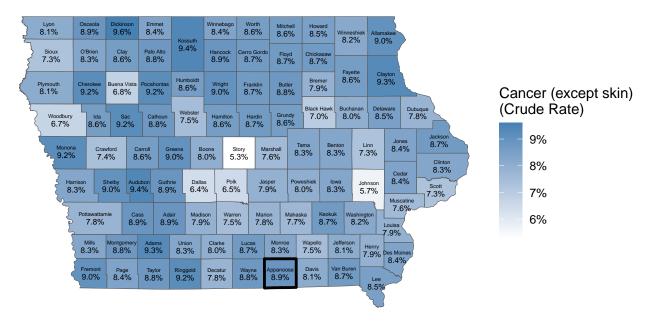


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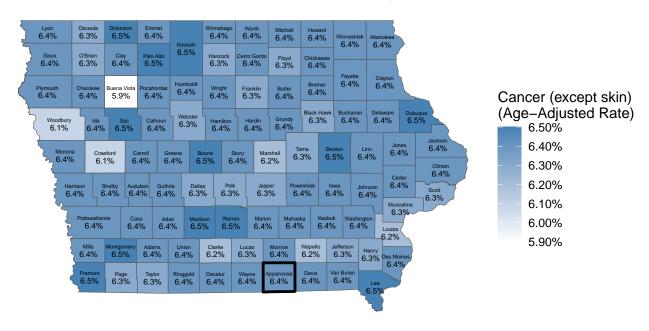


### Cancer (except skin)

Cancer (excluding skin cancer) among adults aged >=18 years

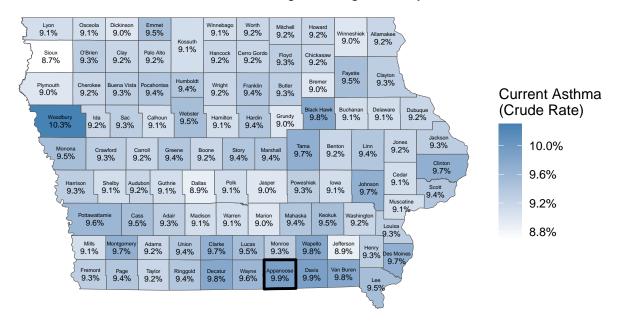


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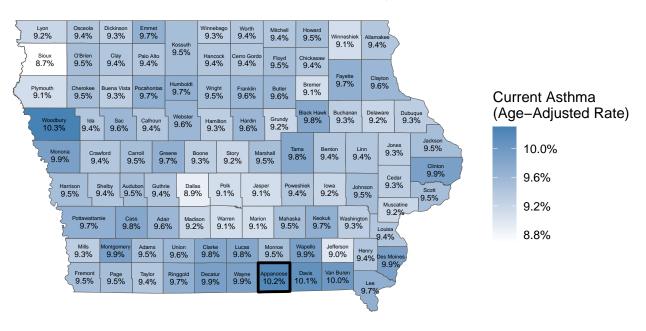


#### **Current Asthma**

#### Current asthma among adults aged >=18 years

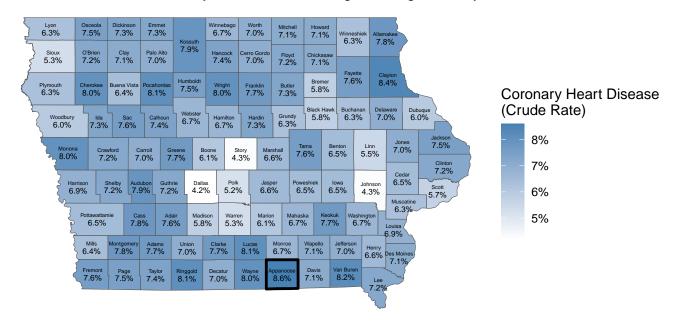


Data Source: CDC PLACES 2023 Release, BRFSS 2021

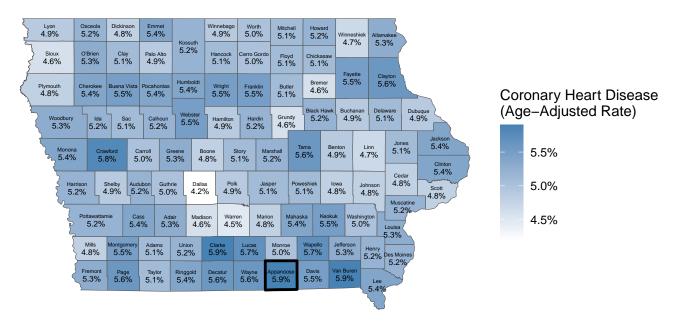


### **Coronary Heart Disease**

#### Coronary heart disease among adults aged >=18 years

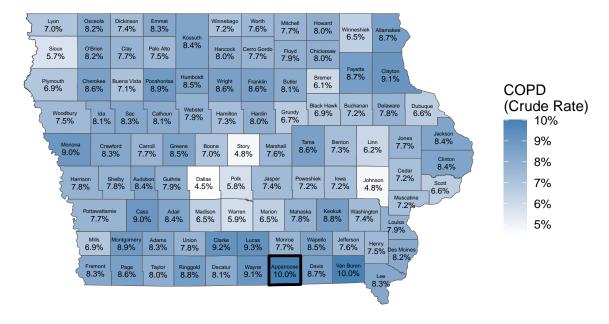


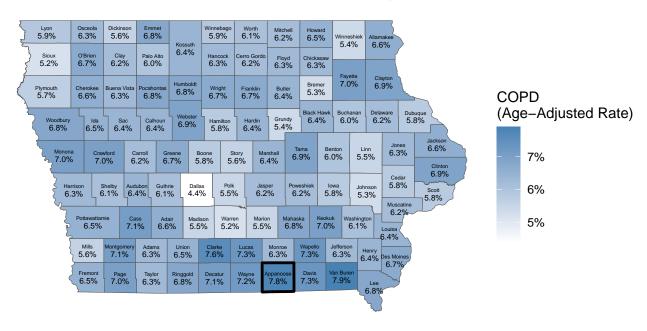
Data Source: CDC PLACES 2023 Release, BRFSS 2021



COPD

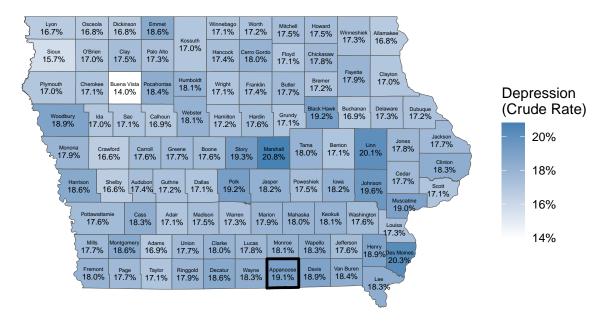
Chronic obstructive pulmonary disease among adults aged >=18 years



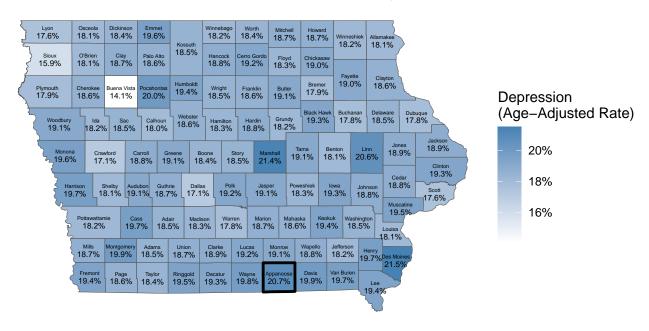


Depression

#### Depression among adults aged >=18 years

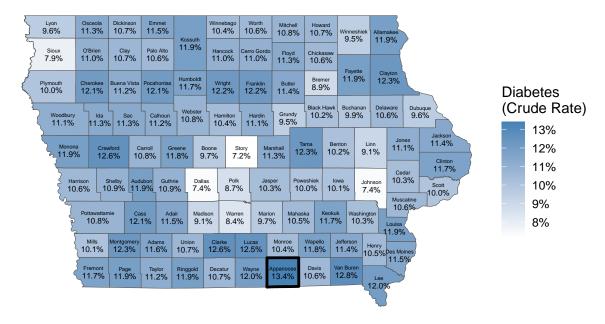


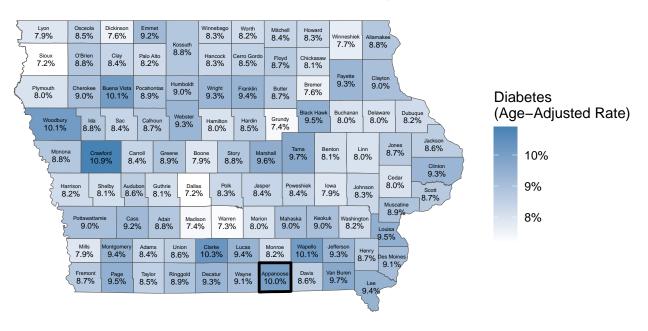
Data Source: CDC PLACES 2023 Release, BRFSS 2021



Diabetes

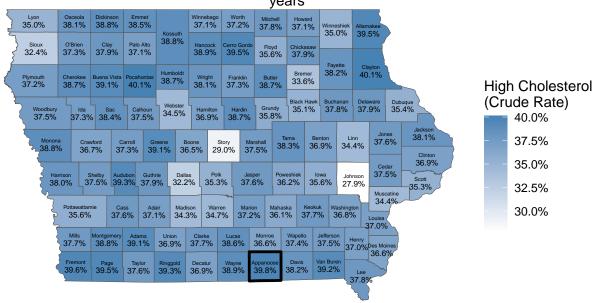
Diagnosed diabetes among adults aged >=18 years



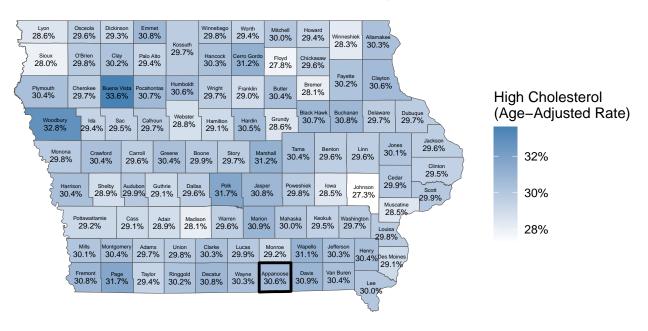


## **High Cholesterol**

High cholesterol among adults aged >=18 years who have been screened in the past 5 years

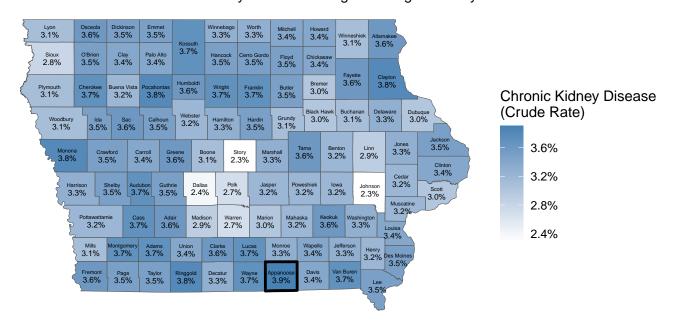


Data Source: CDC PLACES 2023 Release, BRFSS 2021

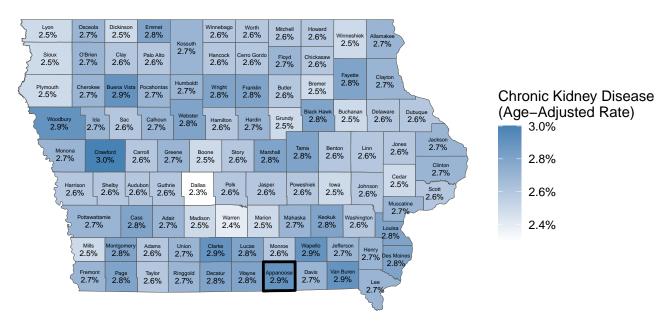


## **Chronic Kidney Disease**

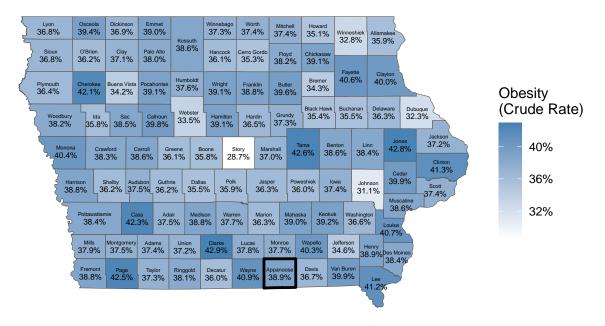
Chronic kidney disease among adults aged >=18 years

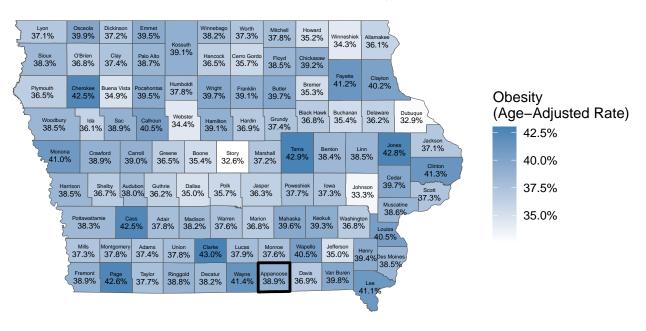


Data Source: CDC PLACES 2023 Release, BRFSS 2021

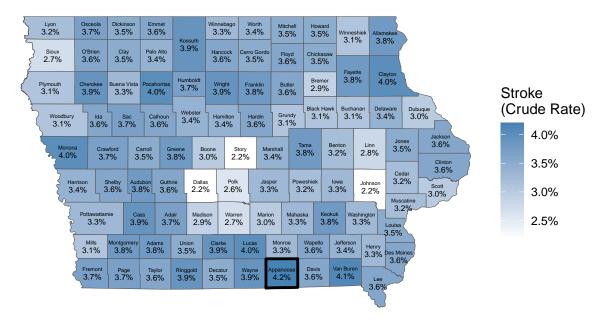


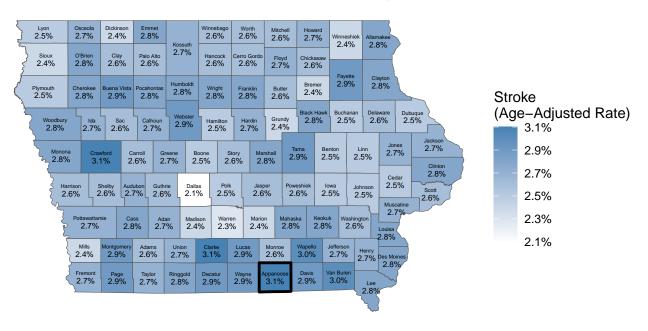
Obesity
Obesity among adults aged >=18 years



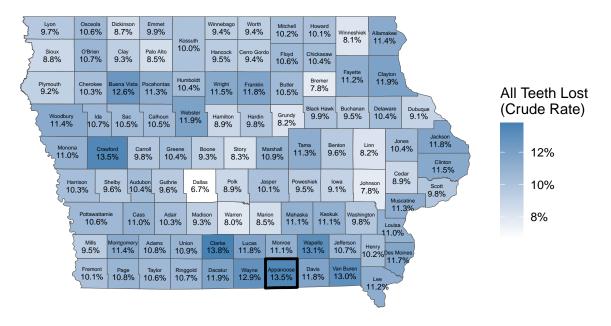


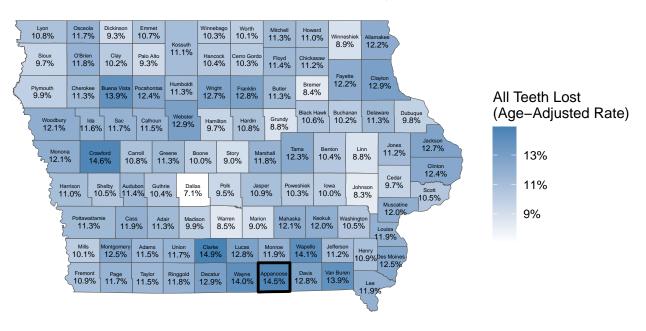
Stroke
Stroke among adults aged >=18 years





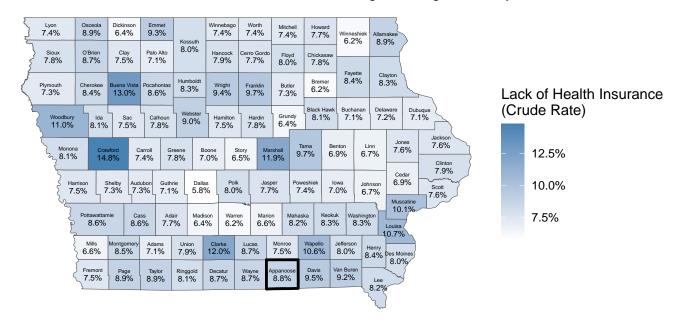
All Teeth Lost
All teeth lost among adults aged >=65 years



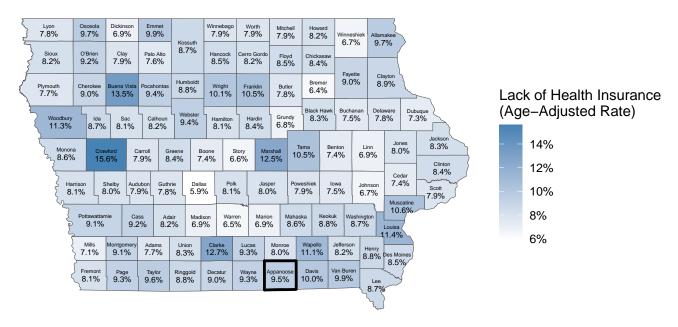


#### Lack of Health Insurance

#### Current lack of health insurance among adults aged 18-64 years

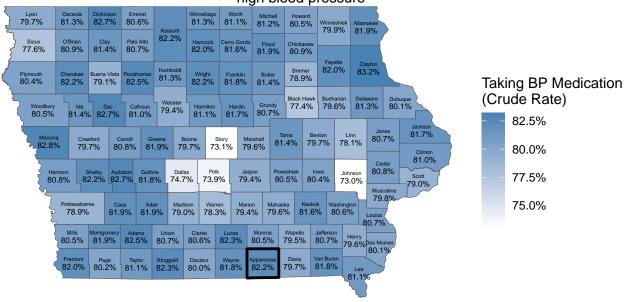


Data Source: CDC PLACES 2023 Release, BRFSS 2021

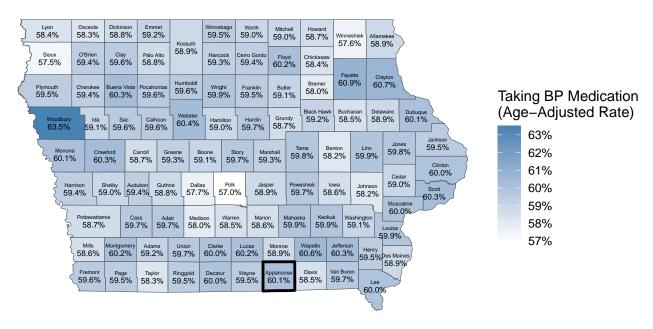


## Taking BP Medication

Taking medicine for high blood pressure control among adults aged >=18 years with high blood pressure

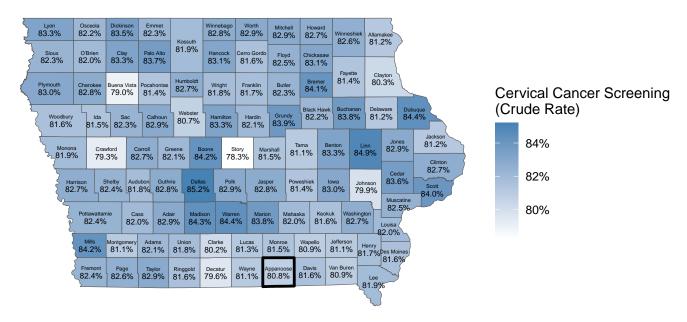


Data Source: CDC PLACES 2023 Release, BRFSS 2021

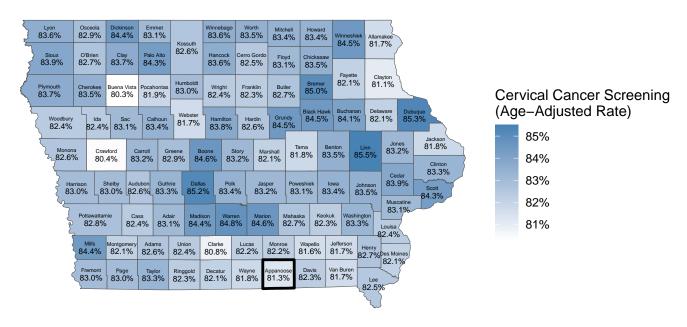


## **Cervical Cancer Screening**

Cervical cancer screening among adult women aged 21-65 years

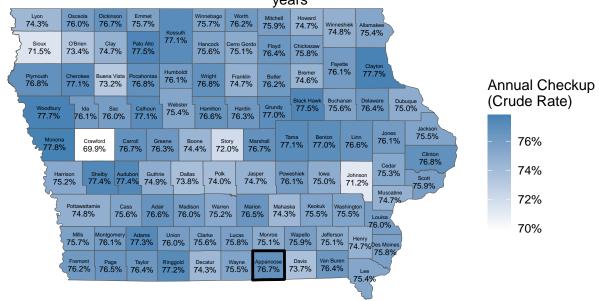


Data Source: CDC PLACES 2023 Release, BRFSS 2020

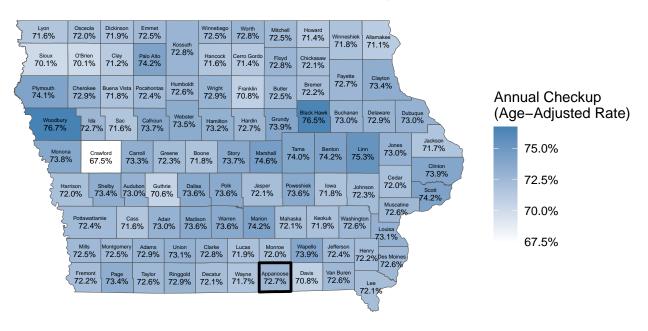


## **Annual Checkup**

Visits to doctor for routine checkup within the past year among adults aged >=18 years

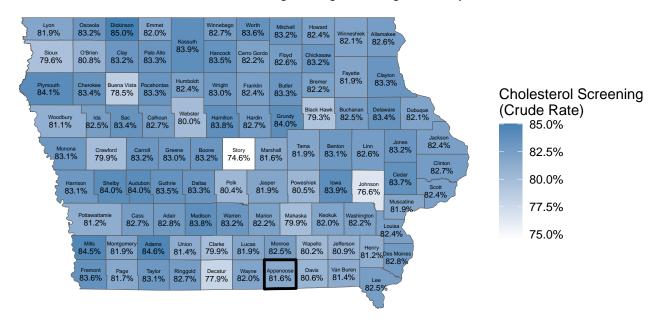


Data Source: CDC PLACES 2023 Release, BRFSS 2021

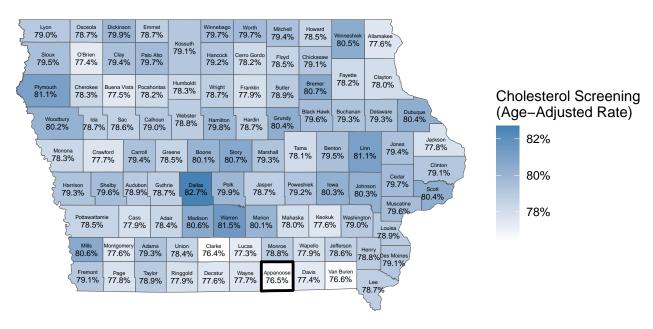


## **Cholesterol Screening**

Cholesterol screening among adults aged >=18 years

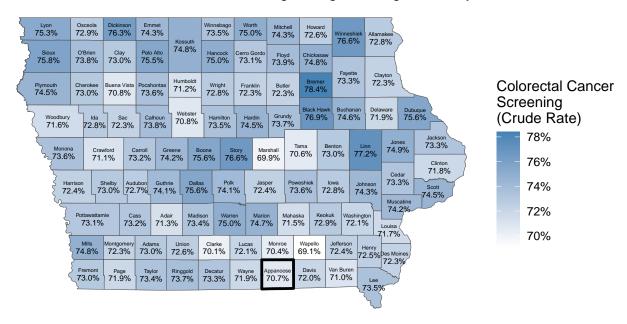


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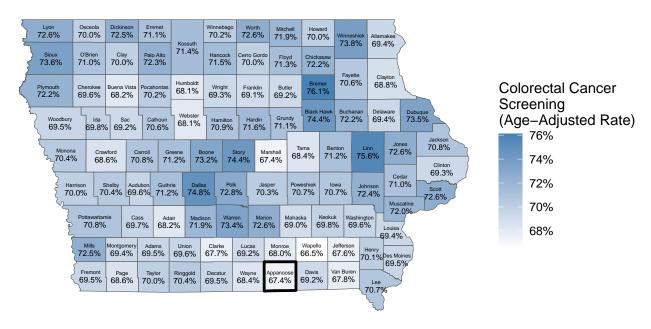


## Colorectal Cancer Screening

Colorectal cancer screening among adults aged 50-75 years

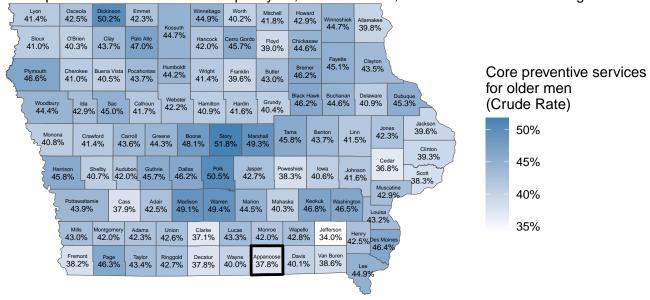


Data Source: CDC PLACES 2023 Release, BRFSS 2020

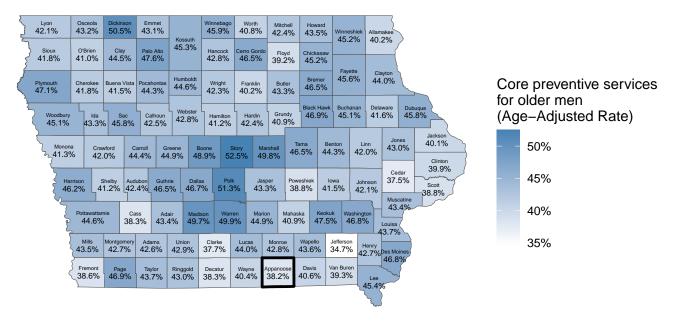


# Core preventive services for older men

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

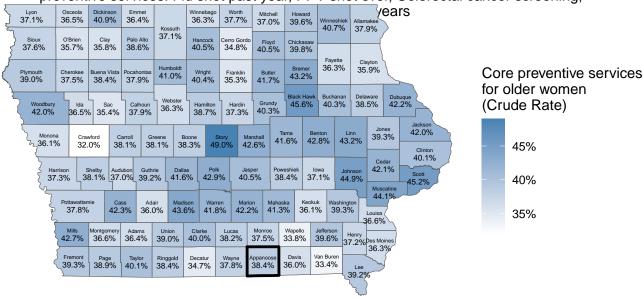


Data Source: CDC PLACES 2023 Release, BRFSS 2020

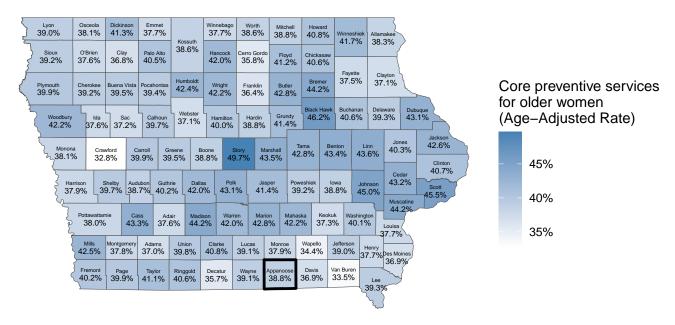


### Core preventive services for older women

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,

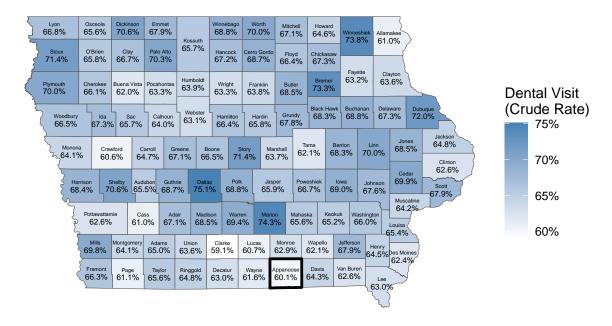


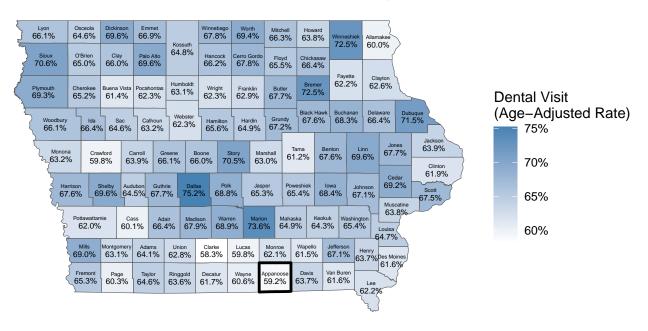
Data Source: CDC PLACES 2023 Release, BRFSS 2020



Dental Visit

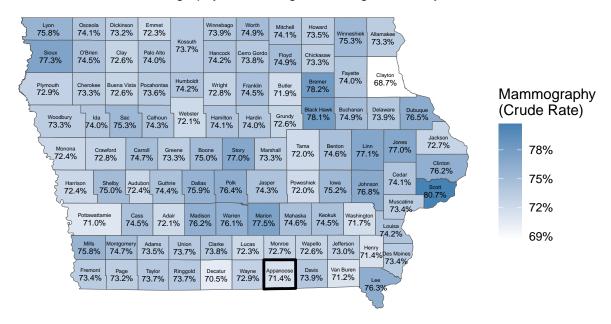
Visits to dentist or dental clinic among adults aged >=18 years



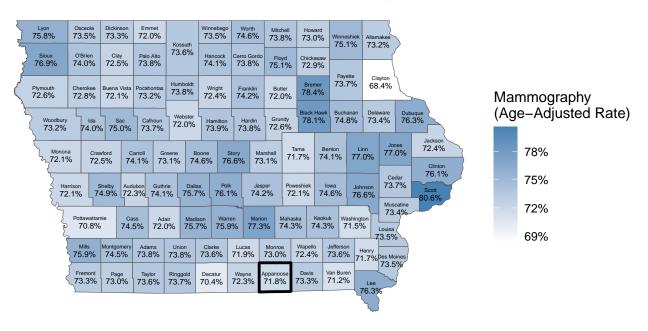


## Mammography

#### Mammography use among women aged 50-74 years

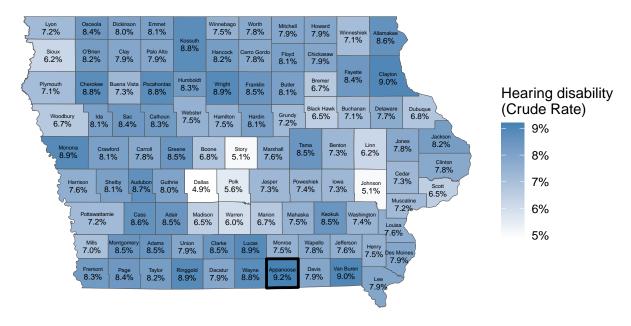


Data Source: CDC PLACES 2023 Release, BRFSS 2020

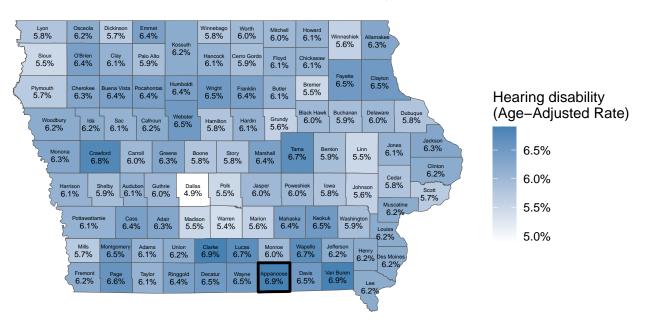


## Hearing disability

#### Hearing disability among adults aged >=18 years

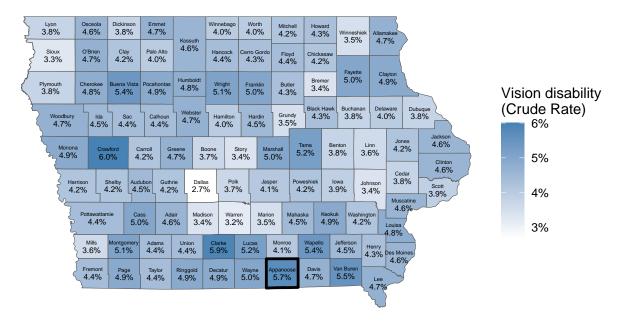


Data Source: CDC PLACES 2023 Release, BRFSS 2021

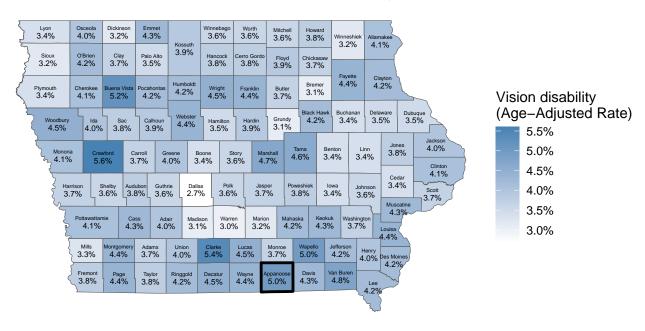


# Vision disability

#### Vision disability among adults aged >=18 years

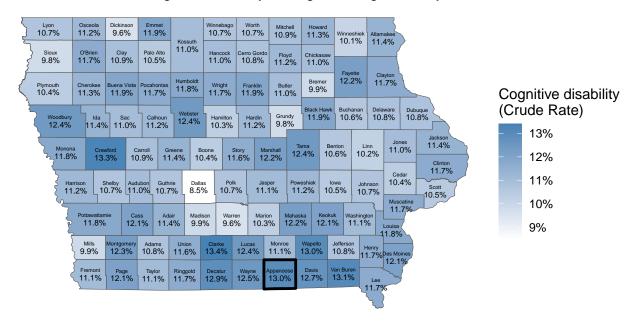


Data Source: CDC PLACES 2023 Release, BRFSS 2021

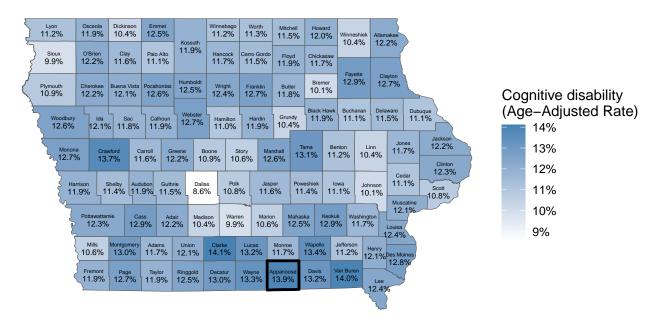


## Cognitive disability

#### Cognitive disability among adults aged >=18 years

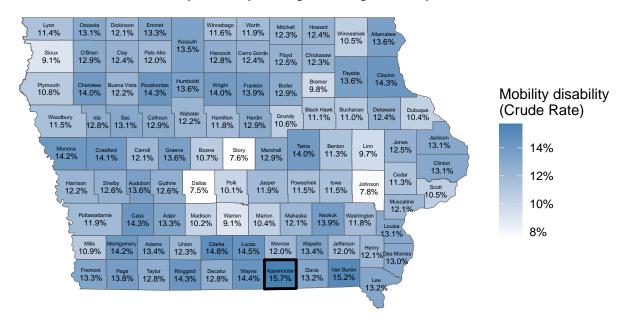


Data Source: CDC PLACES 2023 Release, BRFSS 2021

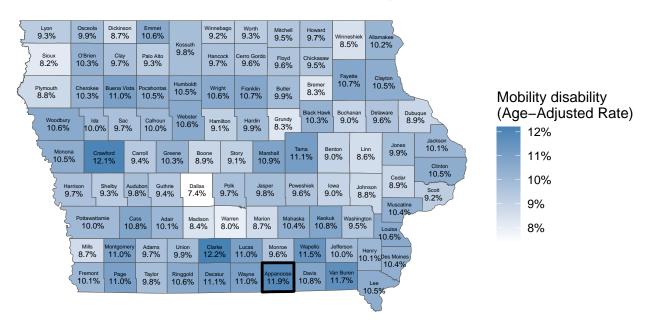


### Mobility disability

#### Mobility disability among adults aged >=18 years

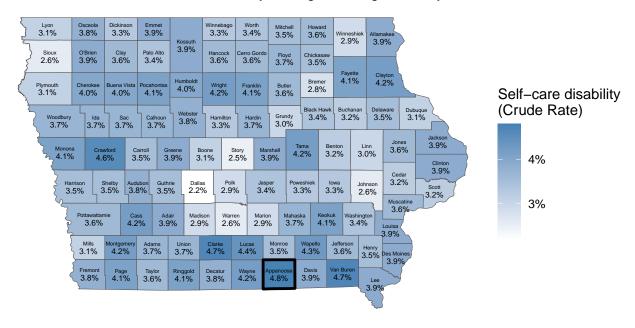


Data Source: CDC PLACES 2023 Release, BRFSS 2021

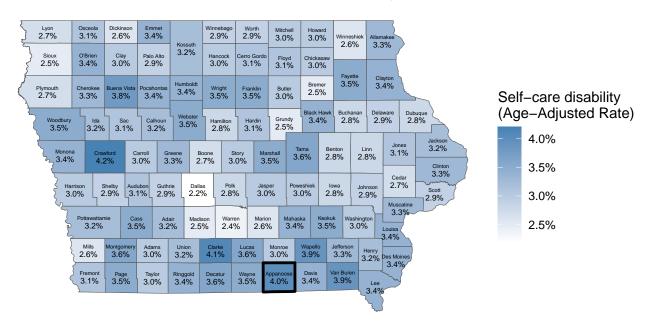


# Self-care disability

#### Self-care disability among adults aged >=18 years

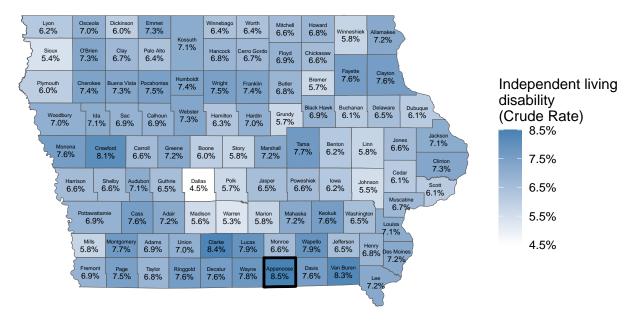


Data Source: CDC PLACES 2023 Release, BRFSS 2021

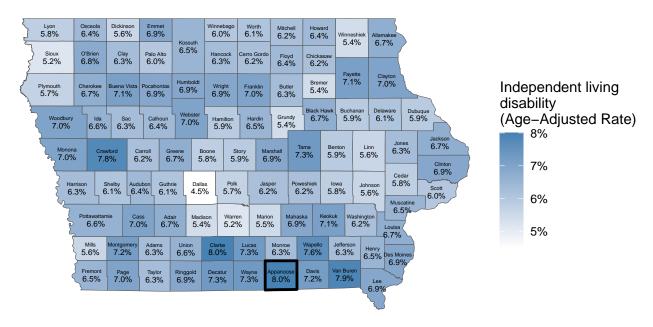


## Independent living disability

#### Independent living disability among adults aged >=18 years



Data Source: CDC PLACES 2023 Release, BRFSS 2021



Any disability

Any disability among adults aged >=18 years

