



Iowa County Health Snapshot Series

*99 county 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 County Health Snapshot Series

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Health in Warren County: Overview

Dear Community Members & Stakeholders of Warren County,

We are pleased to share the Iowa County 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's 99 counties. The following pages include the health snapshot for your county. The snapshot can be used to see how Warren County ranks across various health measures compared to the rest of the state and similarly-sized counties. This comparison allows us to identify Warren 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 Iowa counties and counties of similar size to Warren 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	Metropolitan Non-Core County Rank	Health Domain	Statewide County Rank	Metropolitan Non-Core County Rank
Health Insurance	2nd	2nd	Coronary Heart Disease	2nd	2nd
Vision Disability	2nd	2nd	Self-care Disability	2nd	2nd
Independent Living Disability	2nd	2nd	Chronic Kidney Disease	2nd	2nd
Cognitive Disability	2nd	2nd	Vision Disability	2nd	2nd
Cervical Cancer Screening	3rd	2nd	Hearing Disability	2nd	2nd

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	Metropolitan Non-Core County Rank	Health Domain	Statewide County Rank	Metropolitan Non-Core County Rank
Binge Drinking	94th	11th	Cancer (except skin)	88th	10th
Taking BP Medication	92nd	11th	Taking BP Medication	85th	8th
Annual Checkup	70th	7th	Binge Drinking	83rd	6th
Obesity	51st	7th	Obesity	41st	8th
Depression	33rd	6th	High Cholesterol	30th	5th

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 Warren County.

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

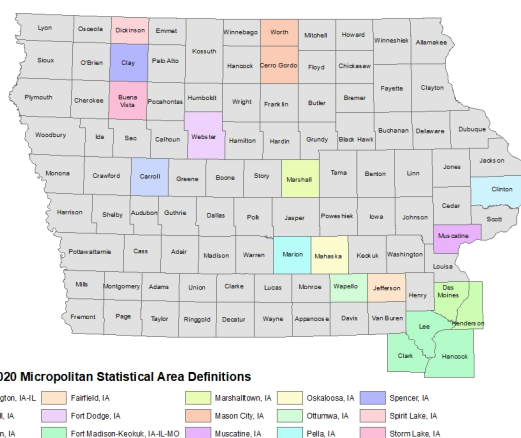
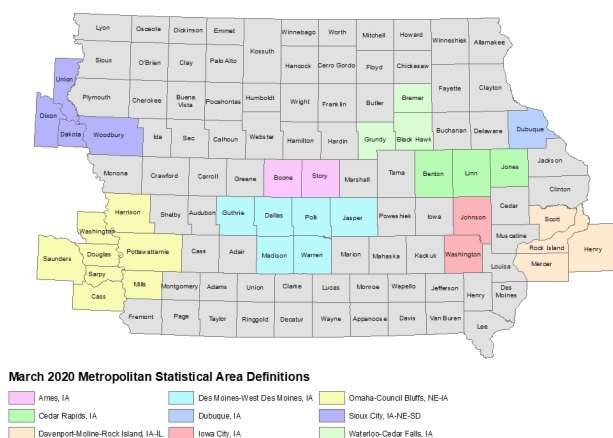
The purpose of the Iowa County Health Snapshot Series is to provide an overview of health in Warren County that can be used to help inform health-related interventions and programming. This report contains five sections, including the overall health status of Warren County, a review of risky behaviors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

With a population of 53,402, Warren County's similarly sized counties are defined as metropolitan non-core counties. In Iowa, metropolitan non-core counties have an average population of 29,821, and there are 12 counties that are considered metropolitan non-core 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

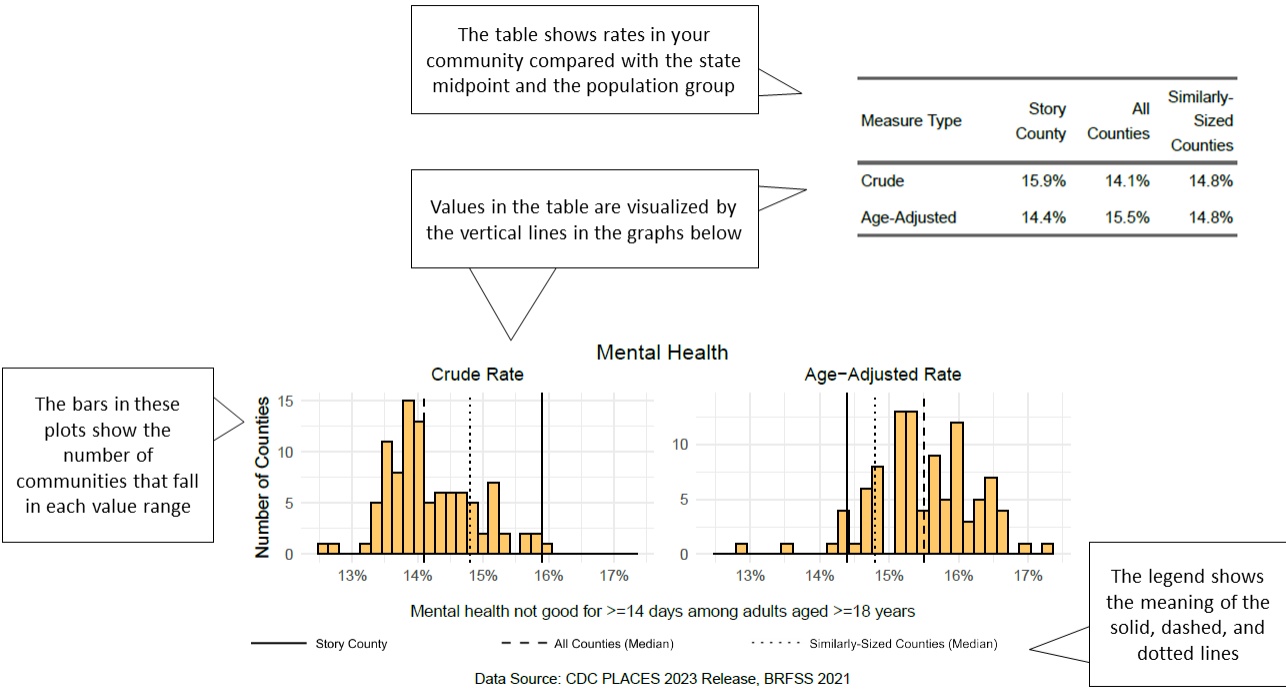
The counties included in each category above are determined by the United States Office of Management and Budget. Iowa has counties in nine metropolitan statistical areas and 15 micropolitan statistical areas. The counties identified as metropolitan and micropolitan can be found in the link and the maps 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 Iowa 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 Iowa 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

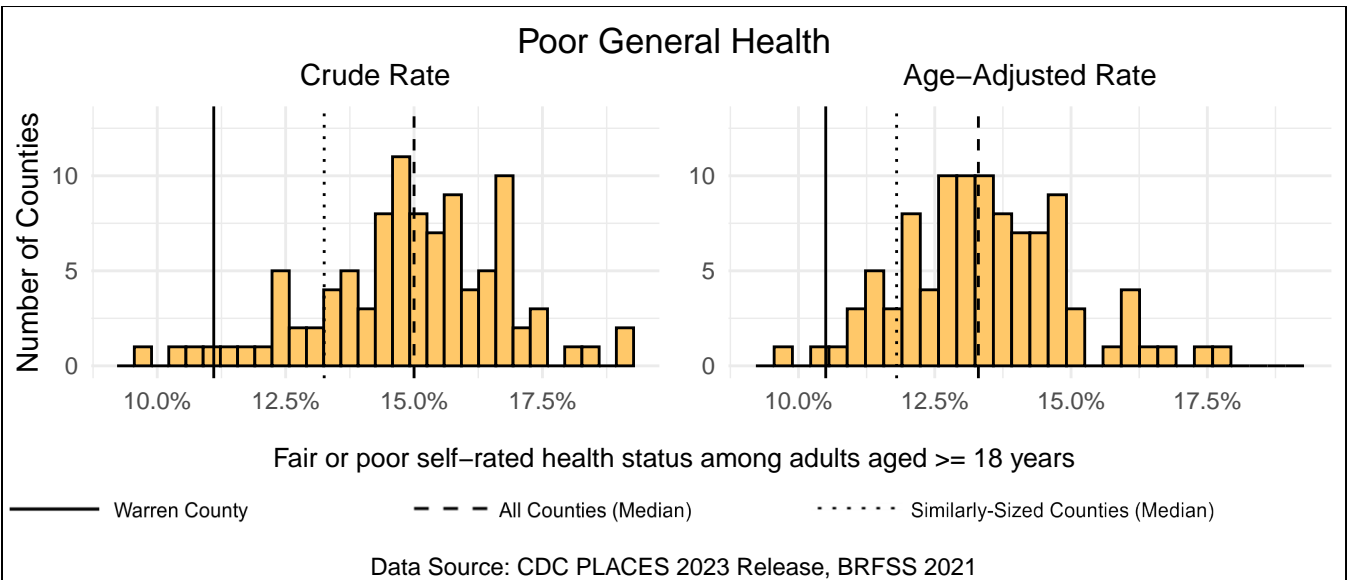
This section reflects measures for overall health, including general, physical, and mental health. These measures are a valuable way to see a simple summary of the health of a country’s population. The questions to calculate these measures ask respondents to evaluate their health status. General health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

Warren County has a crude rate of 11.1% for fair or poor self-rated health status among adults aged >= 18 years, which ranks 4th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 10.5%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

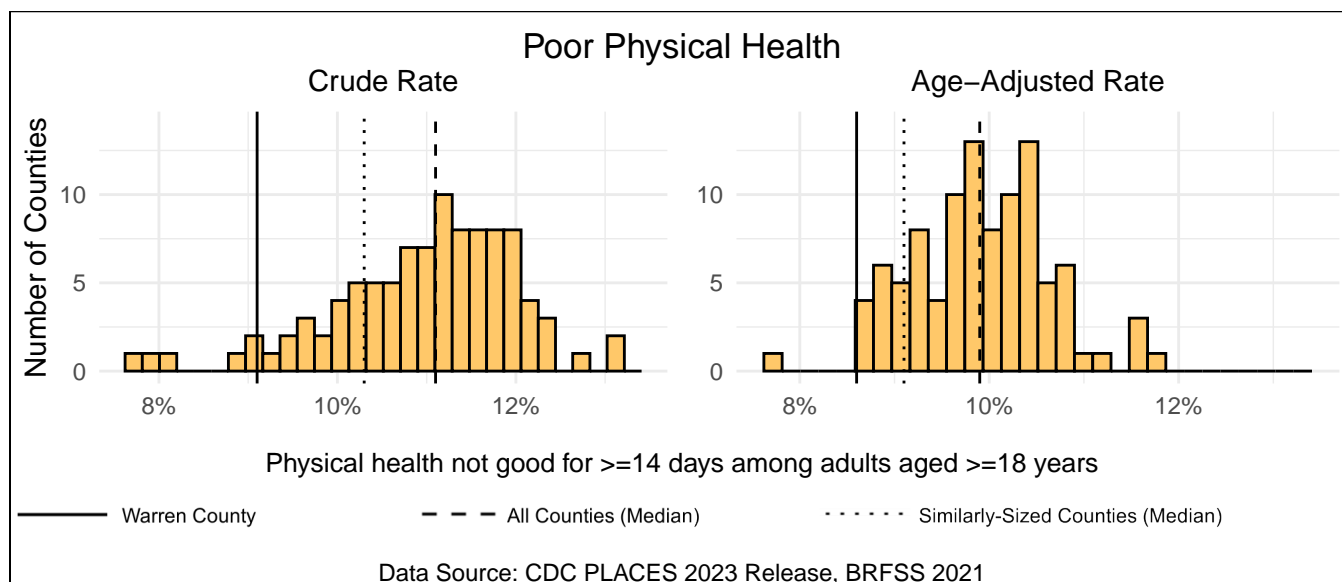
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	11.1%	15.0%	13.2%
Age-Adjusted	10.5%	13.3%	11.8%



Poor Physical Health

Warren County has a crude rate of 9.1% for physical health not good for ≥ 14 days among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 8.6%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

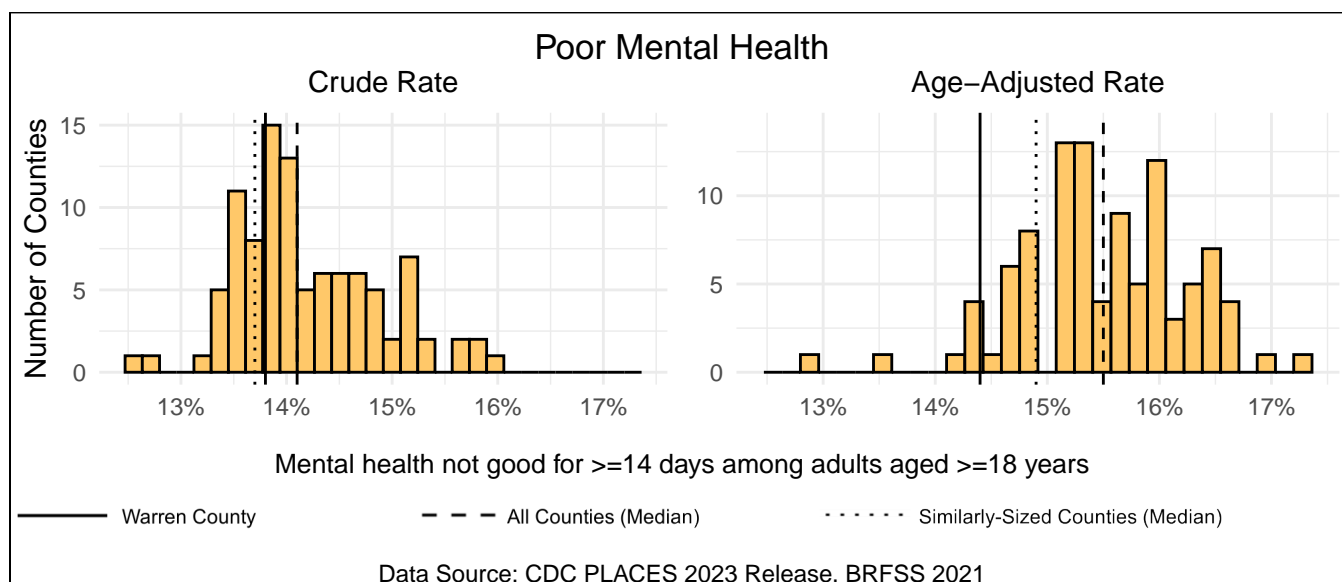
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	9.1%	11.1%	10.3%
Age-Adjusted	8.6%	9.9%	9.1%



Poor Mental Health

Warren County has a crude rate of 13.8% for mental health not good for ≥ 14 days among adults aged ≥ 18 years, which ranks 28th out of 99 Iowa counties (7th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 14.4%, which ranks 5th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	13.8%	14.1%	13.7%
Age-Adjusted	14.4%	15.5%	14.9%



Health Risk Behaviors

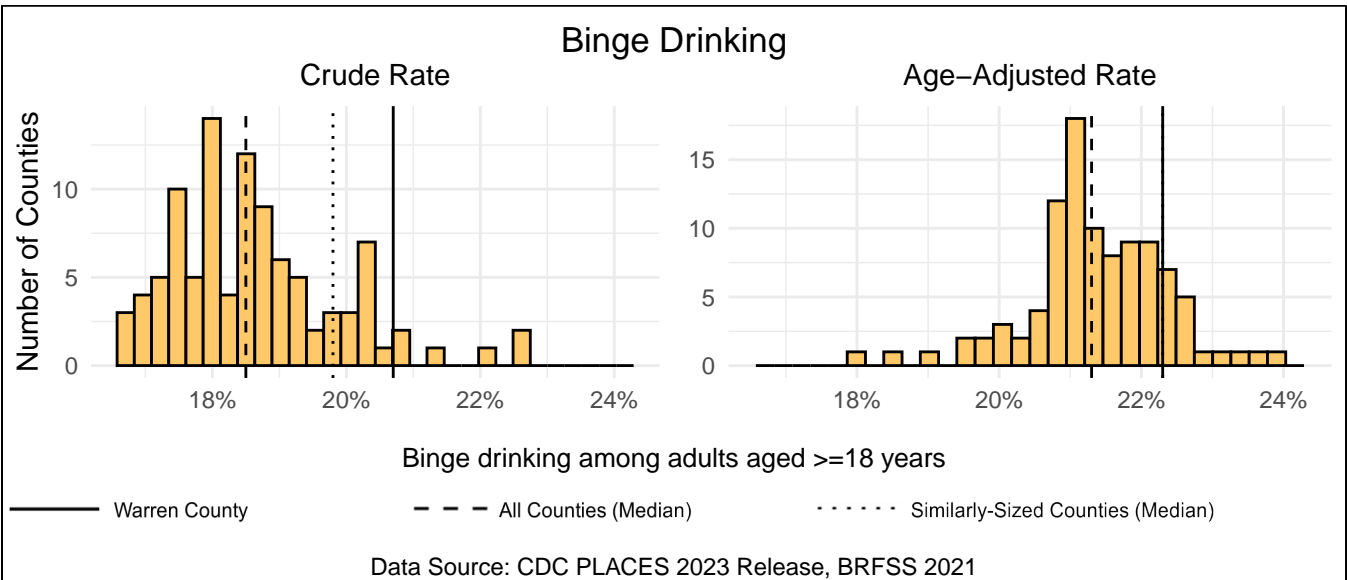
Health risk measures are measures of individual behaviors that can lead to poor health outcomes. These include binge drinking, current smoking, physical inactivity, and getting less than seven hours of nightly sleep. Risk behaviors are the most critical intervention points as they can help save lives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

Warren County has a crude rate of 20.7% for binge drinking among adults aged ≥ 18 years, which ranks 94th out of 99 Iowa counties (11th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 22.3%, which ranks 83rd out of 99 Iowa counties (6th out of 12 similarly-sized counties).

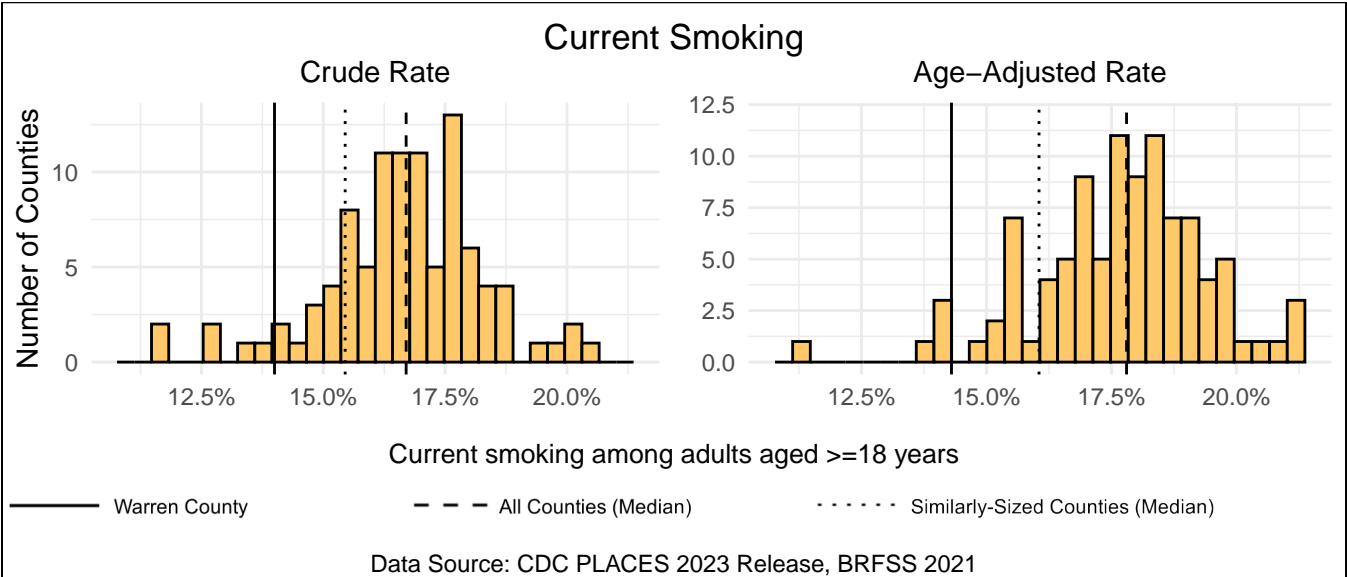
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	20.7%	18.5%	19.8%
Age-Adjusted	22.3%	21.3%	22.3%



Current Smoking

Warren County has a crude rate of 14.0% for current smoking among adults aged >=18 years, which ranks 7th out of 99 Iowa counties (3rd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 14.3%, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

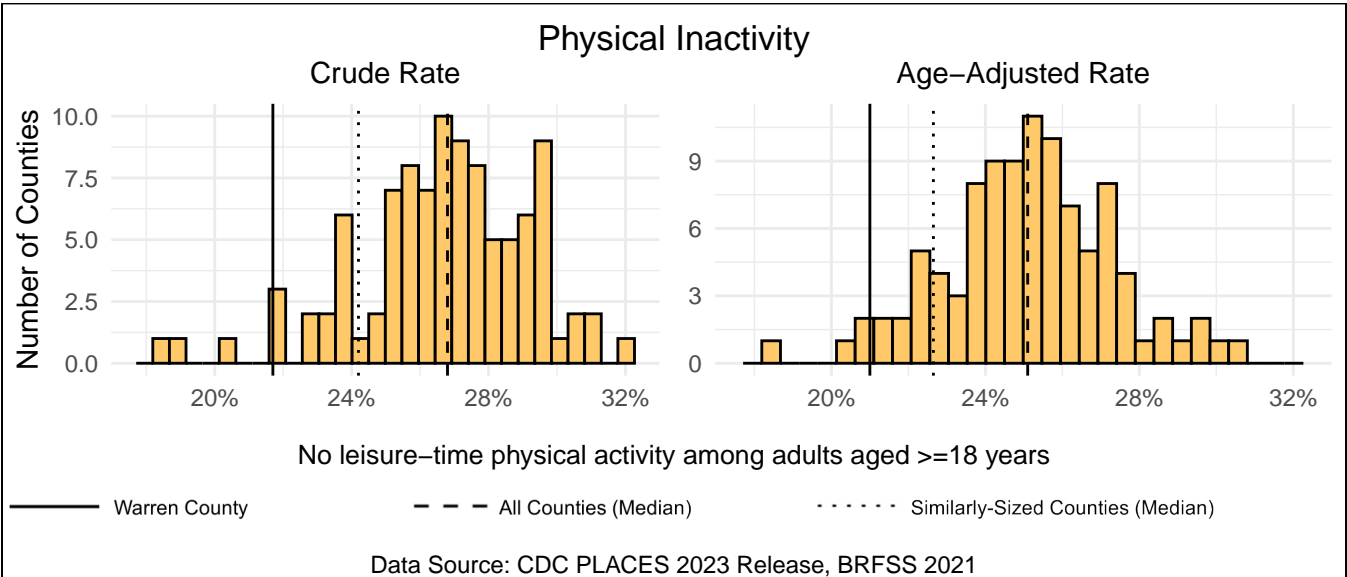
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	14.0%	16.7%	15.4%
Age-Adjusted	14.3%	17.8%	16.0%



Physical Inactivity

Warren County has a crude rate of 21.7% for no leisure-time physical activity among adults aged >=18 years, which ranks 4th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 21.0%, which ranks 4th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

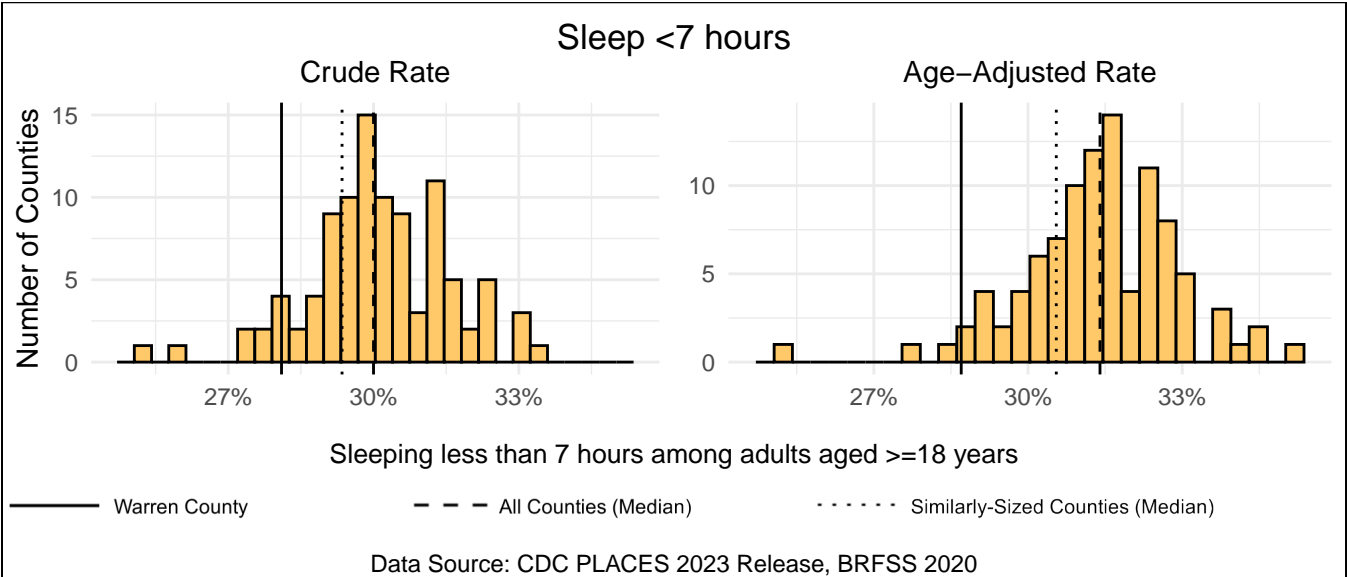
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	21.7%	26.8%	24.2%
Age-Adjusted	21.0%	25.1%	22.6%



Sleep <7 hours

Warren County has a crude rate of 28.1% for sleeping less than 7 hours among adults aged ≥ 18 years, which ranks 8th out of 99 Iowa counties (3rd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 28.7%, which ranks 4th out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	28.1%	30.0%	29.4%
Age-Adjusted	28.7%	31.4%	30.5%



Health Outcomes

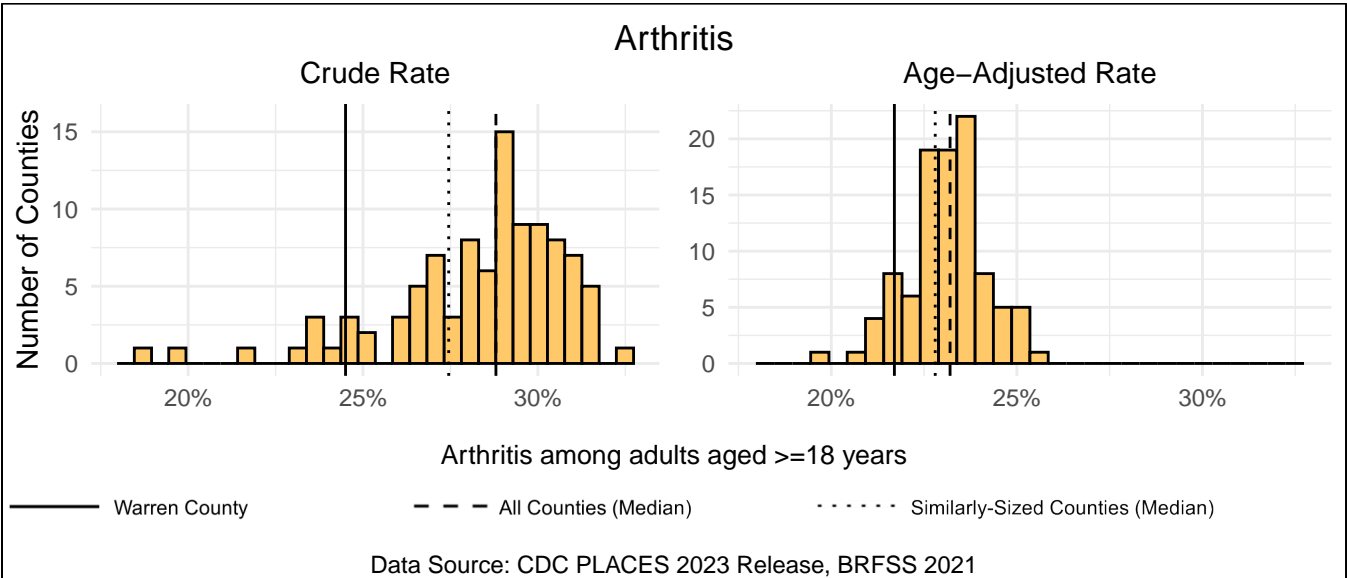
This section includes measures about specific health outcomes such as chronic illness, mental health conditions, and risk factors for future disease. Health outcome measures include but are not limited to arthritis, high blood pressure, cancer, depression, and obesity. Each measure is the percentage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

Warren County has a crude rate of 24.5% for arthritis among adults aged ≥ 18 years, which ranks 9th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 21.7%, which ranks 8th out of 99 Iowa counties (1st out of 12 similarly-sized counties).

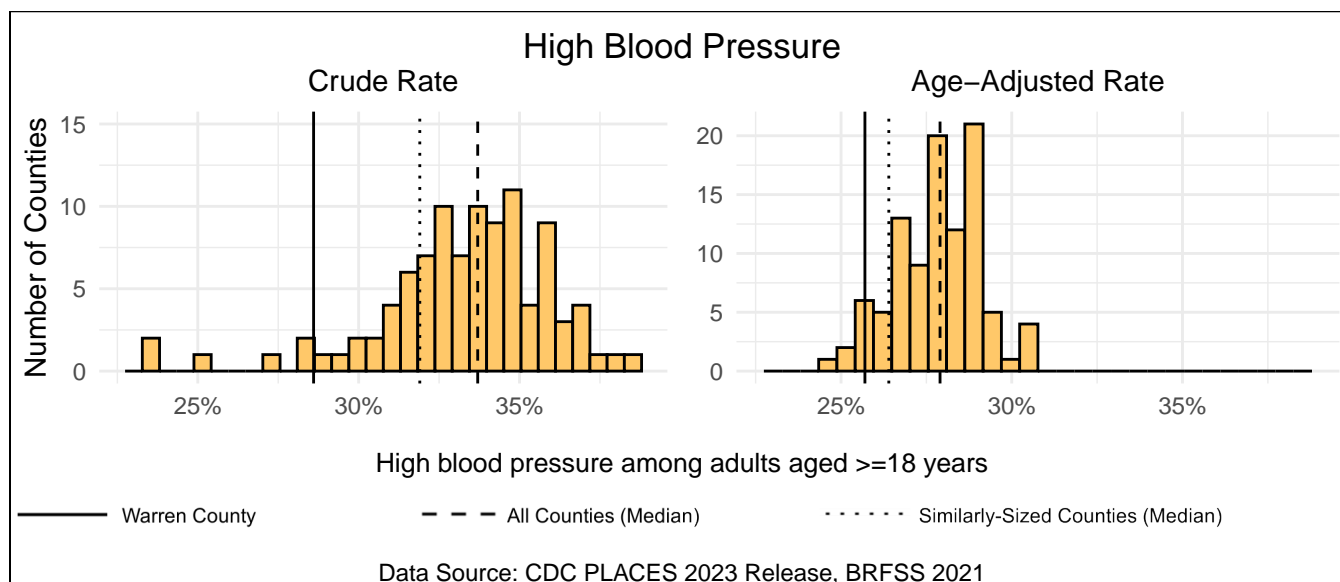
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	24.5%	28.8%	27.4%
Age-Adjusted	21.7%	23.2%	22.8%



High Blood Pressure

Warren County has a crude rate of 28.6% for high blood pressure among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 25.7%, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

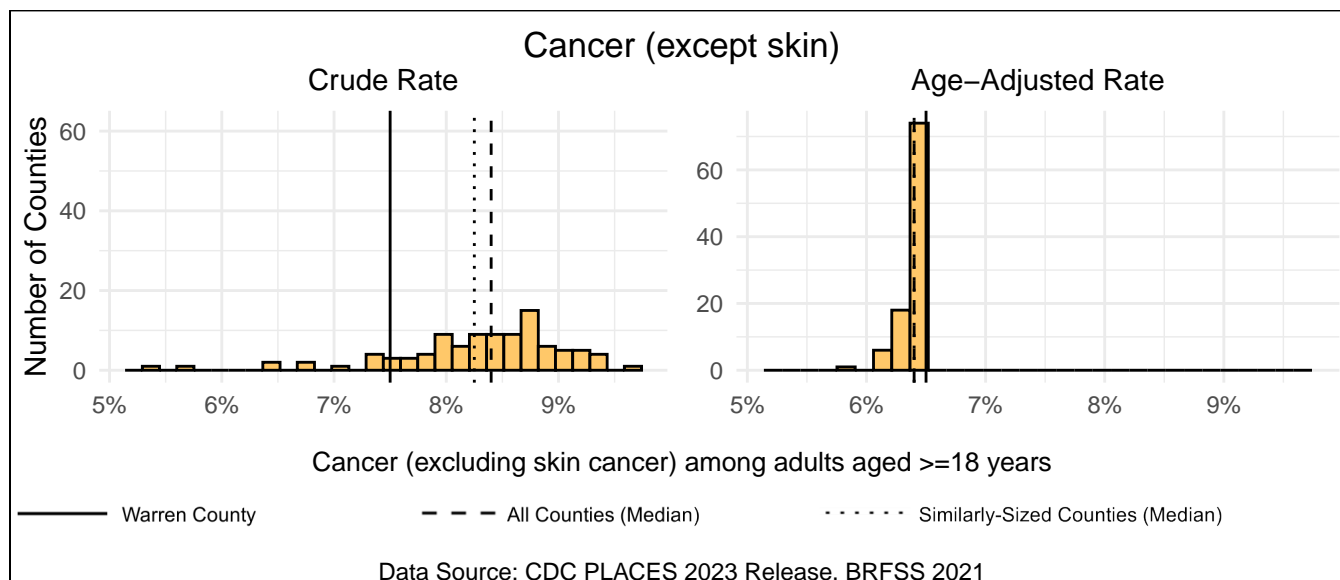
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	28.6%	33.7%	31.9%
Age-Adjusted	25.7%	27.9%	26.4%



Cancer (except skin)

Warren County has a crude rate of 7.5% for cancer (excluding skin cancer) among adults aged ≥ 18 years, which ranks 12th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 6.5%, which ranks 88th out of 99 Iowa counties (10th out of 12 similarly-sized counties).

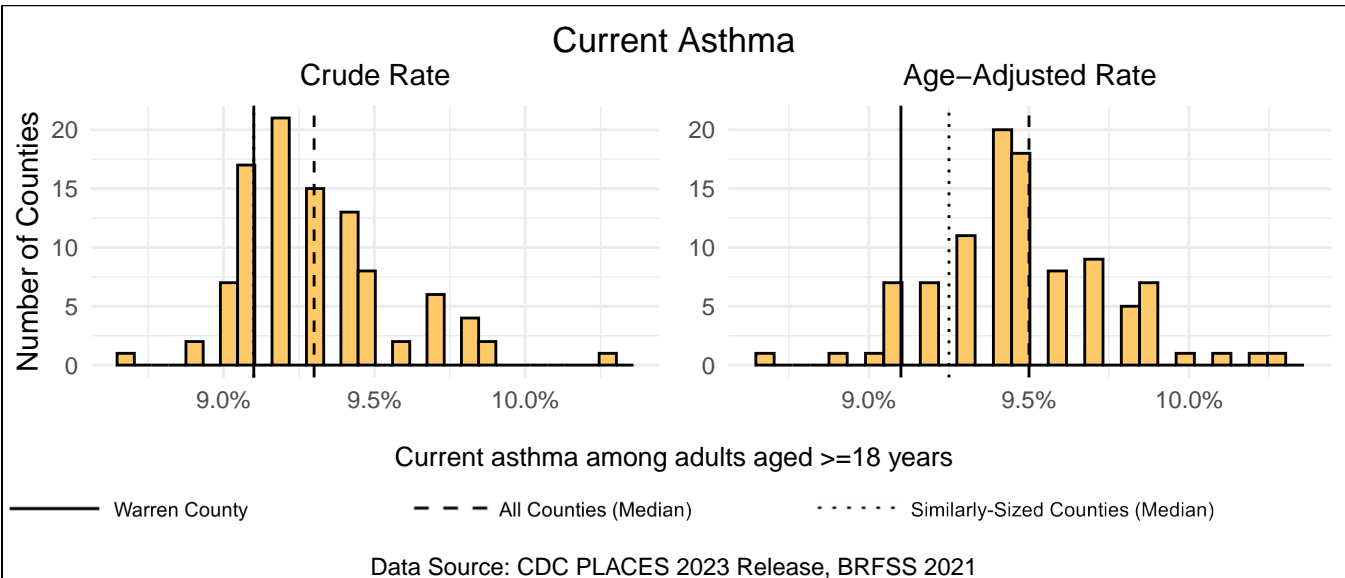
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	7.5%	8.4%	8.2%
Age-Adjusted	6.5%	6.4%	6.4%



Current Asthma

Warren County has a crude rate of 9.1% for current asthma among adults aged ≥ 18 years, which ranks 11th out of 99 Iowa counties (5th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 9.1%, which ranks 4th out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

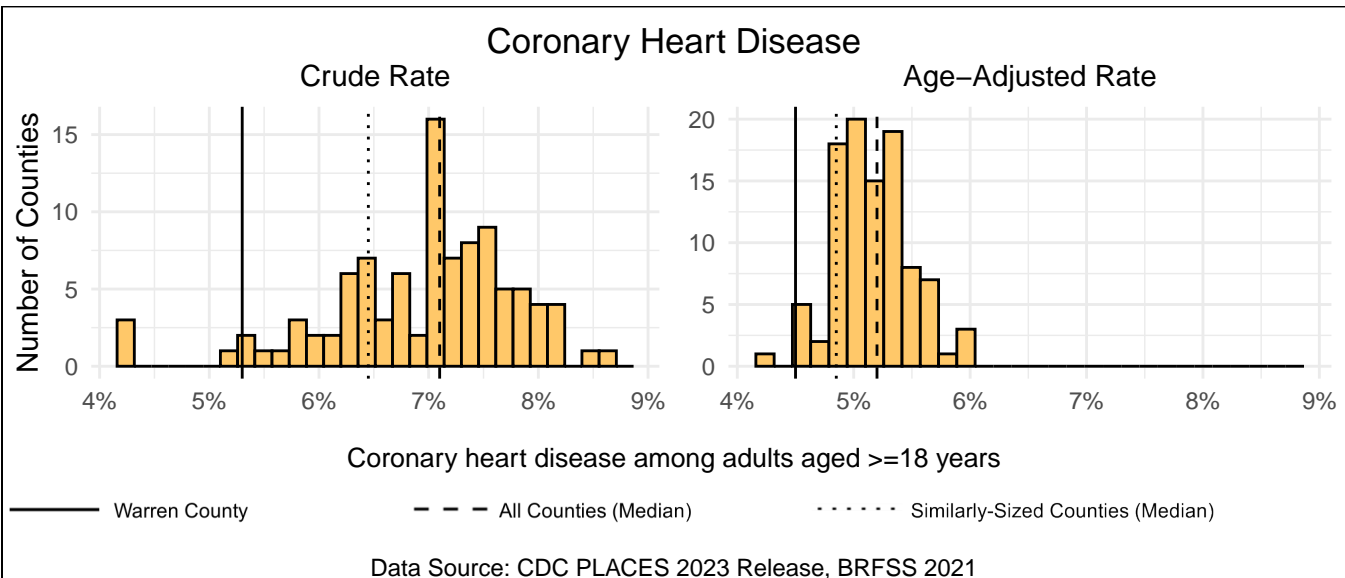
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	9.1%	9.3%	9.1%
Age-Adjusted	9.1%	9.5%	9.2%



Coronary Heart Disease

Warren County has a crude rate of 5.3% for coronary heart disease among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 4.5%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

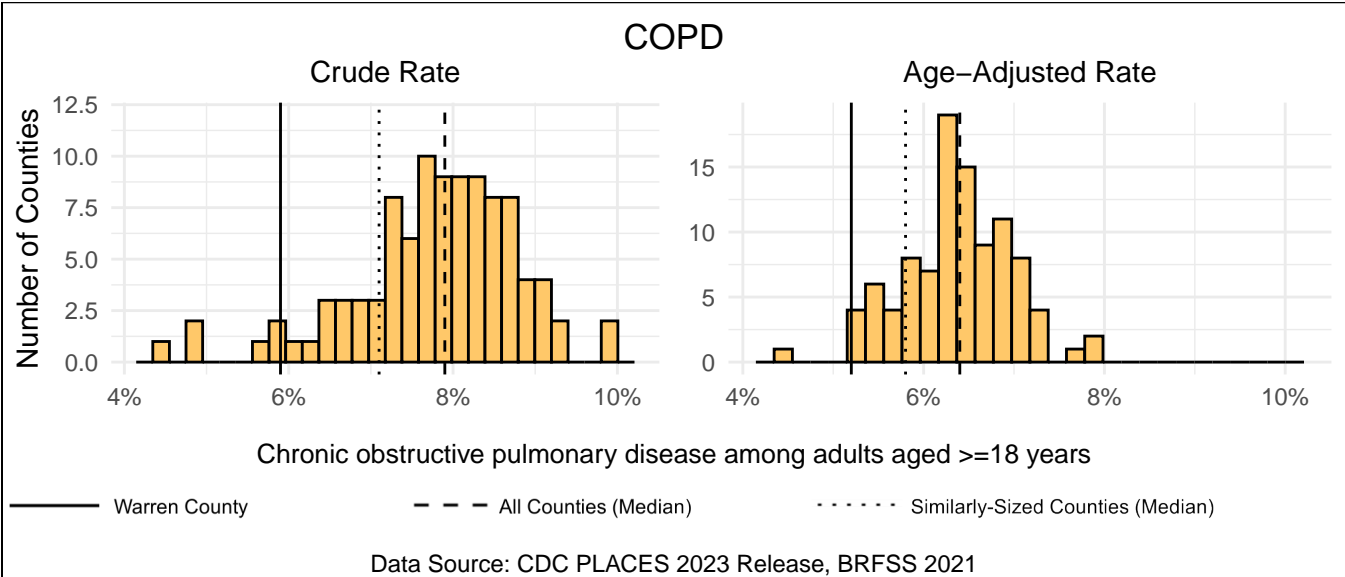
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	5.3%	7.1%	6.4%
Age-Adjusted	4.5%	5.2%	4.8%



COPD

Warren County has a crude rate of 5.9% for chronic obstructive pulmonary disease among adults aged ≥ 18 years, which ranks 6th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 5.2%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

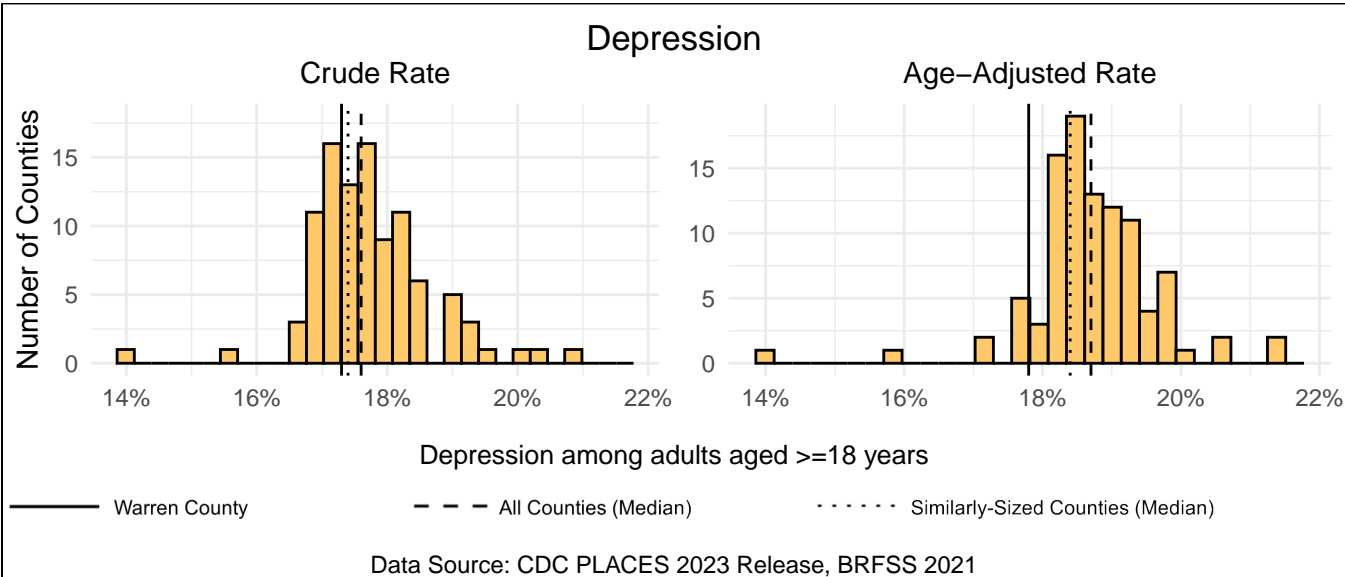
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	5.9%	7.9%	7.1%
Age-Adjusted	5.2%	6.4%	5.8%



Depression

Warren County has a crude rate of 17.3% for depression among adults aged ≥ 18 years, which ranks 33rd out of 99 Iowa counties (6th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 17.8%, which ranks 7th out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

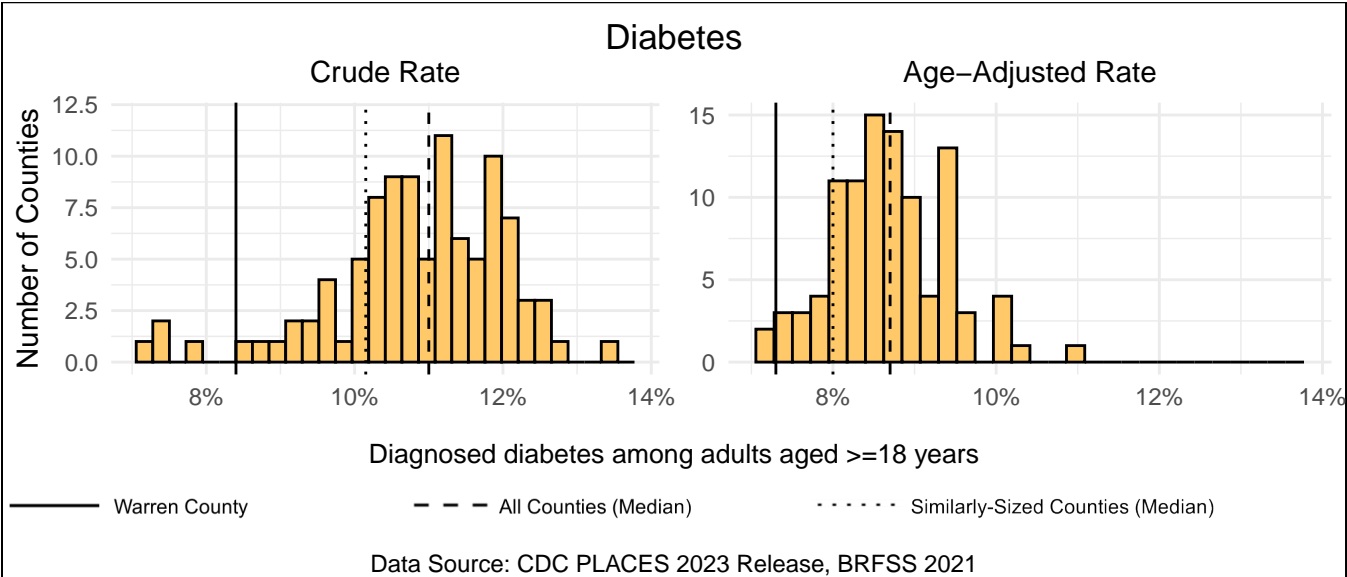
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	17.3%	17.6%	17.4%
Age-Adjusted	17.8%	18.7%	18.4%



Diabetes

Warren County has a crude rate of 8.4% for diagnosed diabetes among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 7.3%, which ranks 3rd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

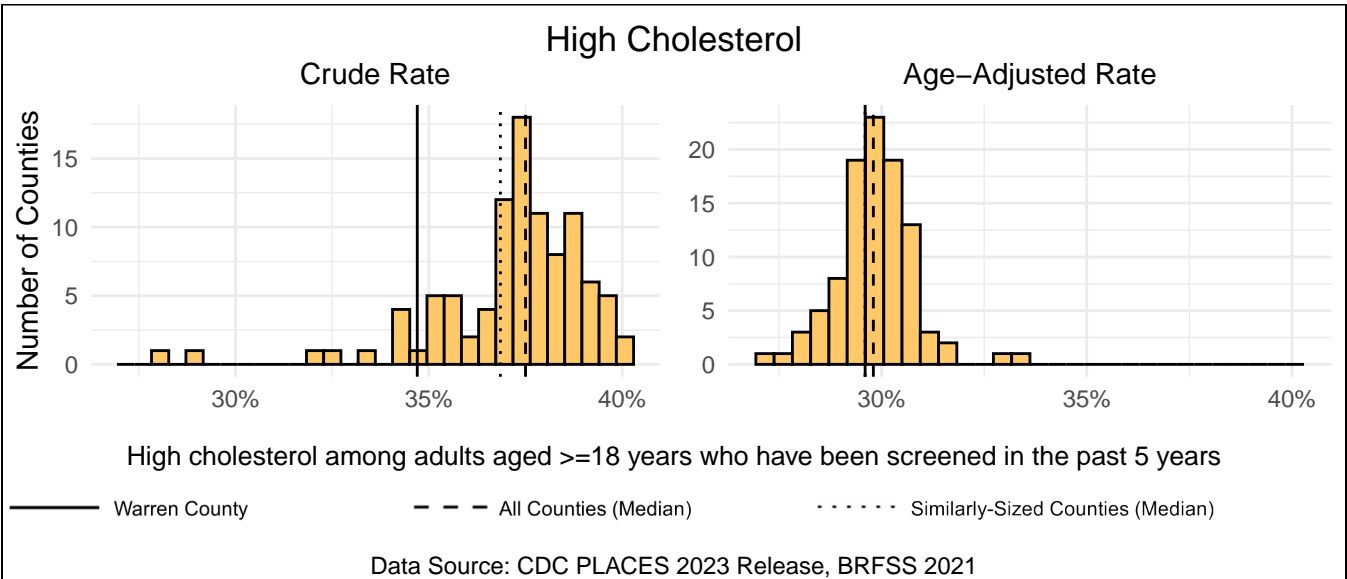
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	8.4%	11.0%	10.1%
Age-Adjusted	7.3%	8.7%	8.0%



High Cholesterol

Warren County has a crude rate of 34.7% for high cholesterol among adults aged ≥ 18 years who have been screened in the past 5 years, which ranks 10th out of 99 Iowa counties (4th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 29.6%, which ranks 30th out of 99 Iowa counties (5th out of 12 similarly-sized counties).

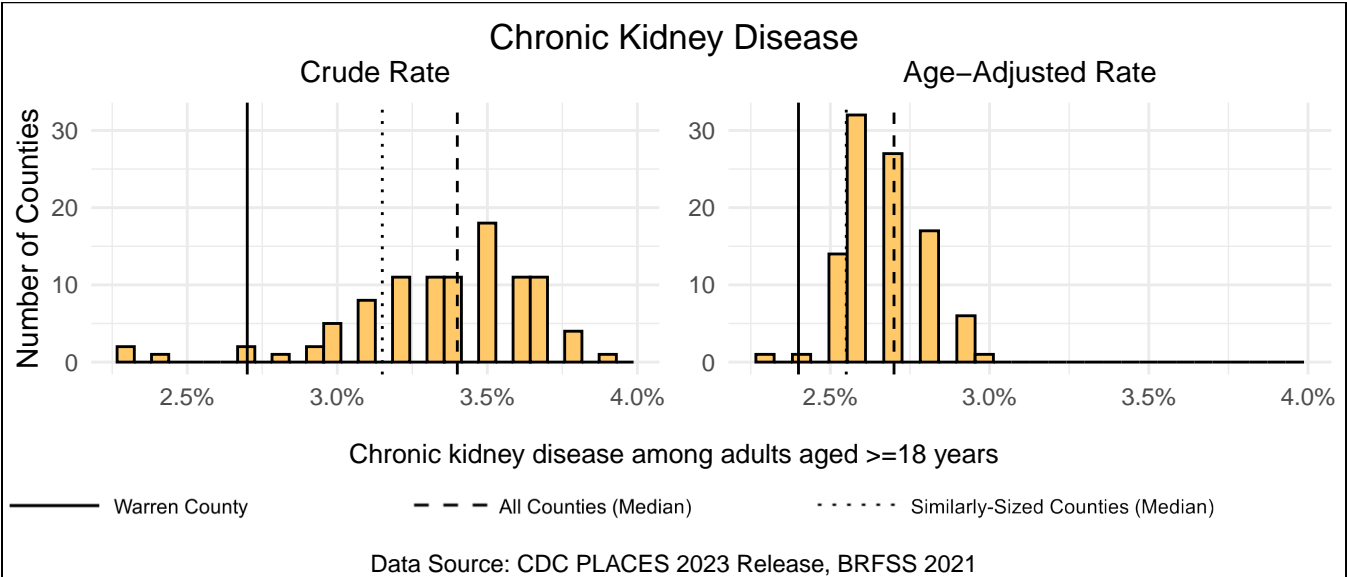
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	34.7%	37.5%	36.8%
Age-Adjusted	29.6%	29.8%	29.6%



Chronic Kidney Disease

Warren County has a crude rate of 2.7% for chronic kidney disease among adults aged ≥ 18 years, which ranks 4th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 2.4%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

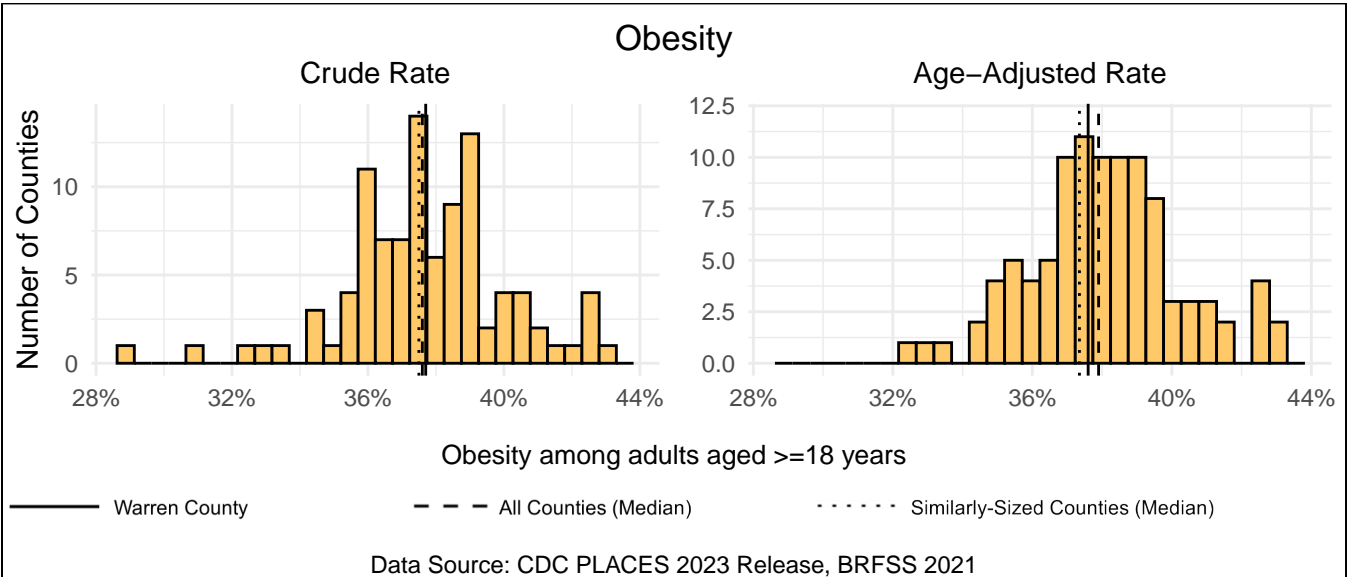
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	2.7%	3.4%	3.2%
Age-Adjusted	2.4%	2.7%	2.5%



Obesity

Warren County has a crude rate of 37.7% for obesity among adults aged ≥ 18 years, which ranks 51st out of 99 Iowa counties (7th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 37.6%, which ranks 41st out of 99 Iowa counties (8th out of 12 similarly-sized counties).

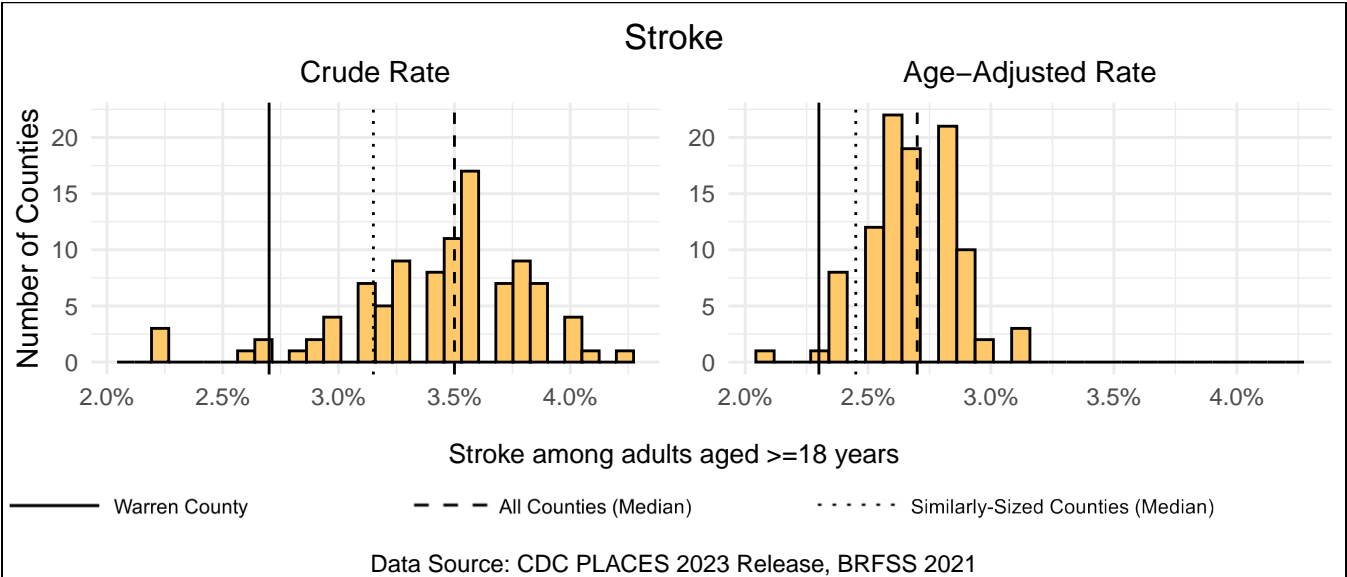
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	37.7%	37.6%	37.5%
Age-Adjusted	37.6%	37.9%	37.3%



Stroke

Warren County has a crude rate of 2.7% for stroke among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 2.3%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

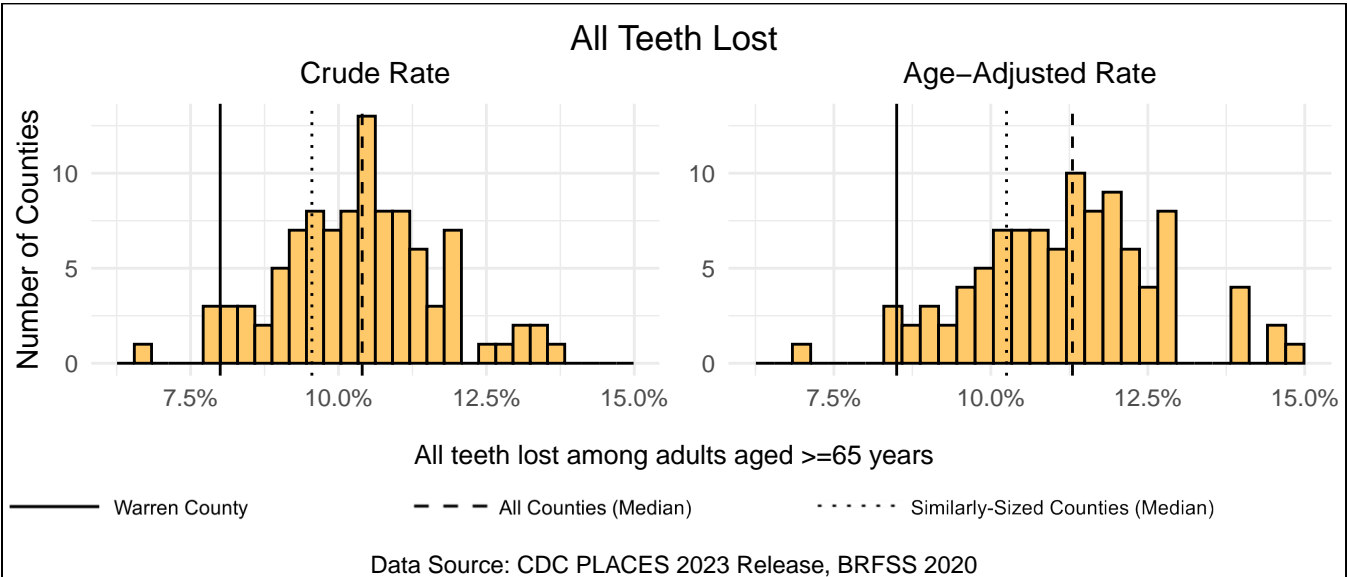
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	2.7%	3.5%	3.2%
Age-Adjusted	2.3%	2.7%	2.4%



All Teeth Lost

Warren County has a crude rate of 8.0% for all teeth lost among adults aged ≥ 65 years, which ranks 4th out of 99 Iowa counties (3rd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 8.5%, which ranks 4th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	8.0%	10.4%	9.6%
Age-Adjusted	8.5%	11.3%	10.2%



Prevention

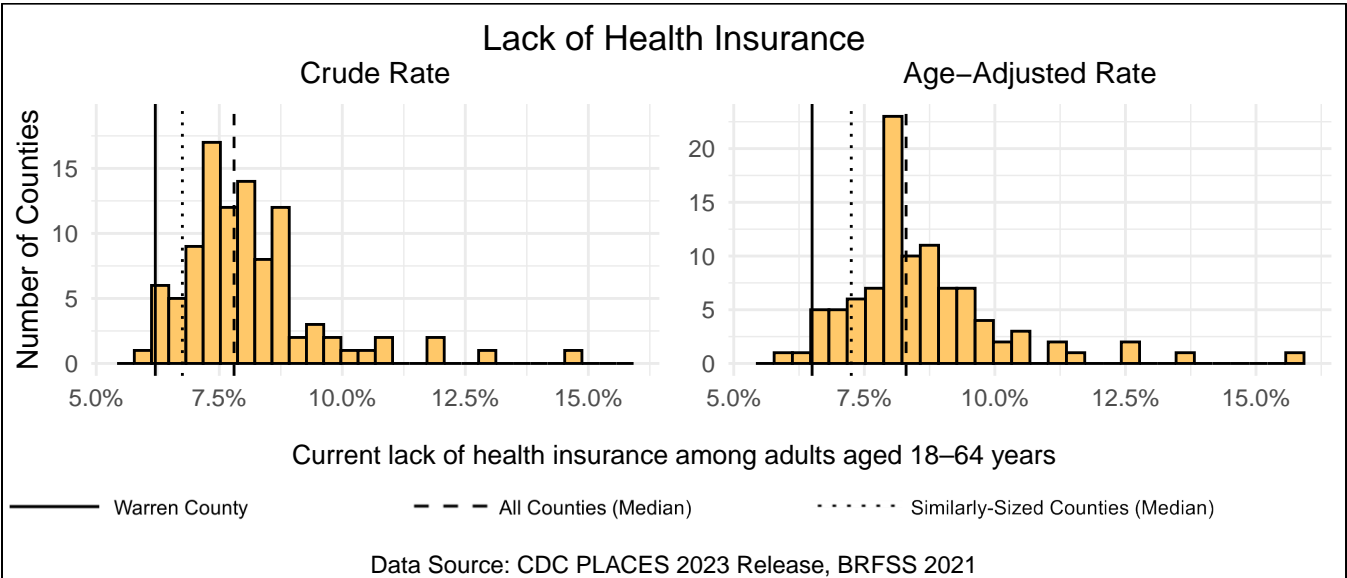
Preventive measures are another practical intervention point for public health professionals as they allow for the early detection of health conditions and improve overall treatment efficacy. This section includes a review of your county’s prevention measures, including preventive screenings and doctor 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

Warren County has a crude rate of 6.2% for current lack of health insurance among adults aged 18–64 years, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 6.5%, which ranks 3rd out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

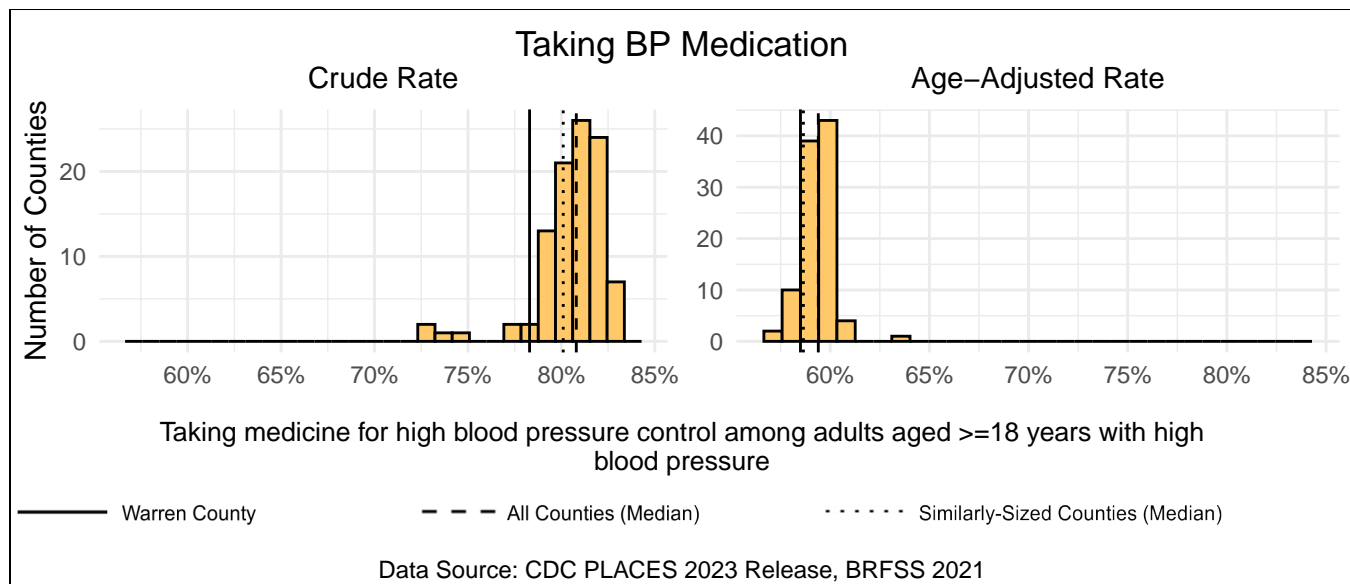
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	6.2%	7.8%	6.8%
Age-Adjusted	6.5%	8.3%	7.2%



Taking BP Medication

Warren County has a crude rate of 78.3% for taking medicine for high blood pressure control among adults aged ≥ 18 years with high blood pressure, which ranks 92nd out of 99 Iowa counties (11th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 58.5%, which ranks 85th out of 99 Iowa counties (8th out of 12 similarly-sized counties).

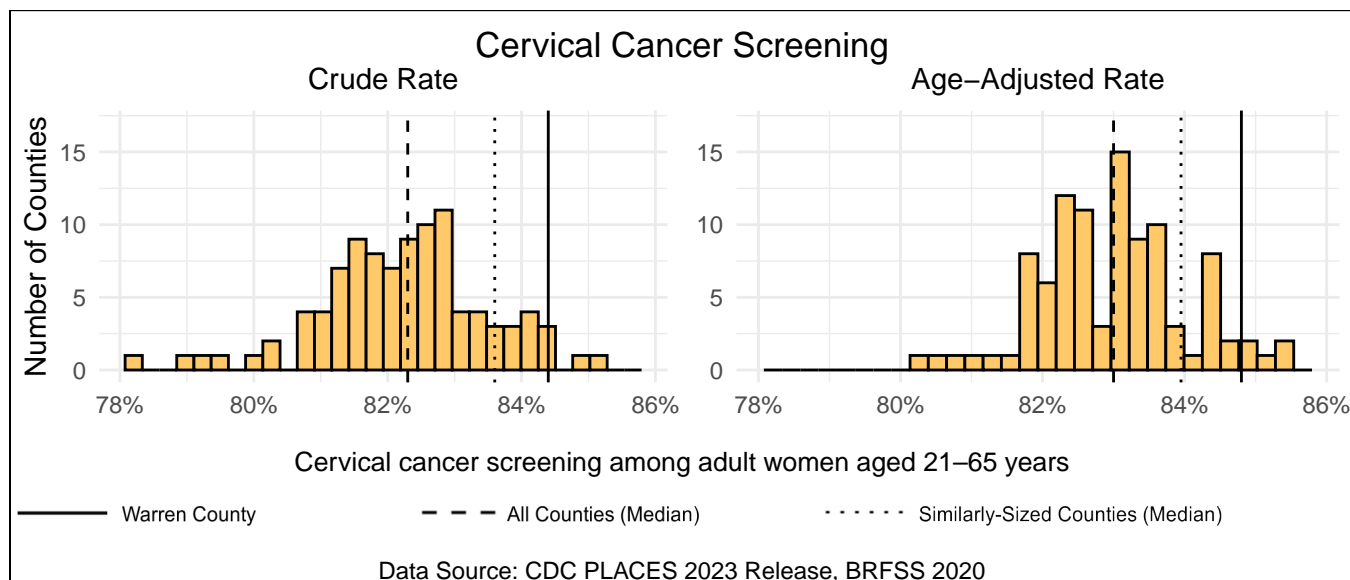
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	78.3%	80.8%	80.1%
Age-Adjusted	58.5%	59.4%	58.6%



Cervical Cancer Screening

Warren County has a crude rate of 84.4% for cervical cancer screening among adult women aged 21–65 years, which ranks 3rd out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 84.8%, which ranks 5th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

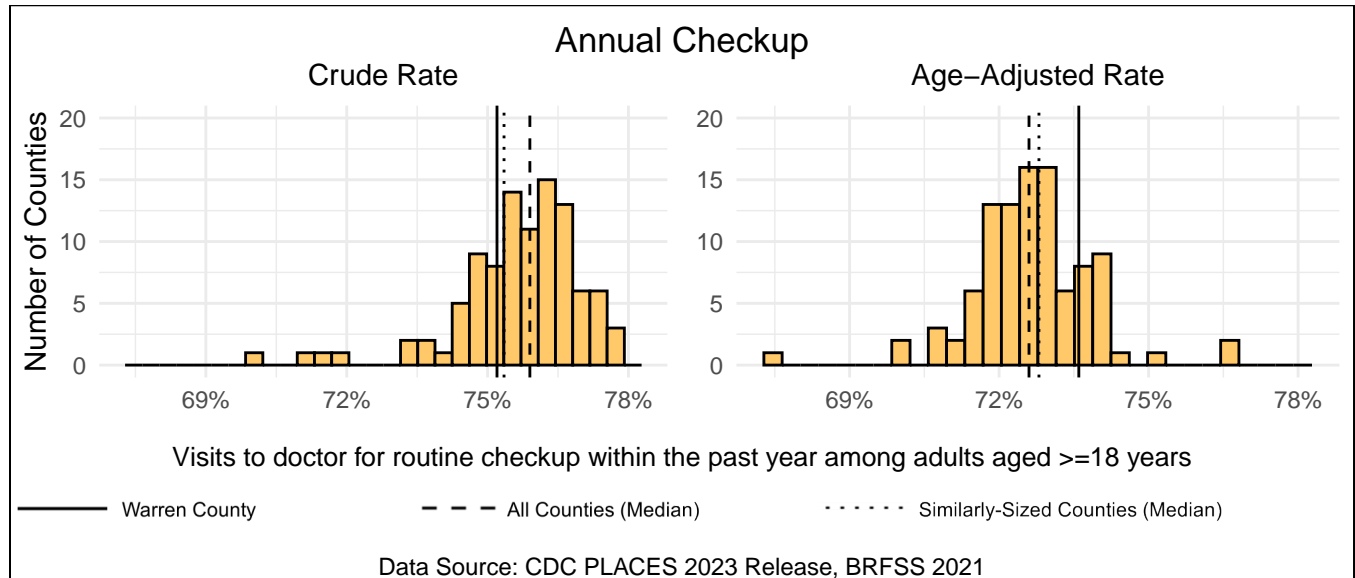
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	84.4%	82.3%	83.6%
Age-Adjusted	84.8%	83.0%	84.0%



Annual Checkup

Warren County has a crude rate of 75.2% for visits to doctor for routine checkup within the past year among adults aged ≥ 18 years, which ranks 70th out of 99 Iowa counties (7th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 73.6%, which ranks 17th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

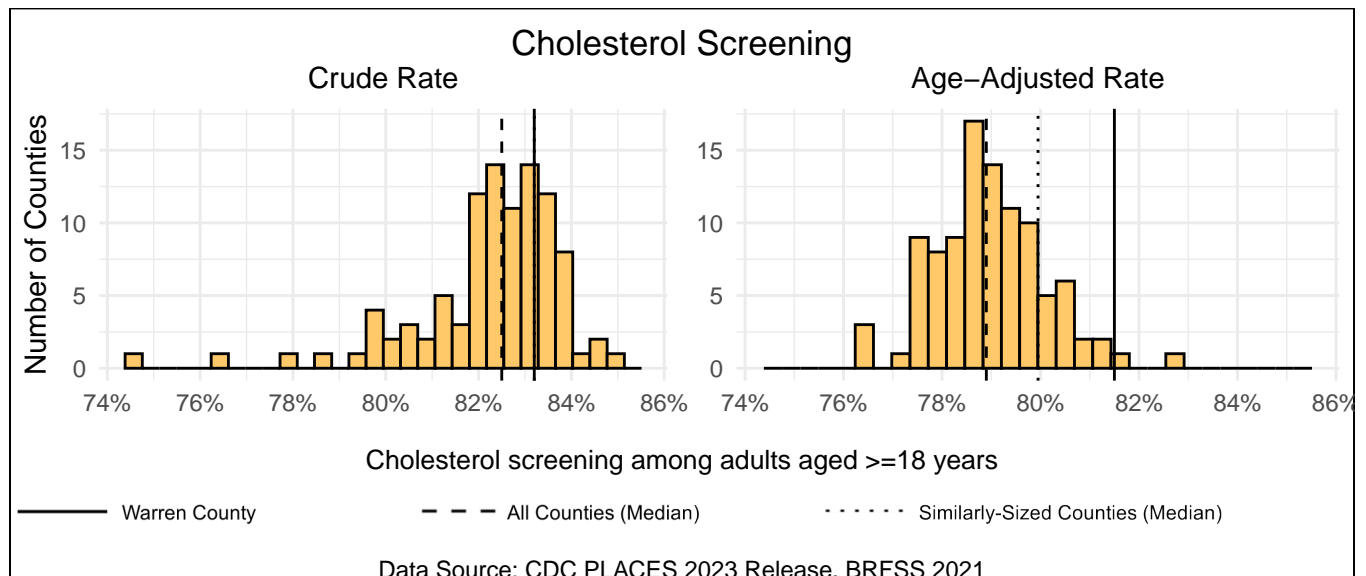
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	75.2%	75.9%	75.3%
Age-Adjusted	73.6%	72.6%	72.8%



Cholesterol Screening

Warren County has a crude rate of 83.2% for cholesterol screening among adults aged ≥ 18 years, which ranks 25th out of 99 Iowa counties (6th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 81.5%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

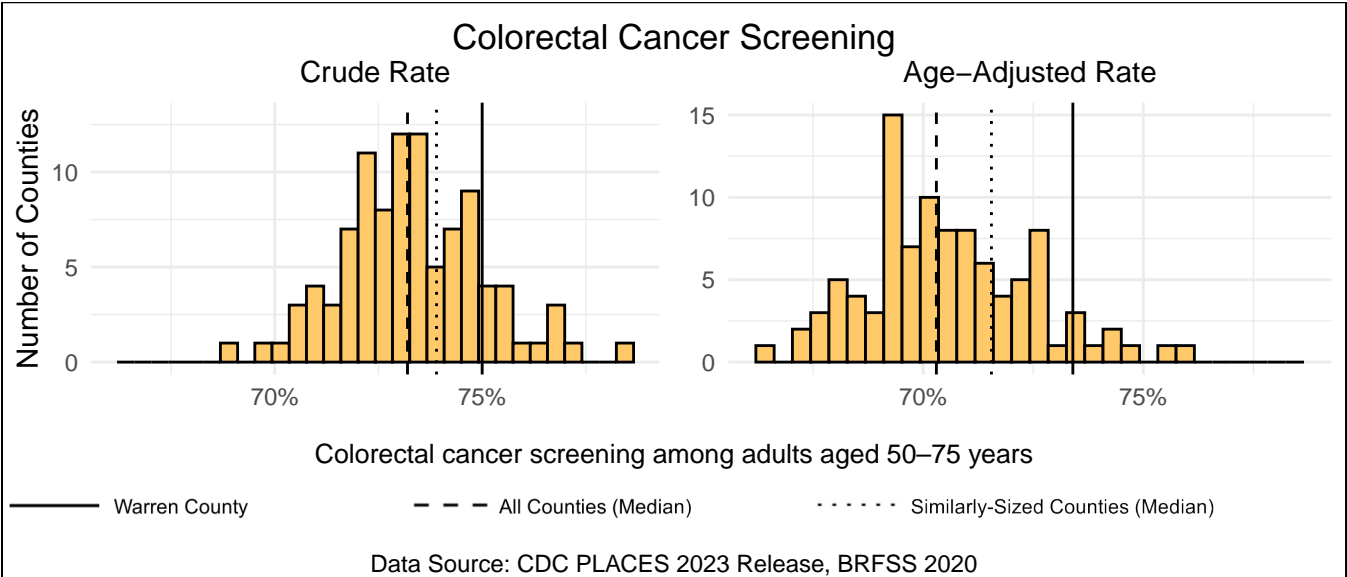
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	83.2%	82.5%	83.2%
Age-Adjusted	81.5%	78.9%	80.0%



Colorectal Cancer Screening

Warren County has a crude rate of 75.0% for colorectal cancer screening among adults aged 50–75 years, which ranks 13th out of 99 Iowa counties (3rd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 73.4%, which ranks 9th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

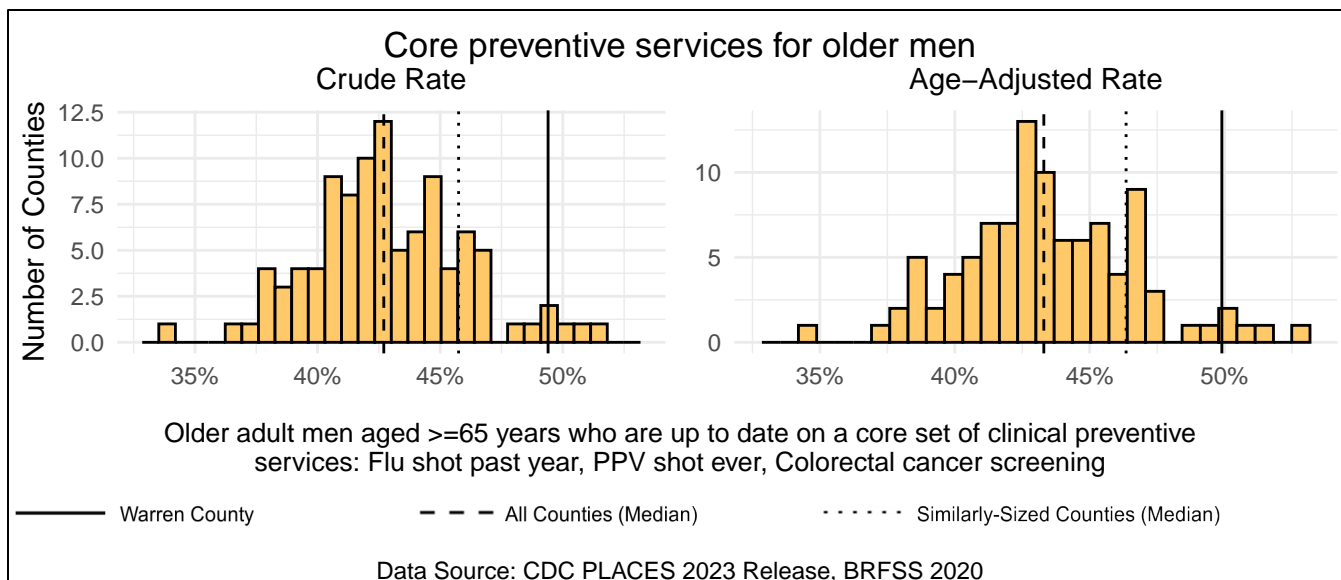
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	75.0%	73.2%	73.9%
Age-Adjusted	73.4%	70.3%	71.6%



Core preventive services for older men

Warren County has a crude rate of 49.4% 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 4th out of 99 Iowa counties (1st out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 49.9%, which ranks 4th out of 99 Iowa counties (1st out of 12 similarly-sized counties).

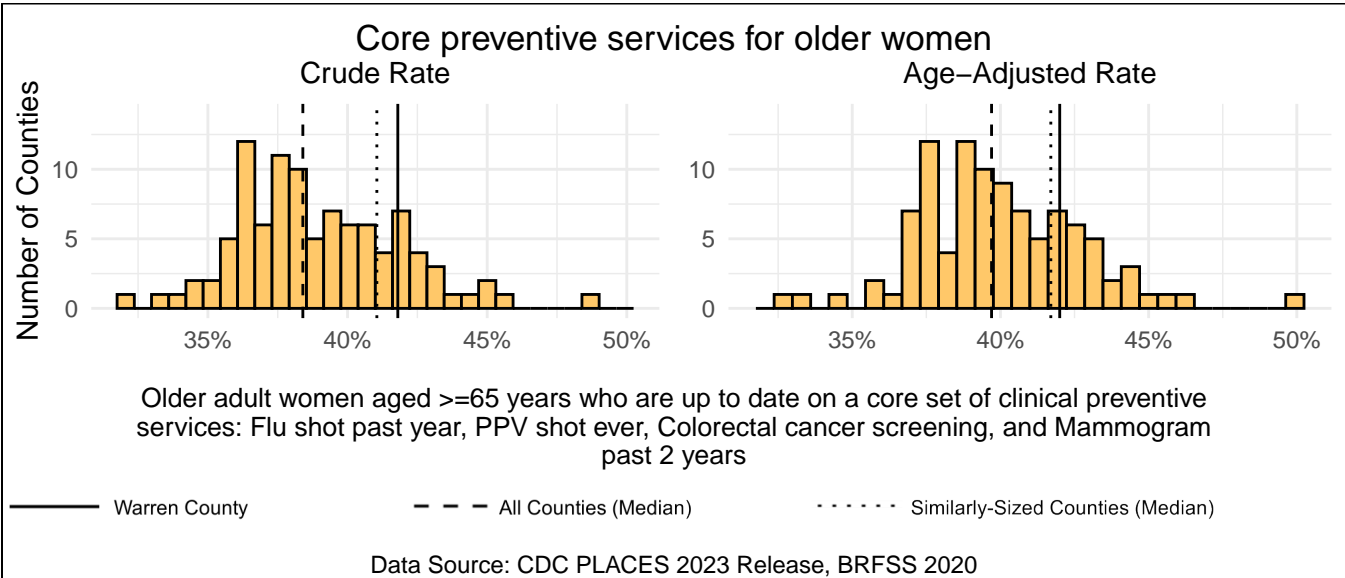
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	49.4%	42.7%	45.8%
Age-Adjusted	49.9%	43.3%	46.4%



Core preventive services for older women

Warren County has a crude rate of 41.8% 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 19th out of 99 Iowa counties (5th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 42.0%, which ranks 24th out of 99 Iowa counties (5th out of 12 similarly-sized counties).

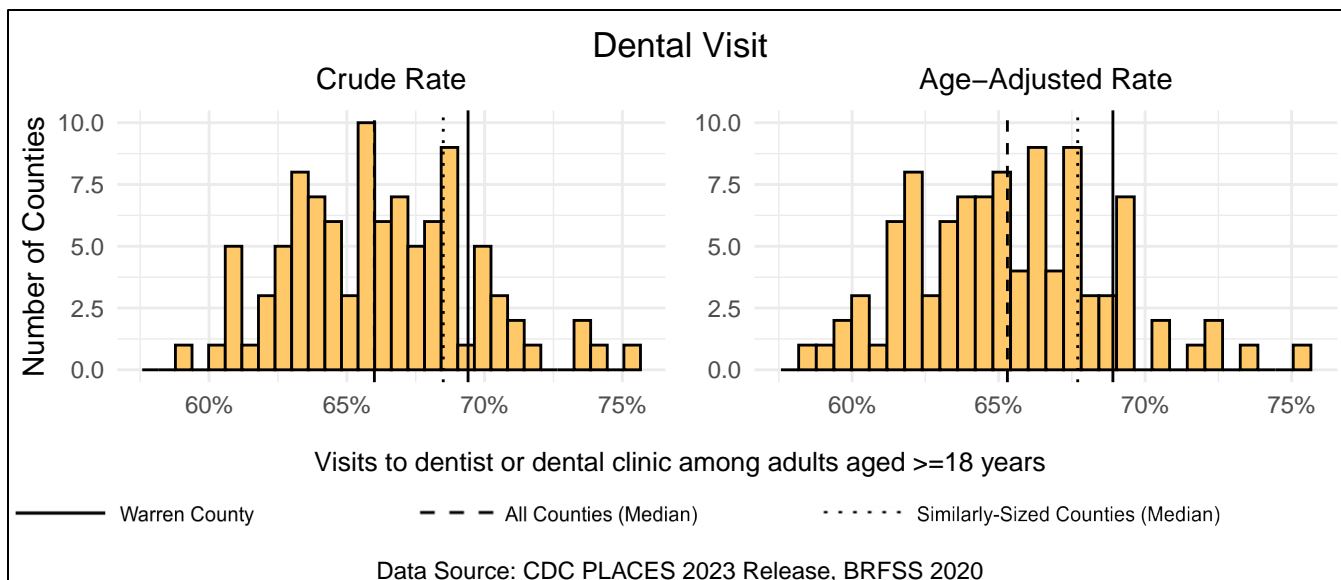
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	41.8%	38.4%	41.0%
Age-Adjusted	42.0%	39.7%	41.7%



Dental Visit

Warren County has a crude rate of 69.4% for visits to dentist or dental clinic among adults aged ≥ 18 years, which ranks 16th out of 99 Iowa counties (4th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 68.9%, which ranks 16th out of 99 Iowa counties (4th out of 12 similarly-sized counties).

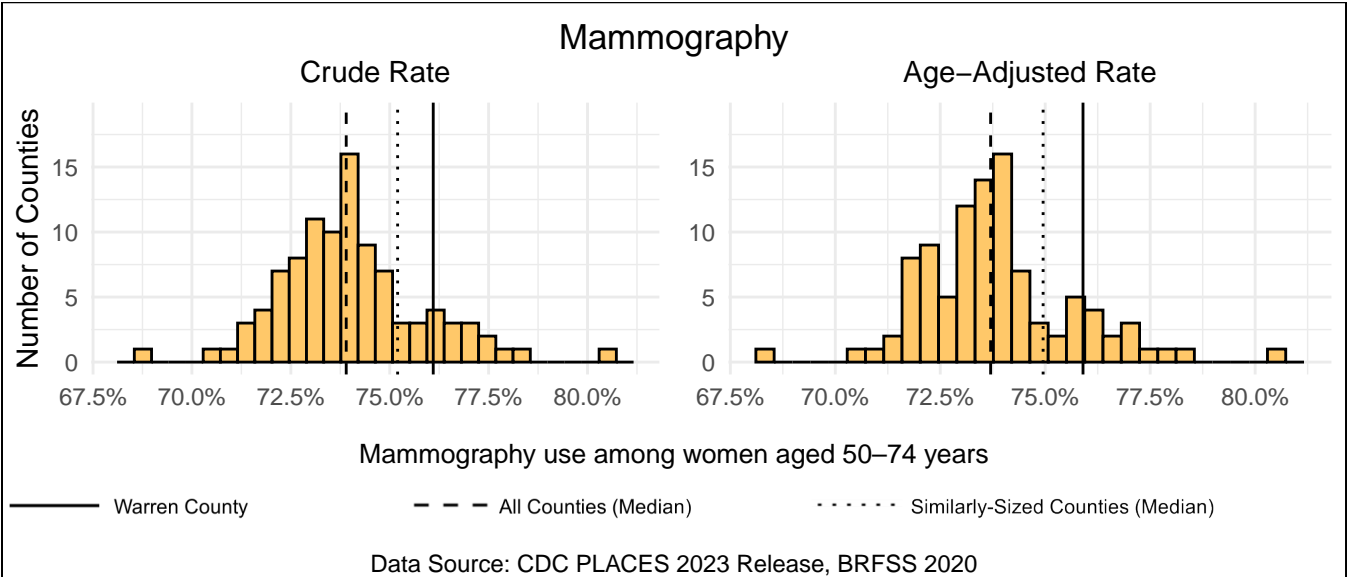
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	69.4%	66.0%	68.5%
Age-Adjusted	68.9%	65.3%	67.7%



Mammography

Warren County has a crude rate of 76.1% for mammography use among women aged 50–74 years, which ranks 15th out of 99 Iowa counties (4th out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 75.9%, which ranks 14th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	76.1%	73.9%	75.2%
Age-Adjusted	75.9%	73.7%	75.0%



Disability

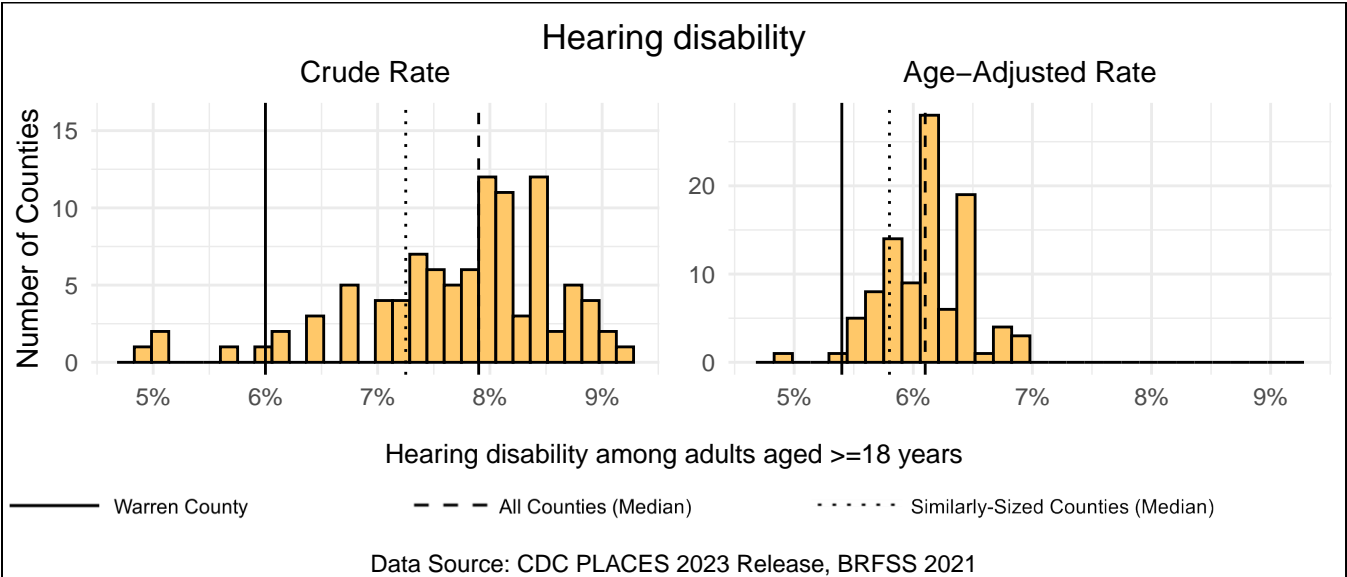
This section includes measures of physical and cognitive disabilities. Respondents were asked to report on six disabilities: hearing, vision, cognition, mobility, self-care, and independent living. The final measure reports the rate of respondents that answered yes to any of the previous six disabilities.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

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

Hearing disability

Warren County has a crude rate of 6.0% for hearing disability among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 5.4%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

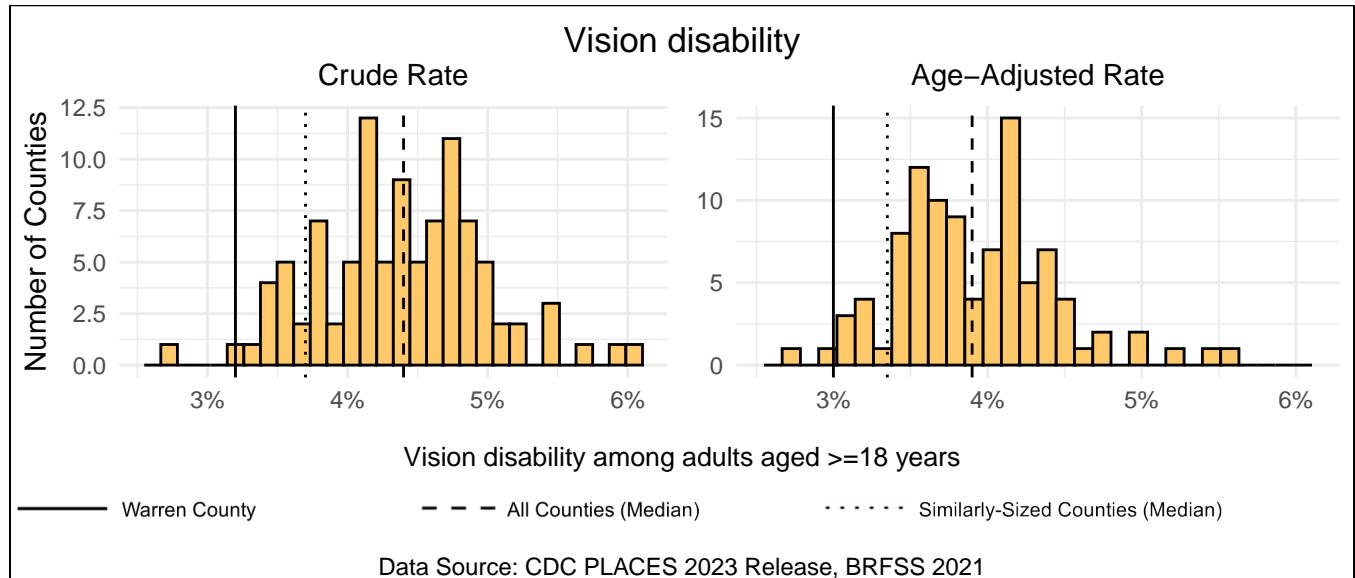
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	6.0%	7.9%	7.2%
Age-Adjusted	5.4%	6.1%	5.8%



Vision disability

Warren County has a crude rate of 3.2% for vision disability among adults aged ≥ 18 years, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 3.0%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

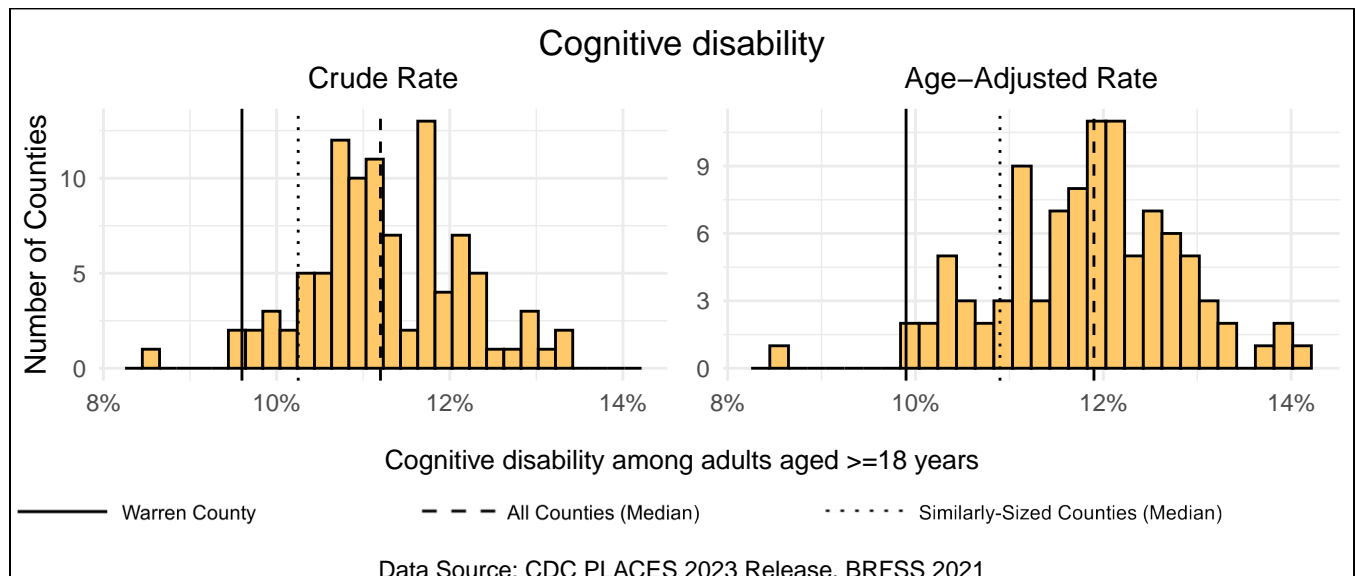
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	3.2%	4.4%	3.7%
Age-Adjusted	3.0%	3.9%	3.3%



Cognitive disability

Warren County has a crude rate of 9.6% for cognitive disability among adults aged ≥ 18 years, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 9.9%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

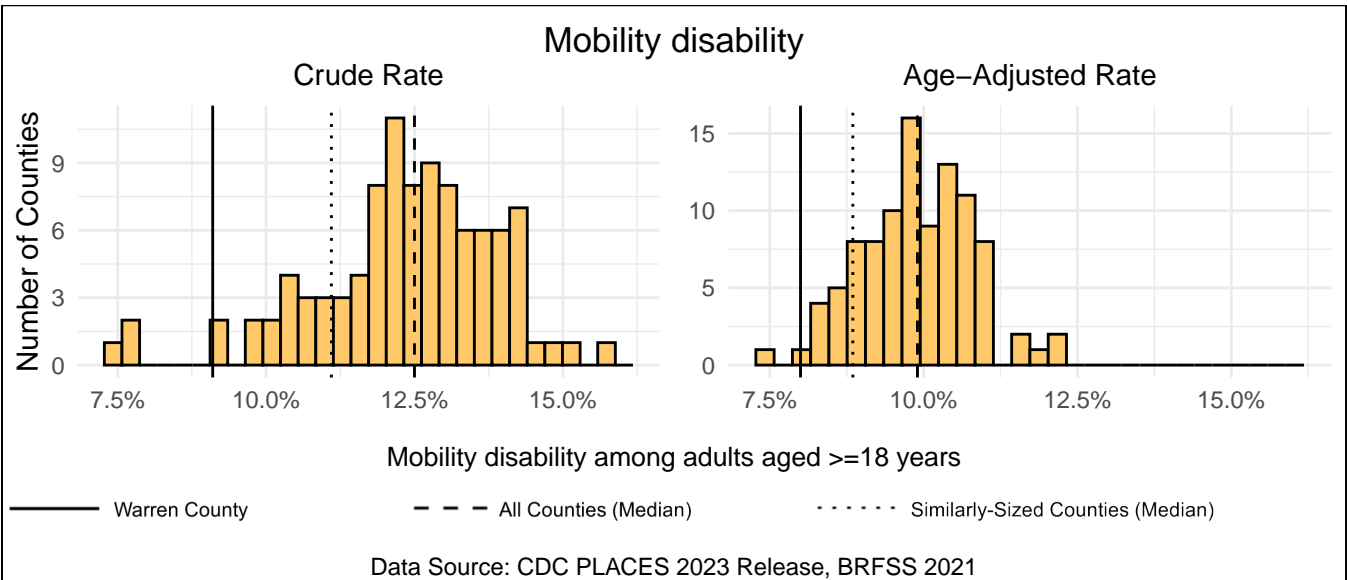
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	9.6%	11.2%	10.2%
Age-Adjusted	9.9%	11.9%	10.9%



Mobility disability

Warren County has a crude rate of 9.1% for mobility disability among adults aged ≥ 18 years, which ranks 4th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 8.0%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

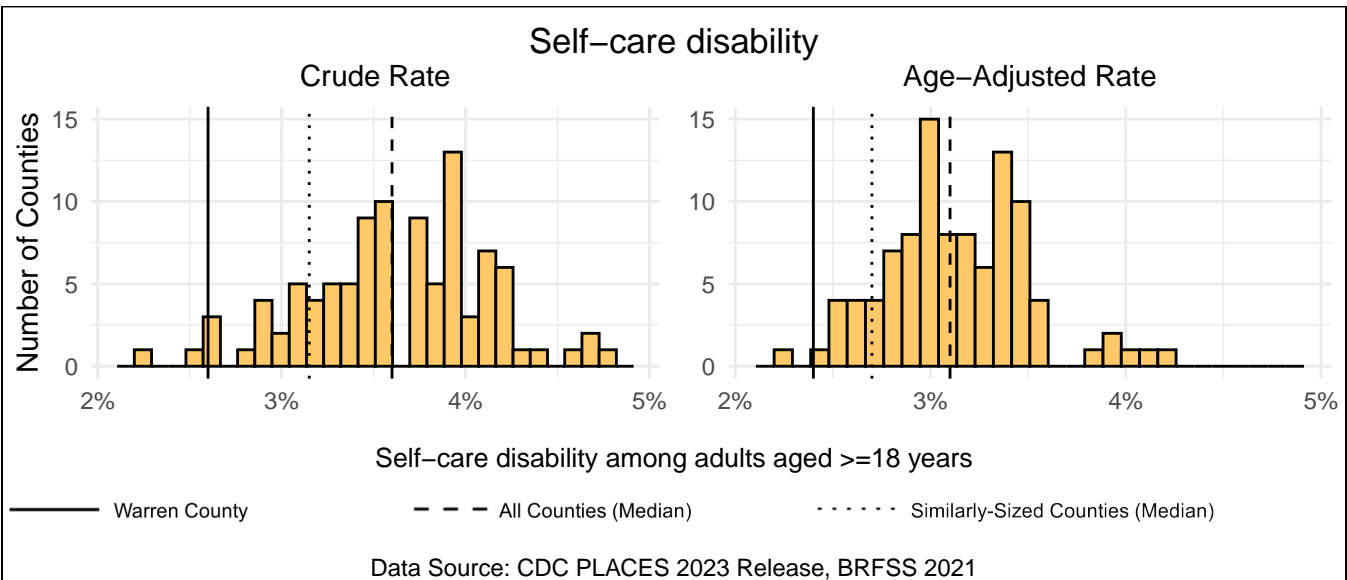
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	9.1%	12.5%	11.1%
Age-Adjusted	8.0%	9.9%	8.8%



Self-care disability

Warren County has a crude rate of 2.6% for self-care disability among adults aged ≥ 18 years, which ranks 3rd out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 2.4%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

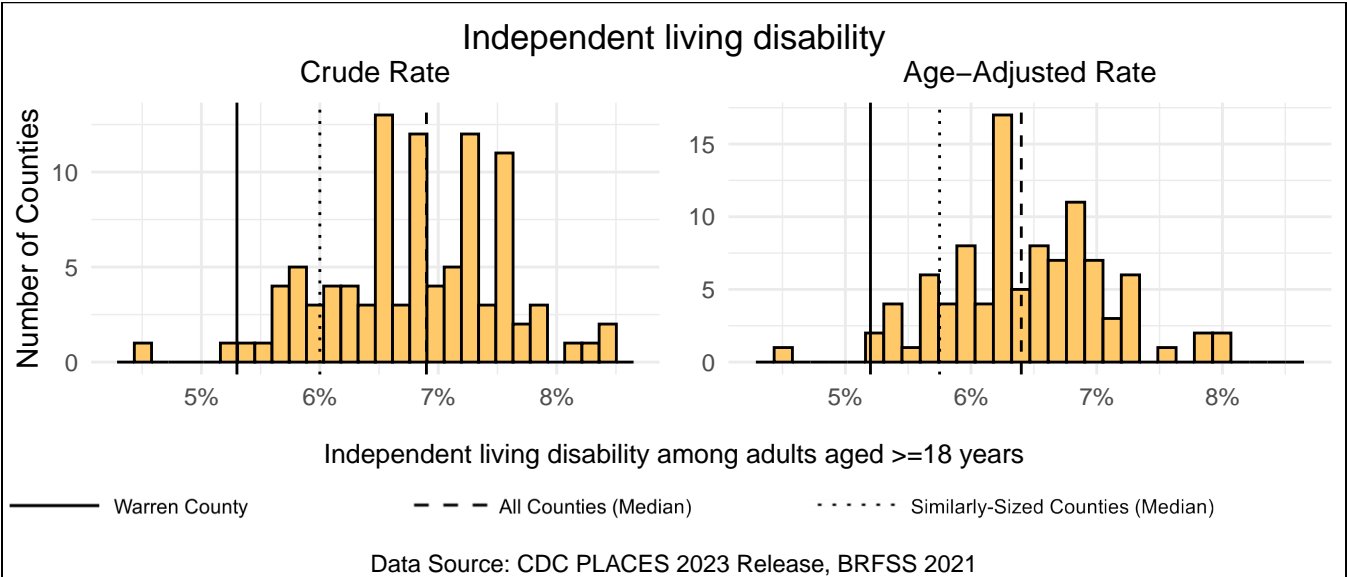
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	2.6%	3.6%	3.2%
Age-Adjusted	2.4%	3.1%	2.7%



Independent living disability

Warren County has a crude rate of 5.3% for independent living disability among adults aged ≥ 18 years, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 5.2%, which ranks 2nd out of 99 Iowa counties (2nd out of 12 similarly-sized counties).

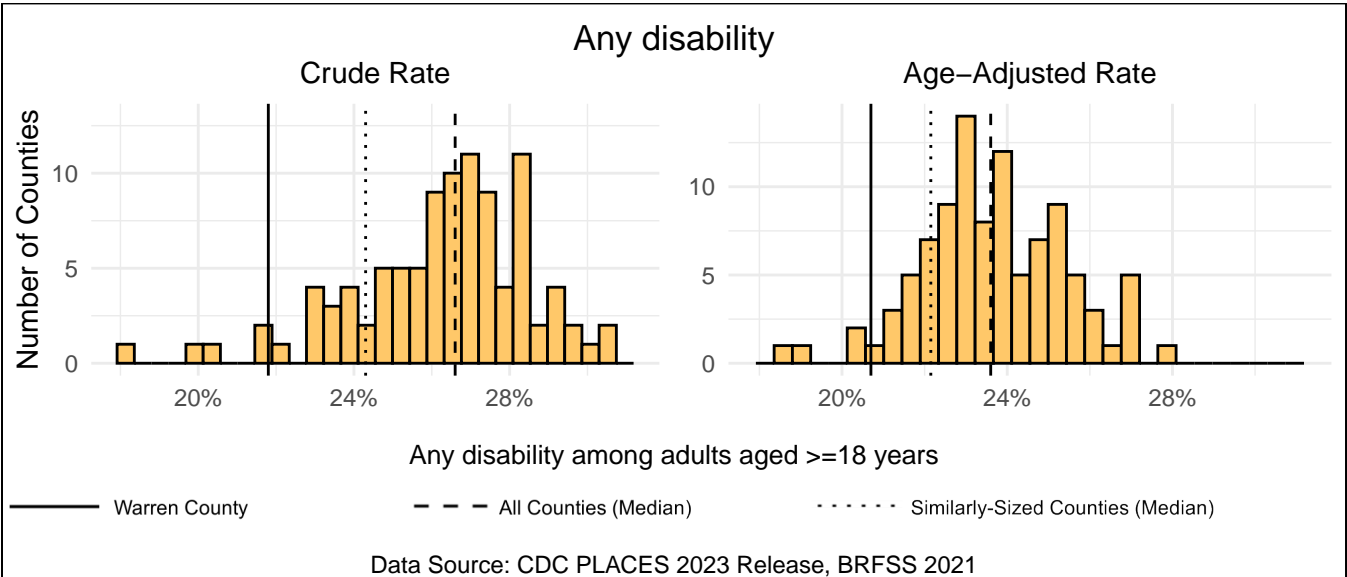
Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	5.3%	6.9%	6.0%
Age-Adjusted	5.2%	6.4%	5.8%



Any disability

Warren County has a crude rate of 21.8% for any disability among adults aged ≥ 18 years, which ranks 5th out of 99 Iowa counties (2nd out of 12 similarly-sized counties). The age-adjusted rate for Warren County is 20.7%, which ranks 5th out of 99 Iowa counties (3rd out of 12 similarly-sized counties).

Measure Type	Warren County	All Counties	Similarly-Sized Counties
Crude	21.8%	26.6%	24.3%
Age-Adjusted	20.7%	23.6%	22.1%



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: Warren County 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	28	13.8% (11.8% - 16.0%)	5	14.4% (12.3% - 16.8%)
Health Status	General Health	4	11.1% (9.1% - 13.3%)	2	10.5% (8.5% - 12.7%)
Health Status	Physical Health	5	9.1% (7.7% - 10.7%)	2	8.6% (7.3% - 10.1%)
Health Risk Behaviors	Current Smoking	7	14.0% (10.8% - 17.5%)	5	14.3% (11.0% - 18.1%)
Health Risk Behaviors	Sleep <7 hours	8	28.1% (26.6% - 29.7%)	4	28.7% (27.1% - 30.4%)
Health Risk Behaviors	Binge Drinking	94	20.7% (17.5% - 24.3%)	83	22.3% (18.8% - 26.0%)
Health Risk Behaviors	Physical Inactivity	4	21.7% (17.4% - 26.4%)	4	21.0% (16.8% - 25.7%)
Health Outcomes	All Teeth Lost	4	8.0% (5.1% - 11.3%)	4	8.5% (5.4% - 12.3%)
Health Outcomes	Chronic Kidney Disease	4	2.7% (2.4% - 3.0%)	2	2.4% (2.2% - 2.7%)
Health Outcomes	Coronary Heart Disease	5	5.3% (4.5% - 6.1%)	2	4.5% (3.9% - 5.2%)
Health Outcomes	Obesity	51	37.7% (31.2% - 44.6%)	41	37.6% (31.2% - 44.3%)
Health Outcomes	Cancer (except skin)	12	7.5% (6.7% - 8.3%)	88	6.5% (5.8% - 7.2%)
Health Outcomes	Diabetes	5	8.4% (7.0% - 10.0%)	3	7.3% (6.1% - 8.7%)
Health Outcomes	High Blood Pressure	5	28.6% (24.8% - 32.5%)	5	25.7% (22.2% - 29.3%)
Health Outcomes	Depression	33	17.3% (14.3% - 20.7%)	7	17.8% (14.7% - 21.2%)
Health Outcomes	High Cholesterol	10	34.7% (30.5% - 38.9%)	30	29.6% (25.5% - 33.9%)
Health Outcomes	Arthritis	9	24.5% (20.9% - 28.3%)	8	21.7% (18.4% - 25.2%)
Health Outcomes	Current Asthma	11	9.1% (7.9% - 10.3%)	4	9.1% (8.0% - 10.3%)
Health Outcomes	Stroke	5	2.7% (2.3% - 3.1%)	2	2.3% (2.0% - 2.7%)
Health Outcomes	COPD	6	5.9% (4.7% - 7.1%)	2	5.2% (4.2% - 6.3%)
Prevention	Annual Checkup	70	75.2% (70.6% - 79.3%)	17	73.6% (68.7% - 77.9%)
Prevention	Colorectal Cancer Screening	13	75.0% (72.1% - 77.8%)	9	73.4% (70.3% - 76.4%)
Prevention	Health Insurance	2	6.2% (4.7% - 8.2%)	3	6.5% (4.9% - 8.6%)
Prevention	Core preventive services for older men	4	49.4% (40.8% - 58.3%)	4	49.9% (41.5% - 58.7%)
Prevention	Dental Visit	16	69.4% (65.7% - 72.8%)	16	68.9% (65.1% - 72.5%)

Category	Health Domain	Crude Rate Rank	Crude Rate (95% CI)	Age-Adj. Rate Rank	Age-Adj. Rate (95% CI)
Prevention	Cervical Cancer Screening	3	84.4% (81.7% - 86.8%)	5	84.8% (82.1% - 87.3%)
Prevention	Taking BP Medication	92	78.3% (74.7% - 81.3%)	85	58.5% (53.3% - 63.5%)
Prevention	Core preventive services for older women	19	41.8% (34.8% - 49.2%)	24	42.0% (35.1% - 49.4%)
Prevention	Cholesterol Screening	25	83.2% (80.2% - 86.0%)	2	81.5% (78.2% - 84.6%)
Prevention	Mammography	15	76.1% (71.9% - 80.0%)	14	75.9% (71.4% - 80.0%)
Disability	Self-care Disability	3	2.6% (2.2% - 3.1%)	2	2.4% (2.0% - 2.9%)
Disability	Any Disability	5	21.8% (18.1% - 25.7%)	5	20.7% (17.2% - 24.4%)
Disability	Vision Disability	2	3.2% (2.6% - 3.7%)	2	3.0% (2.5% - 3.5%)
Disability	Hearing Disability	5	6.0% (5.3% - 6.9%)	2	5.4% (4.7% - 6.2%)
Disability	Mobility Disability	4	9.1% (7.4% - 10.9%)	2	8.0% (6.6% - 9.6%)
Disability	Cognitive Disability	2	9.6% (7.9% - 11.6%)	2	9.9% (8.2% - 11.9%)
Disability	Independent Living Disability	2	5.3% (4.3% - 6.3%)	2	5.2% (4.3% - 6.2%)

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

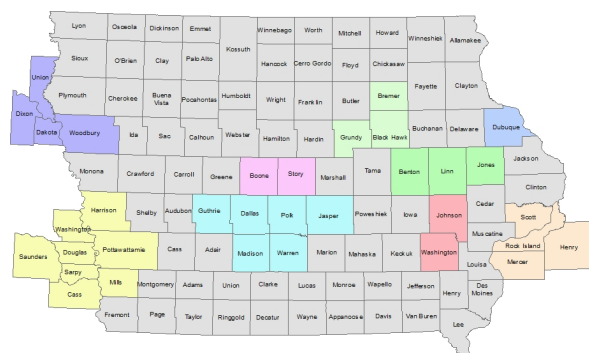
Appendix 3: Metropolitan Non-Core Counties

Warren County falls into the group of metropolitan non-core counties. In this data, 12 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 Group	Population
Dallas County	Metropolitan Non-Core	103,796
Warren County	Metropolitan Non-Core	53,402
Jasper County	Metropolitan Non-Core	37,764
Benton County	Metropolitan Non-Core	25,691
Bremer County	Metropolitan Non-Core	25,081
Washington County	Metropolitan Non-Core	22,491
Jones County	Metropolitan Non-Core	20,805
Madison County	Metropolitan Non-Core	16,773
Harrison County	Metropolitan Non-Core	14,669
Mills County	Metropolitan Non-Core	14,465
Grundy County	Metropolitan Non-Core	12,347
Guthrie County	Metropolitan Non-Core	10,567

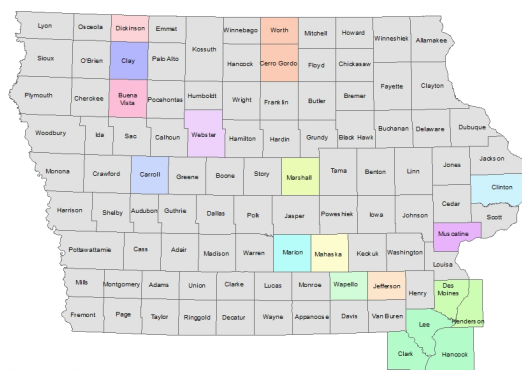
Metropolitan and micropolitan areas can be found in the link and the maps below.

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



March 2020 Metropolitan Statistical Area Definitions

- | | | |
|-------------------------------------|--------------------------------|-----------------------------|
| Ames, IA | Des Moines-West Des Moines, IA | Omaha-Council Bluffs, NE-IA |
| Cedar Rapids, IA | Dubuque, IA | Sioux City, IA-NE-SD |
| Davenport-Moline-Rock Island, IA-IL | Iowa City, IA | Waterloo-Cedar Falls, IA |



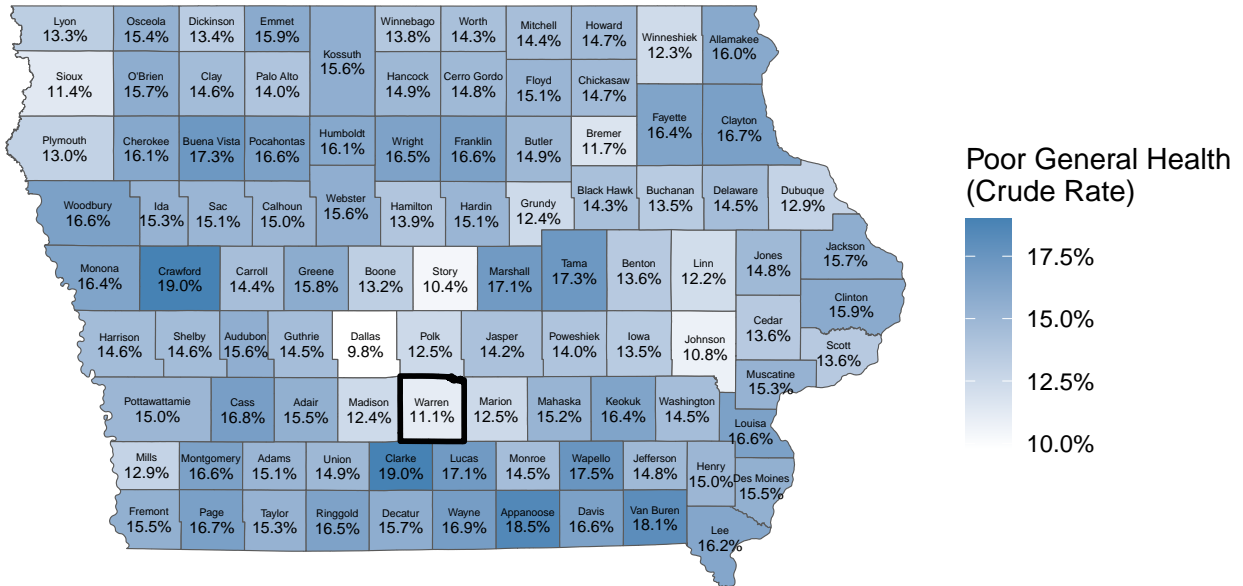
March 2020 Micropolitan Statistical Area Definitions

- | | | | | |
|-------------------|-------------------------------|------------------|---------------|-----------------|
| Burlington, IA-IL | Fairfield, IA | Marshalltown, IA | Oskaloosa, IA | Spencer, IA |
| Carroll, IA | Fort Dodge, IA | Mason City, IA | Ottumwa, IA | Spirit Lake, IA |
| Clinton, IA | Fort Madison-Keokuk, IA-IL-MO | Muscatine, IA | Pella, IA | Storm Lake, IA |

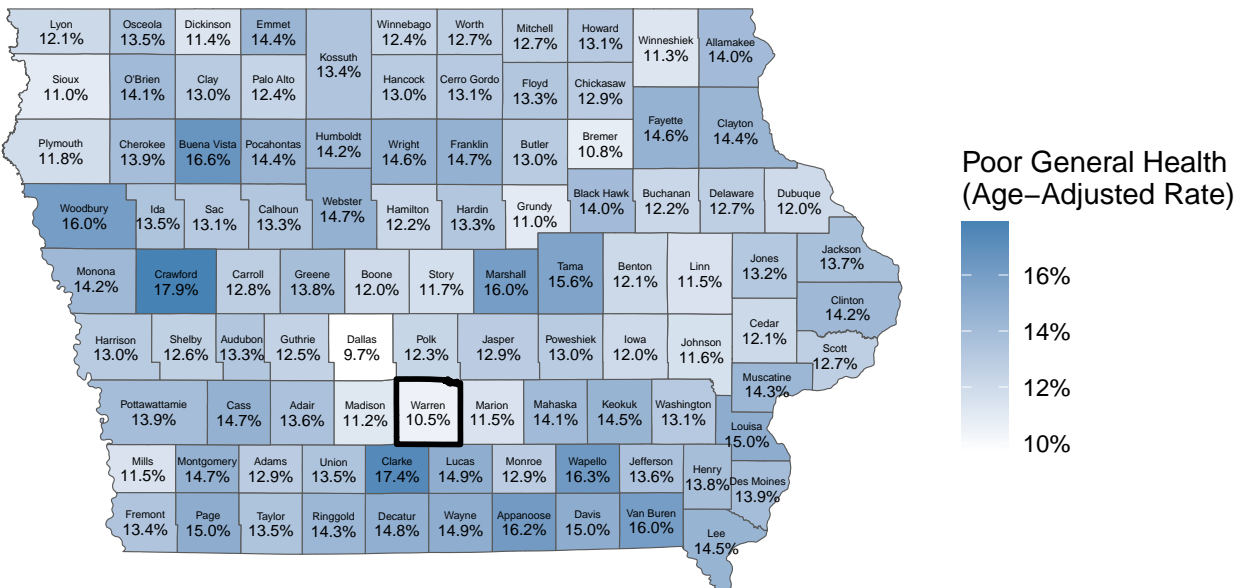
Appendix 4: County Maps

Poor General Health

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



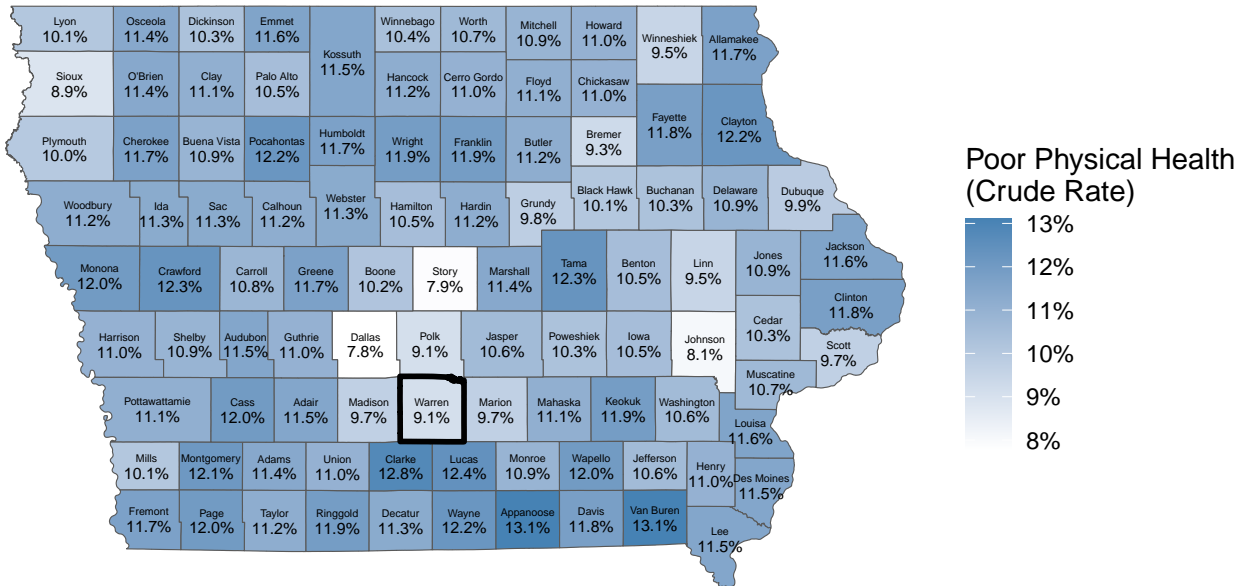
Data Source: CDC PLACES 2023 Release, BRFSS 2021



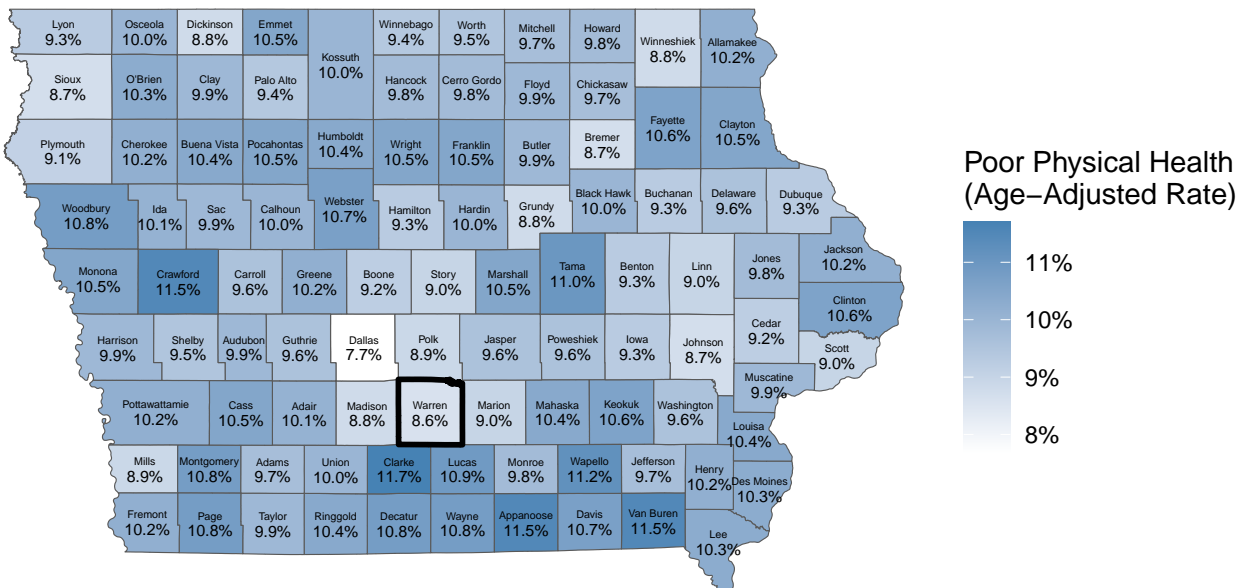
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Poor Physical Health

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



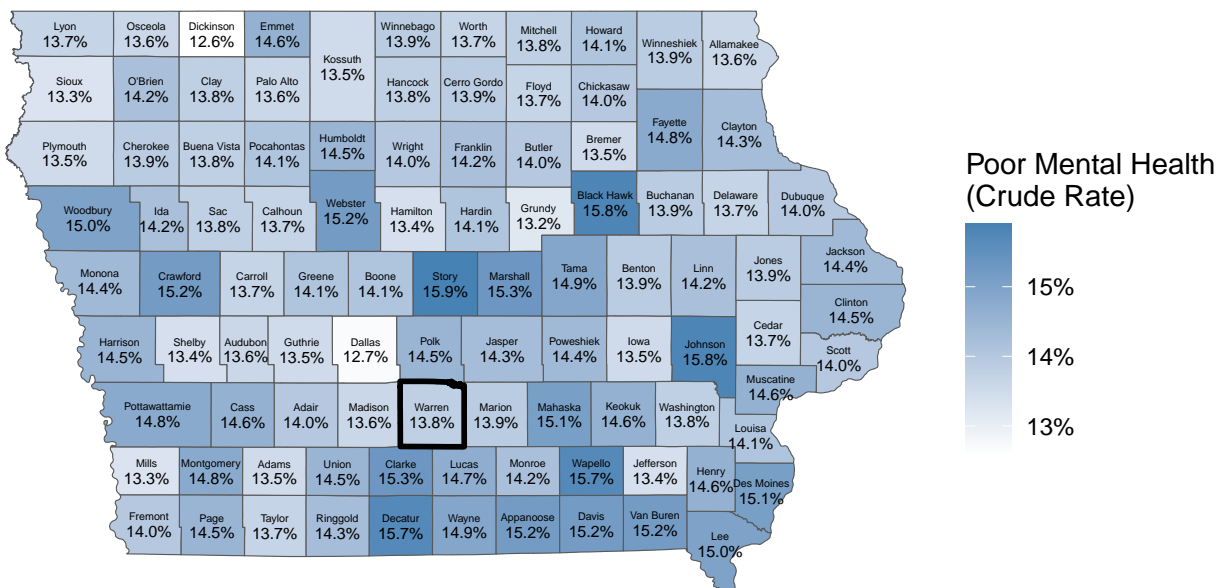
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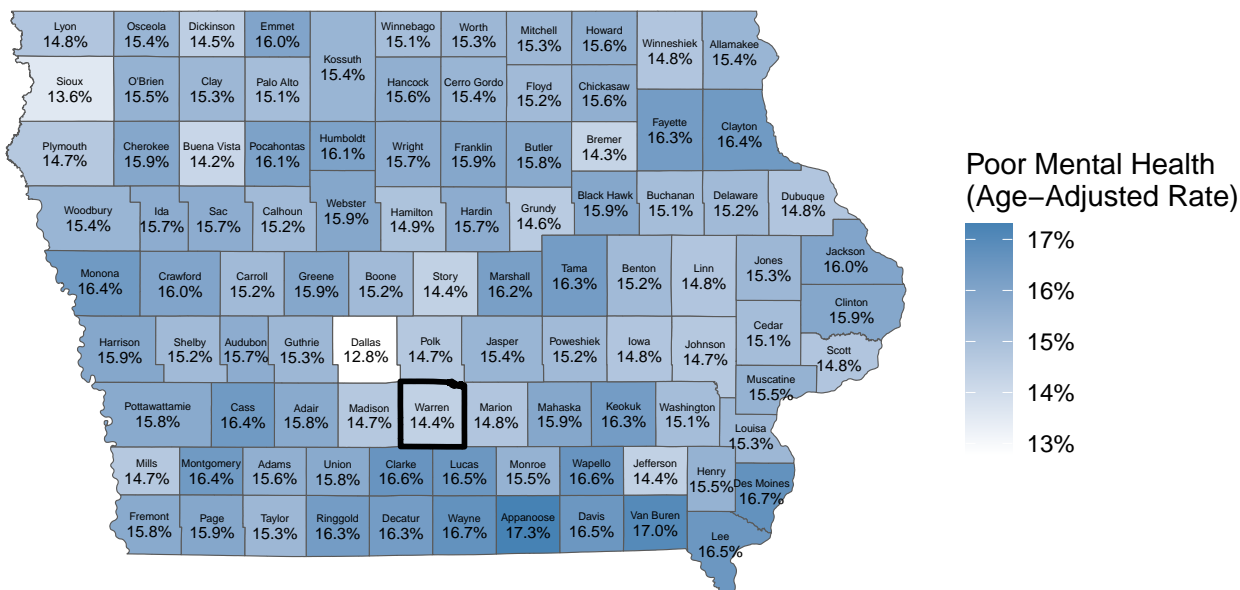
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Poor Mental Health

Mental health not good for ≥ 14 days among adults aged ≥ 18 years



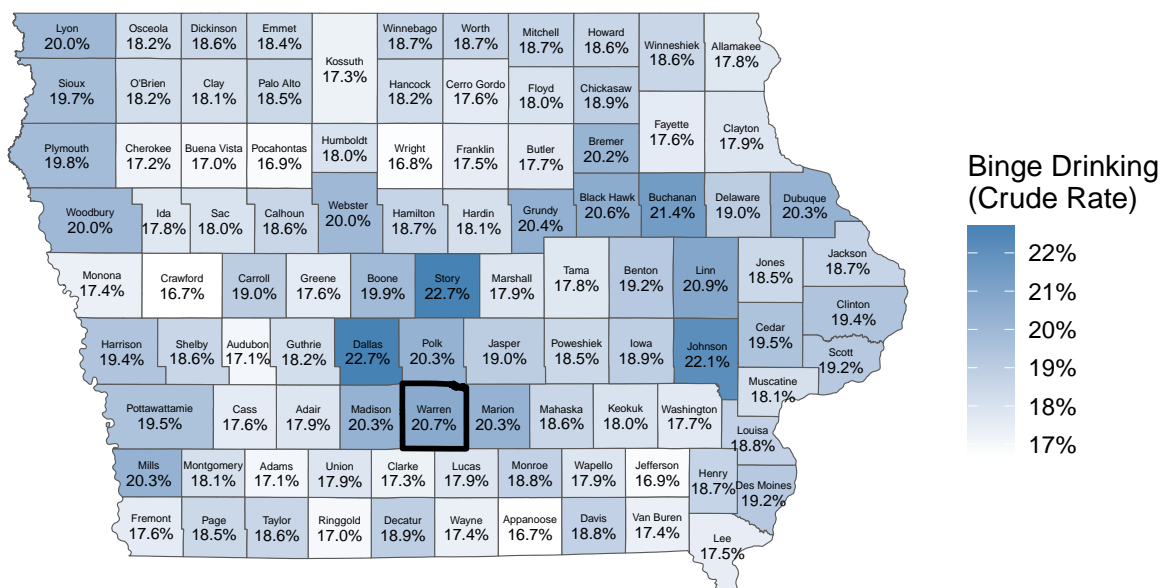
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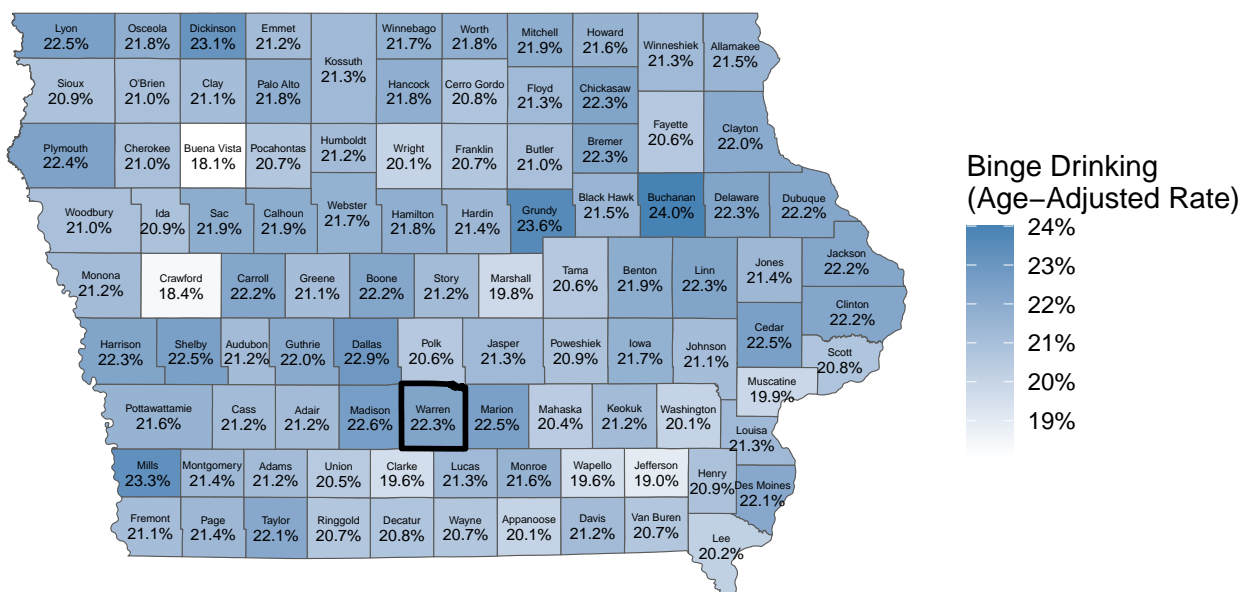
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Binge Drinking

Binge drinking among adults aged >=18 years



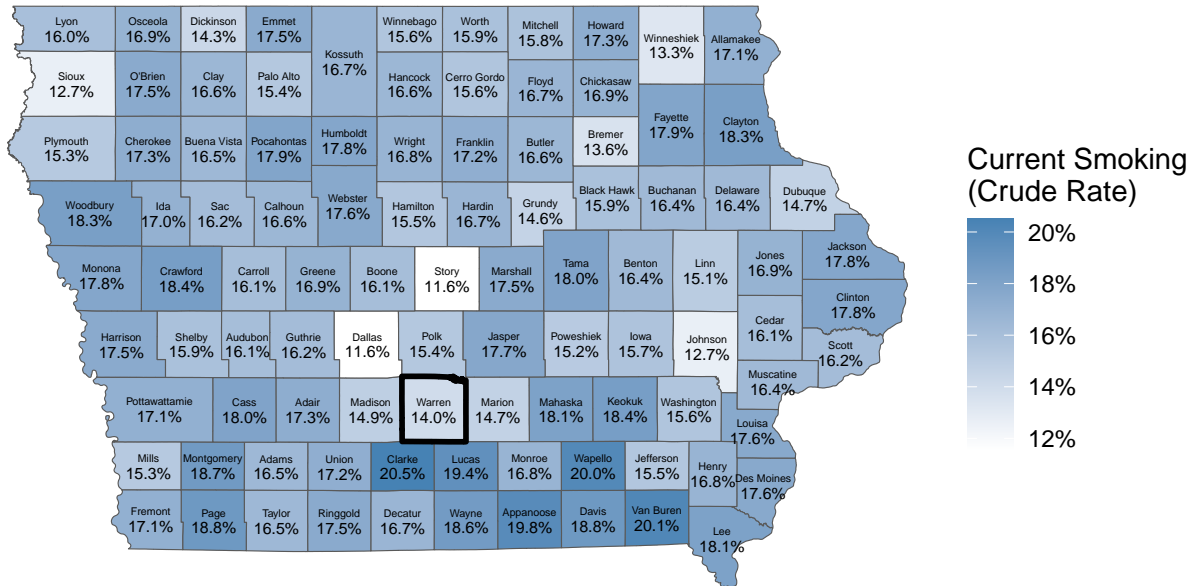
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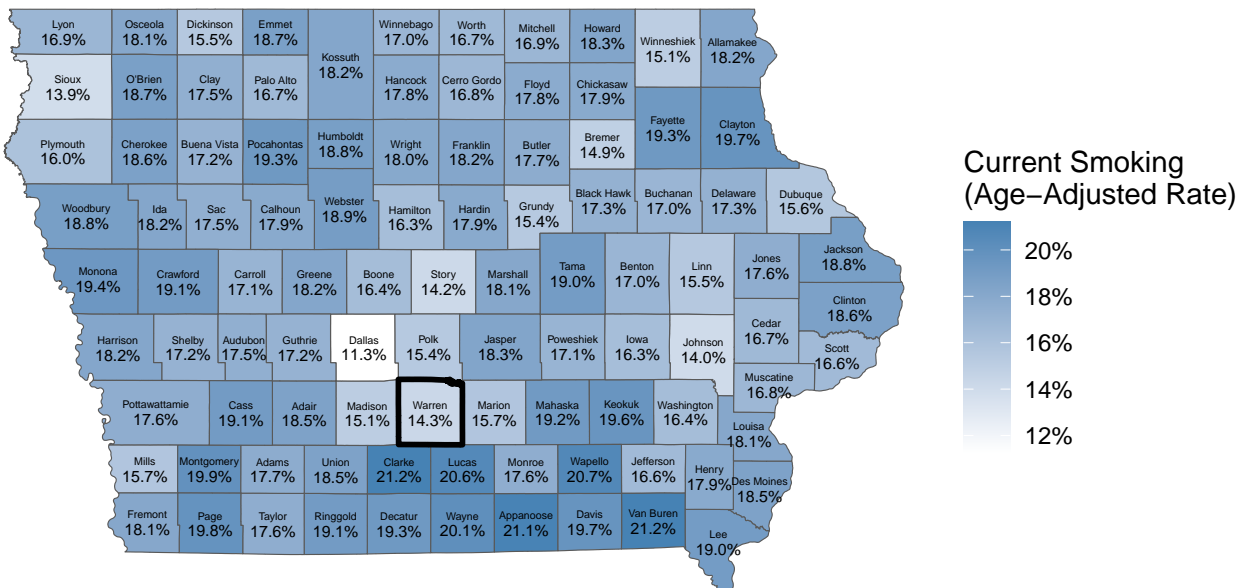
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Current Smoking

Current smoking among adults aged ≥ 18 years



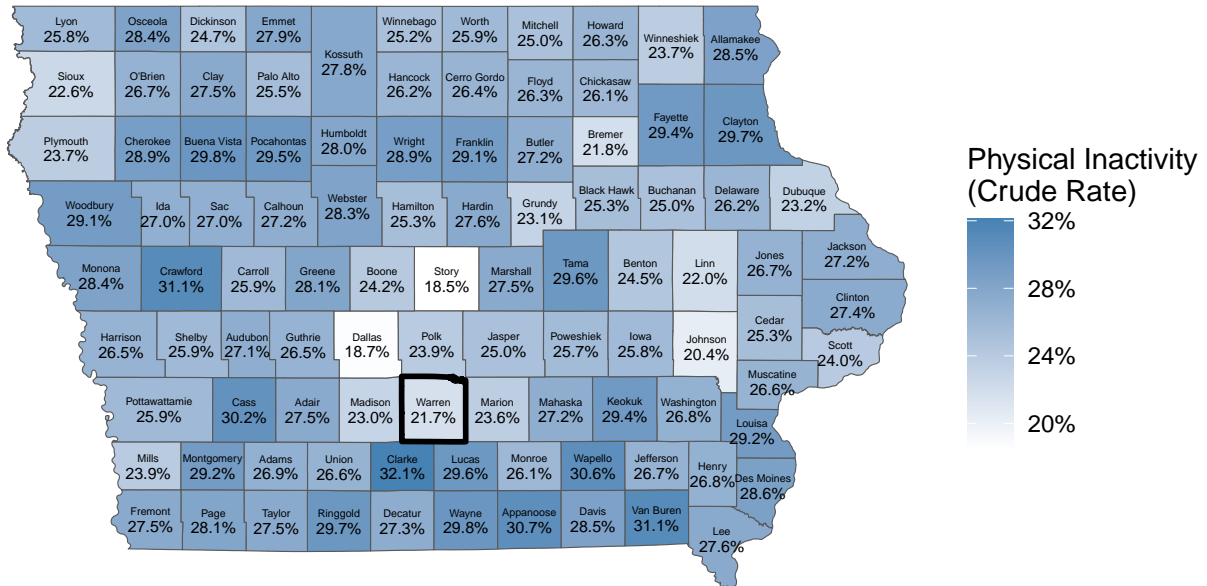
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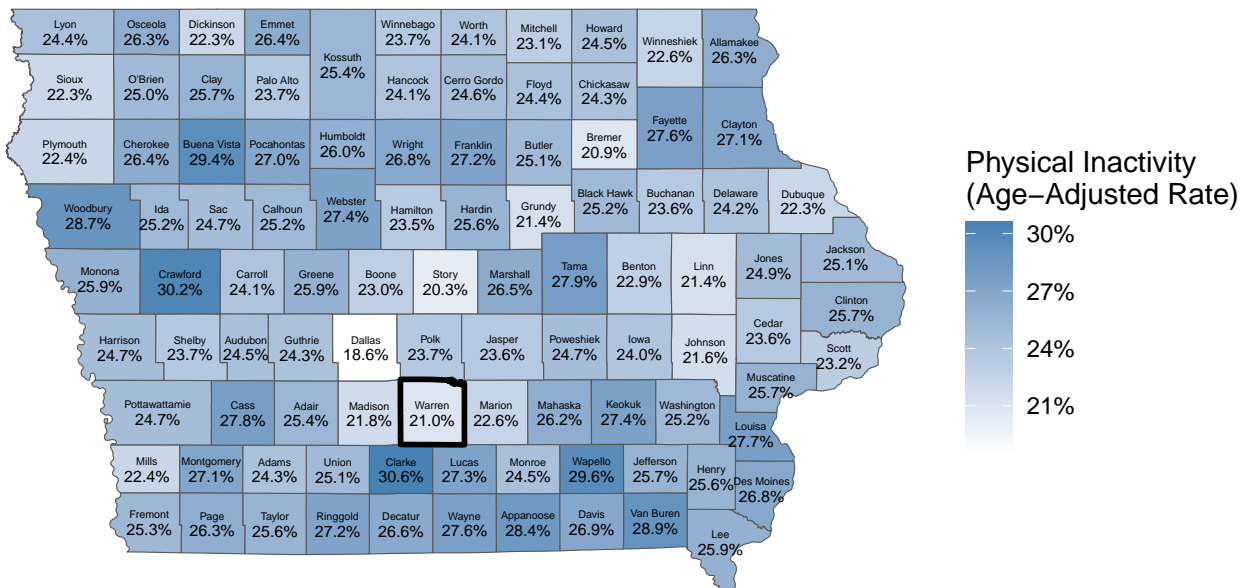
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Physical Inactivity

No leisure-time physical activity among adults aged ≥ 18 years



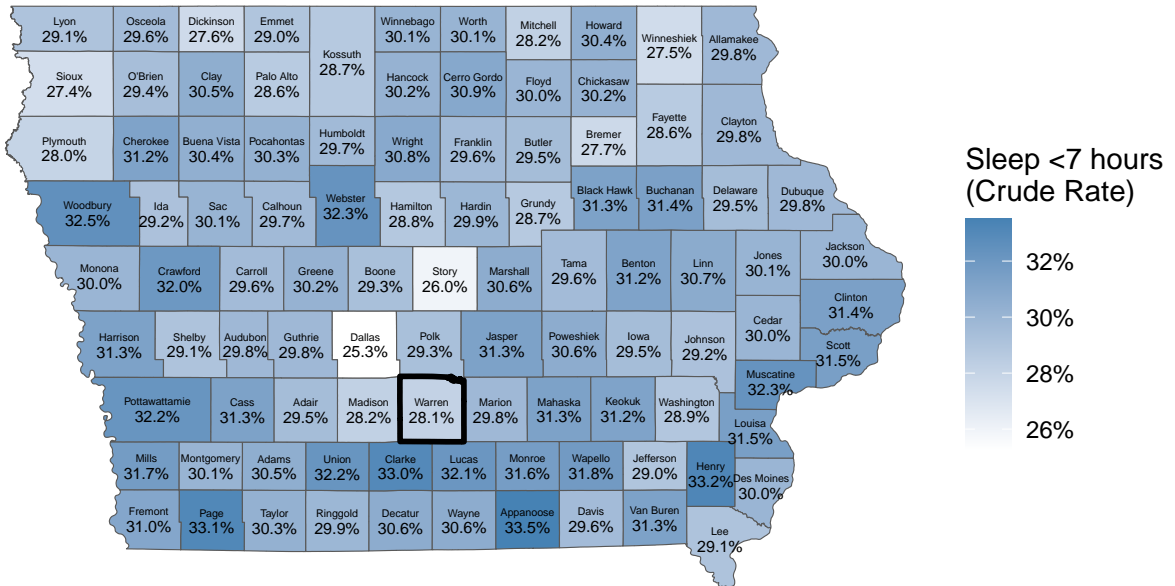
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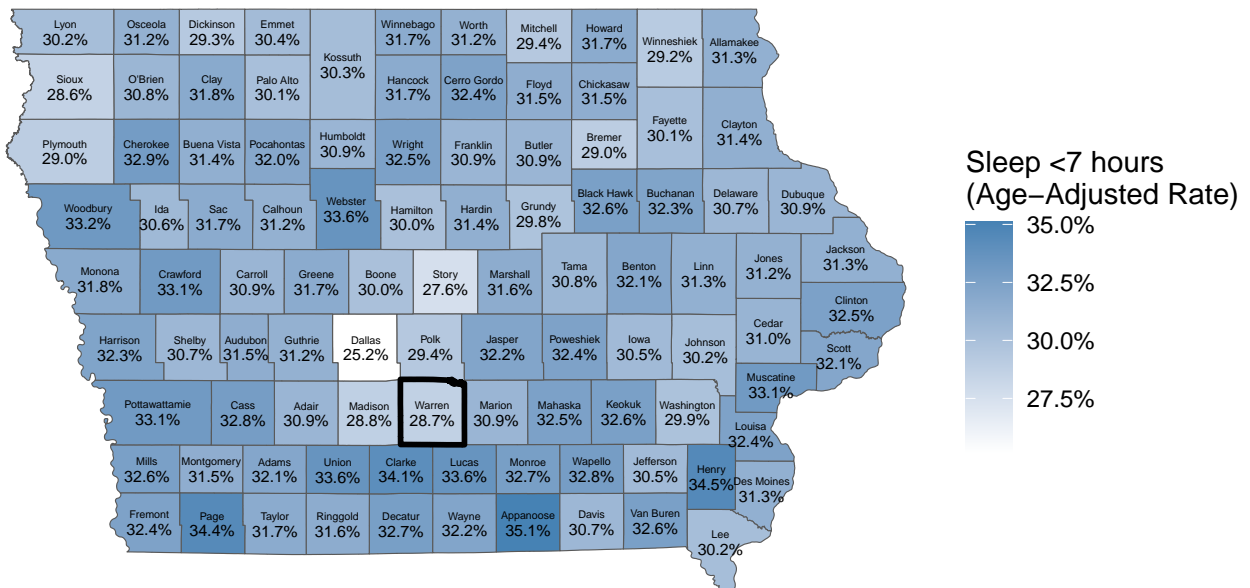
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Sleep <7 hours

Sleeping less than 7 hours among adults aged ≥ 18 years



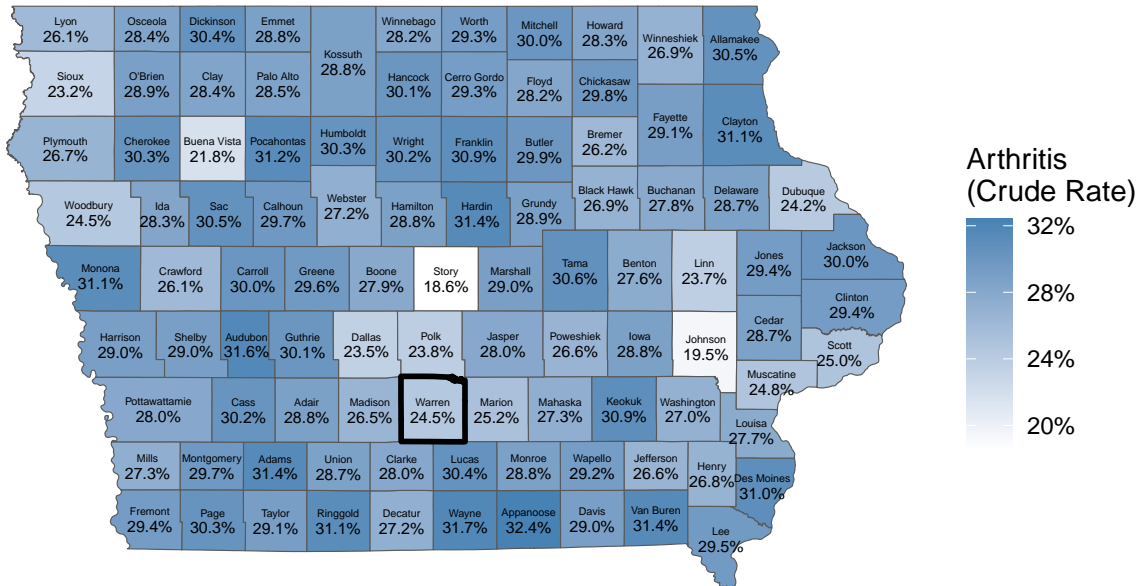
Data Source: CDC PLACES 2023 Release, BRFSS 2020



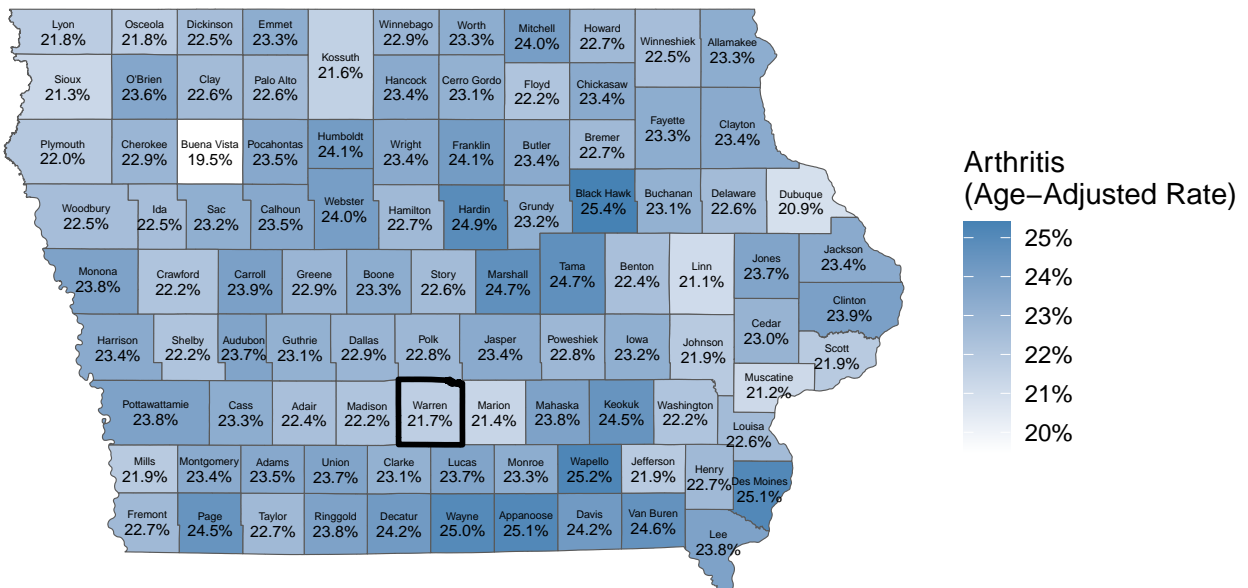
Data Source: CDC PLACES 2023 Release, BRFSS 2020

Arthritis

Arthritis among adults aged >=18 years



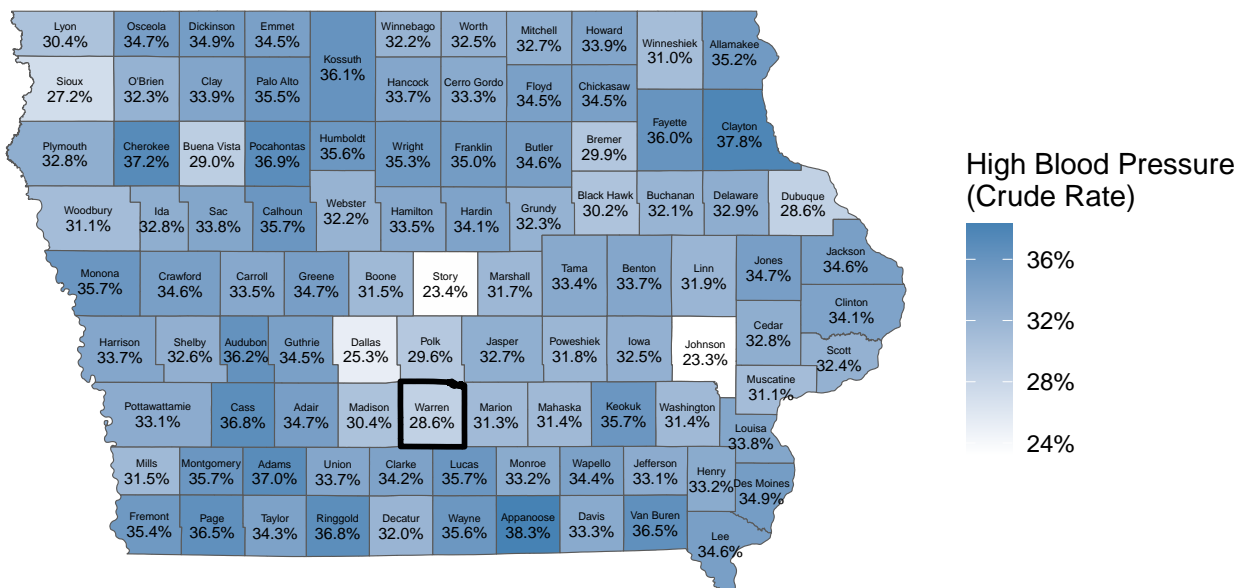
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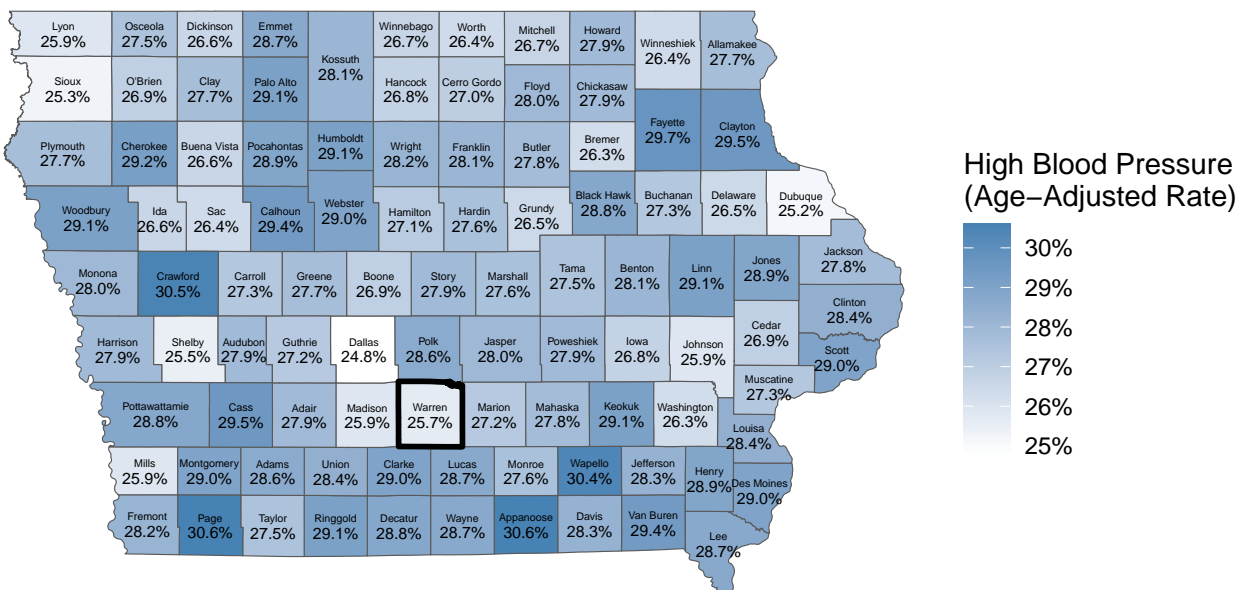
Data Source: CDC PLACES 2023 Release, BRFSS 2021

High Blood Pressure

High blood pressure among adults aged ≥ 18 years



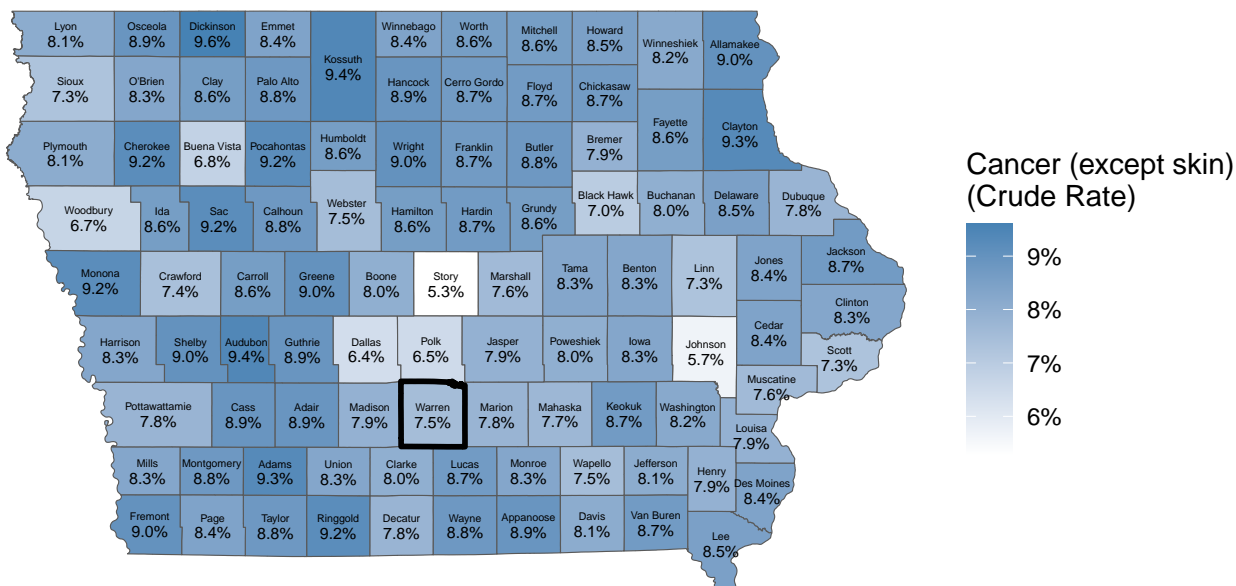
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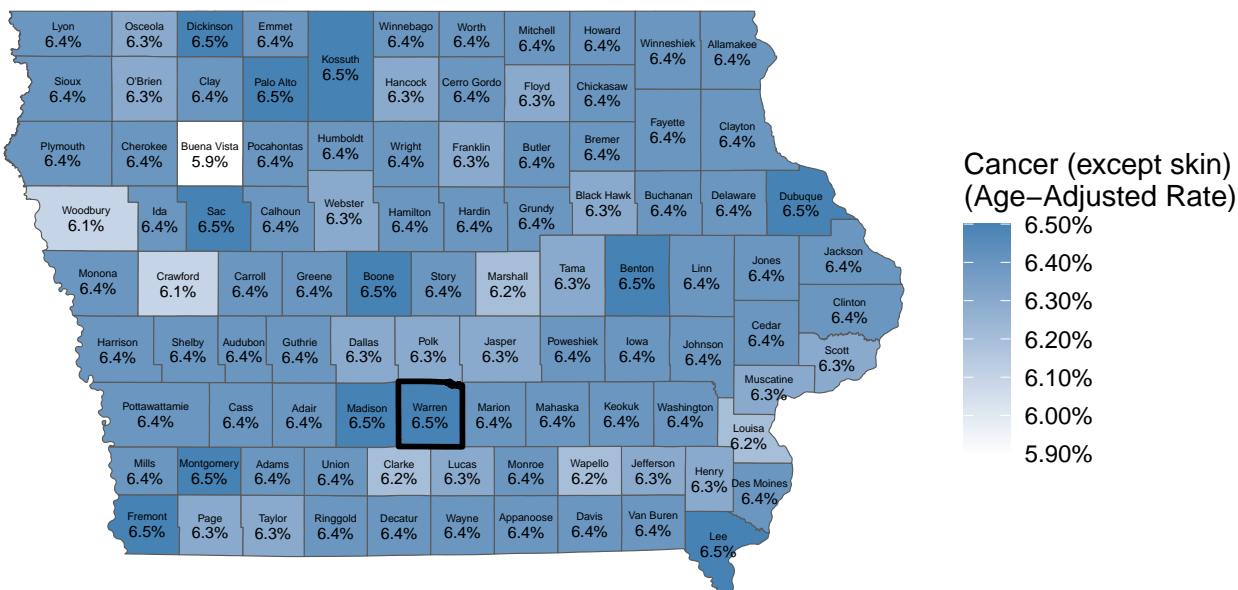
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Cancer (except skin)

Cancer (excluding skin cancer) among adults aged ≥ 18 years



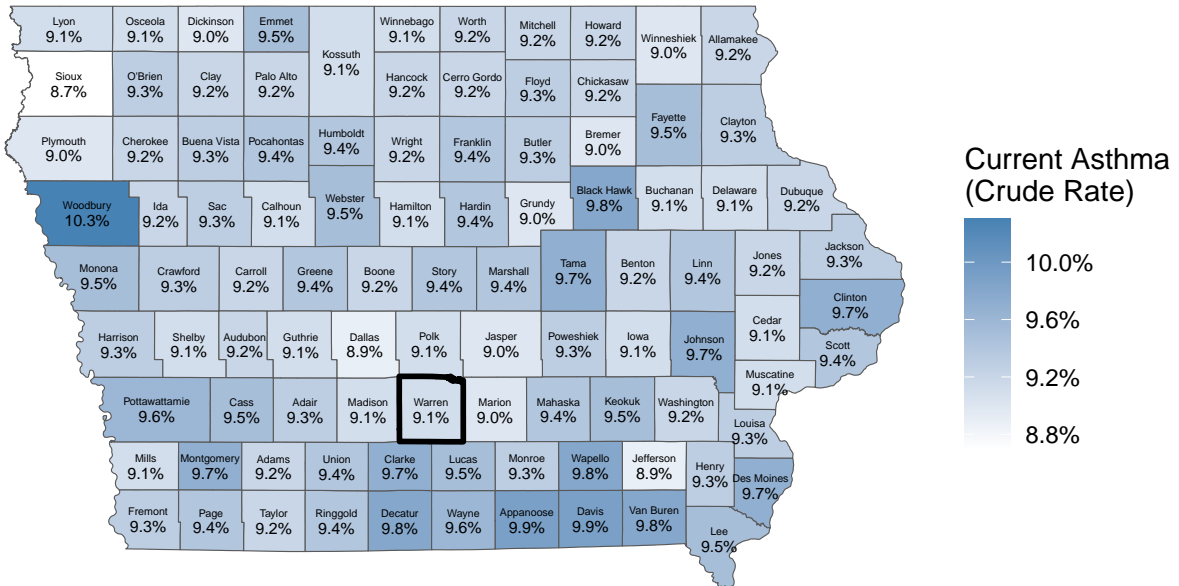
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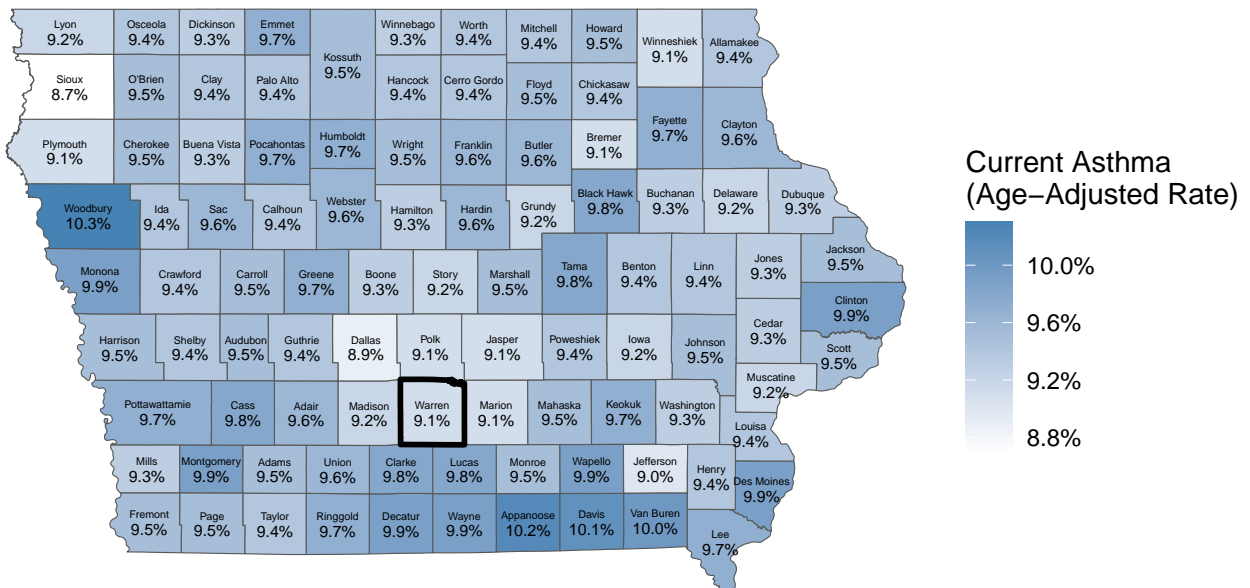
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Current Asthma

Current asthma among adults aged ≥ 18 years



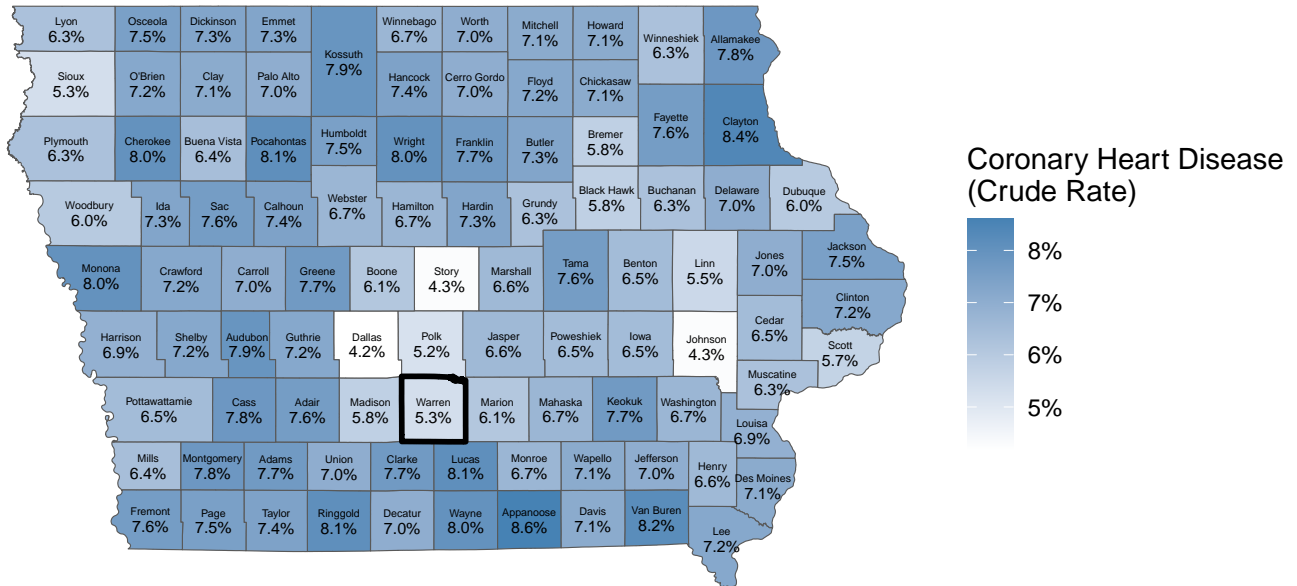
Data Source: CDC PLACES 2023 Release, BRFSS 2021



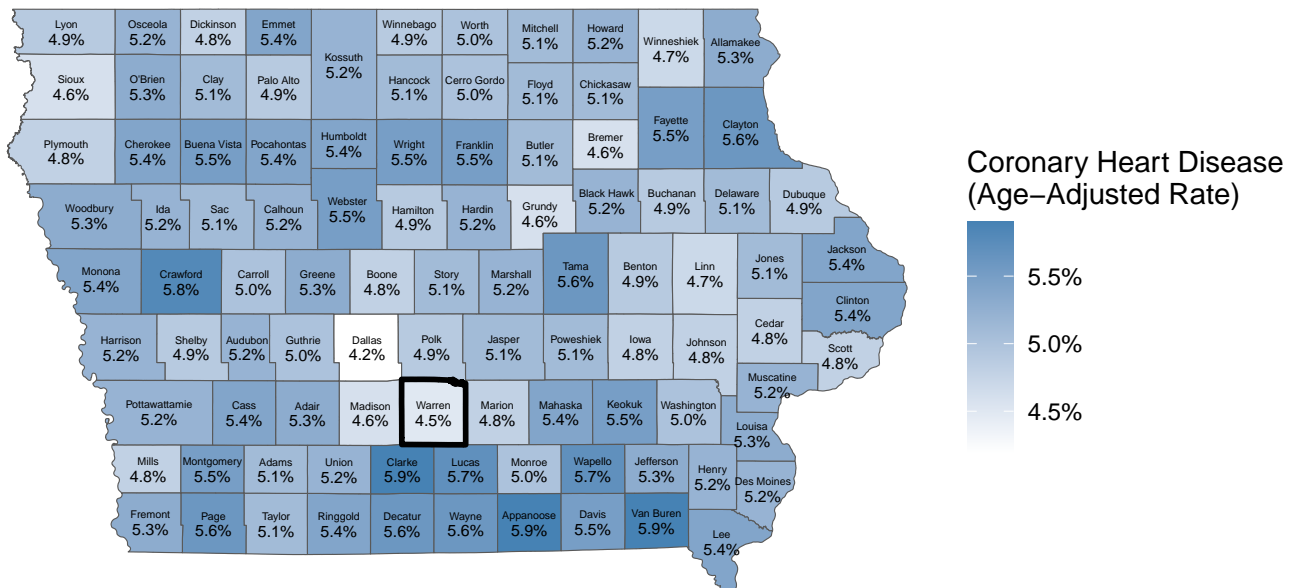
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Coronary Heart Disease

Coronary heart disease among adults aged ≥ 18 years



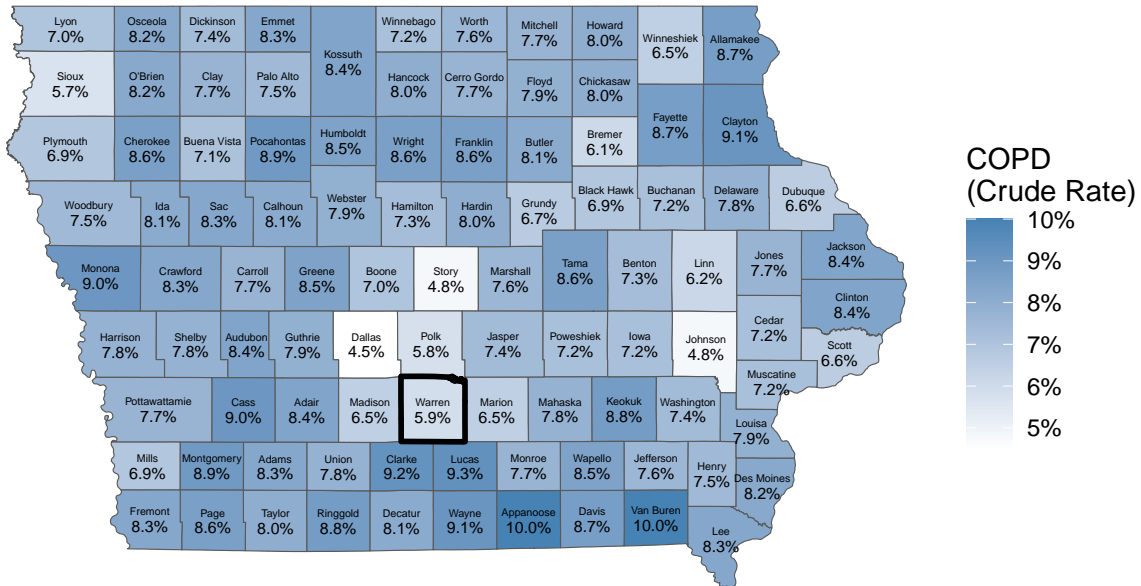
Data Source: CDC PLACES 2023 Release, BRFSS 2021



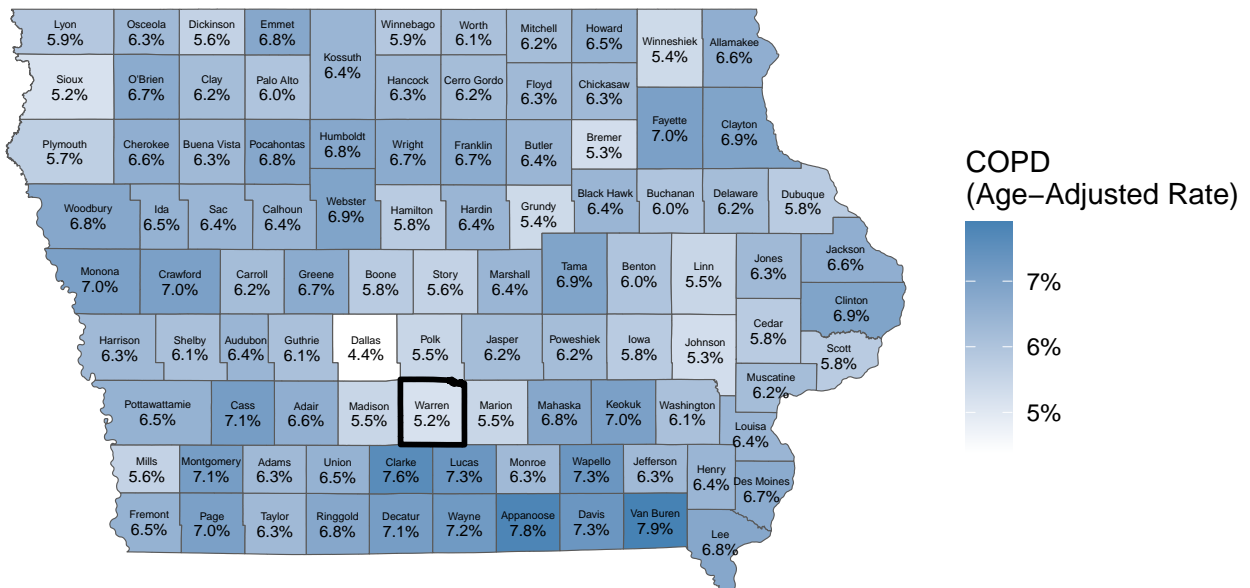
Data Source: CDC PLACES 2023 Release, BRFSS 2021

COPD

Chronic obstructive pulmonary disease among adults aged >=18 years



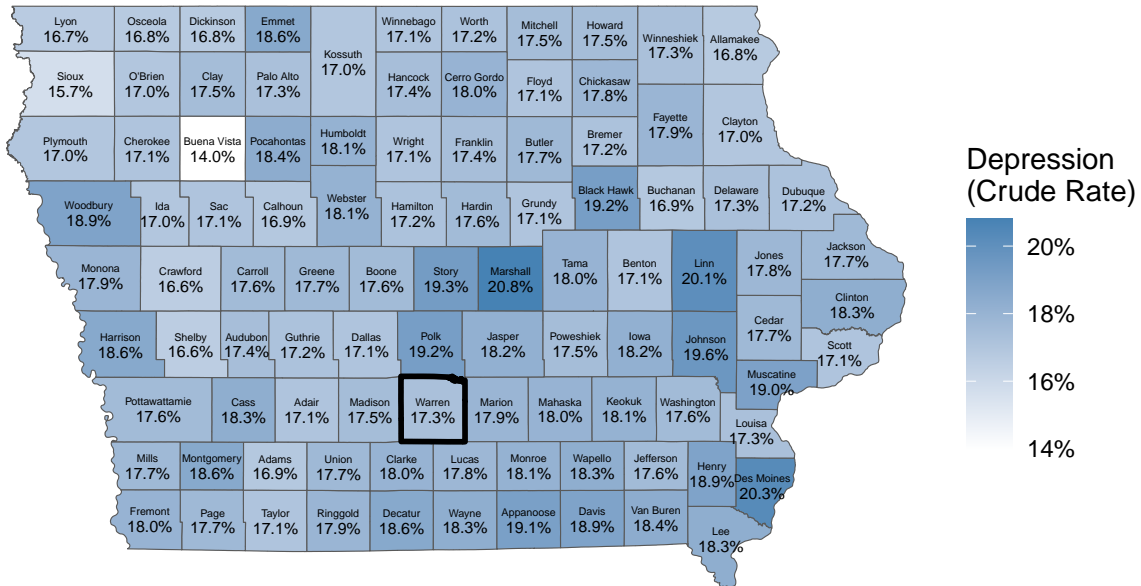
Data Source: CDC PLACES 2023 Release, BRFSS 2021



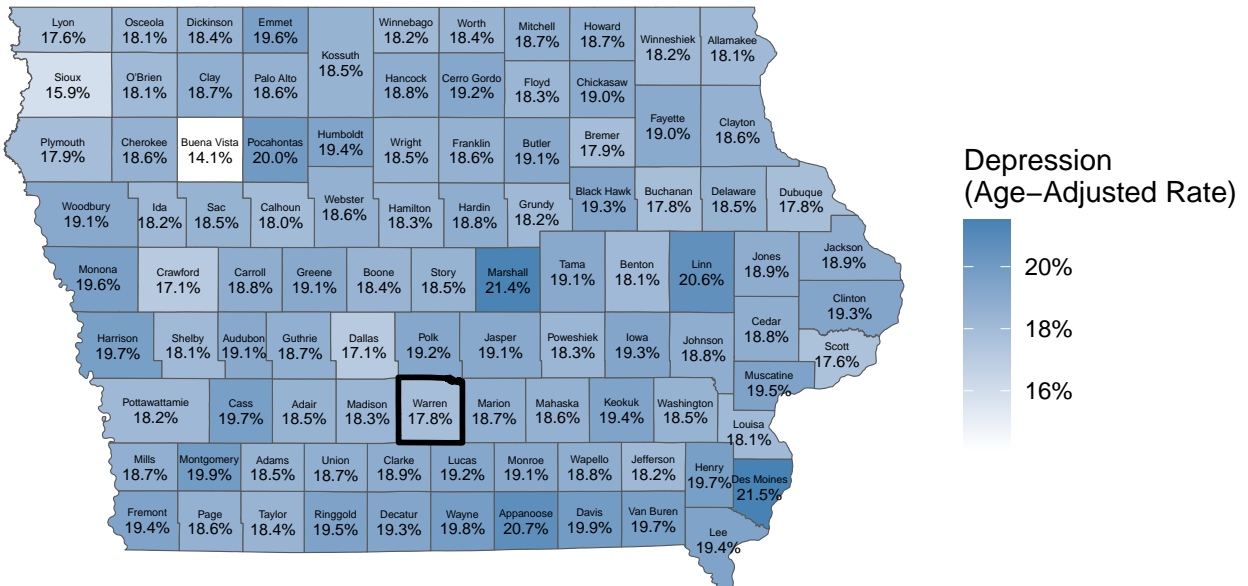
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Depression

Depression among adults aged >=18 years



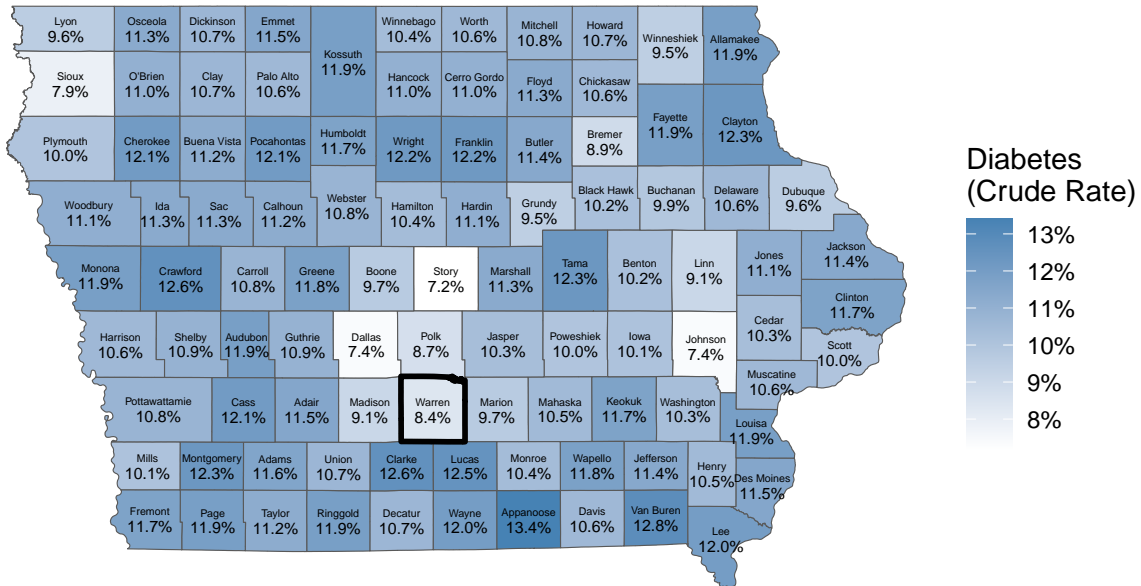
Data Source: CDC PLACES 2023 Release, BRFSS 2021



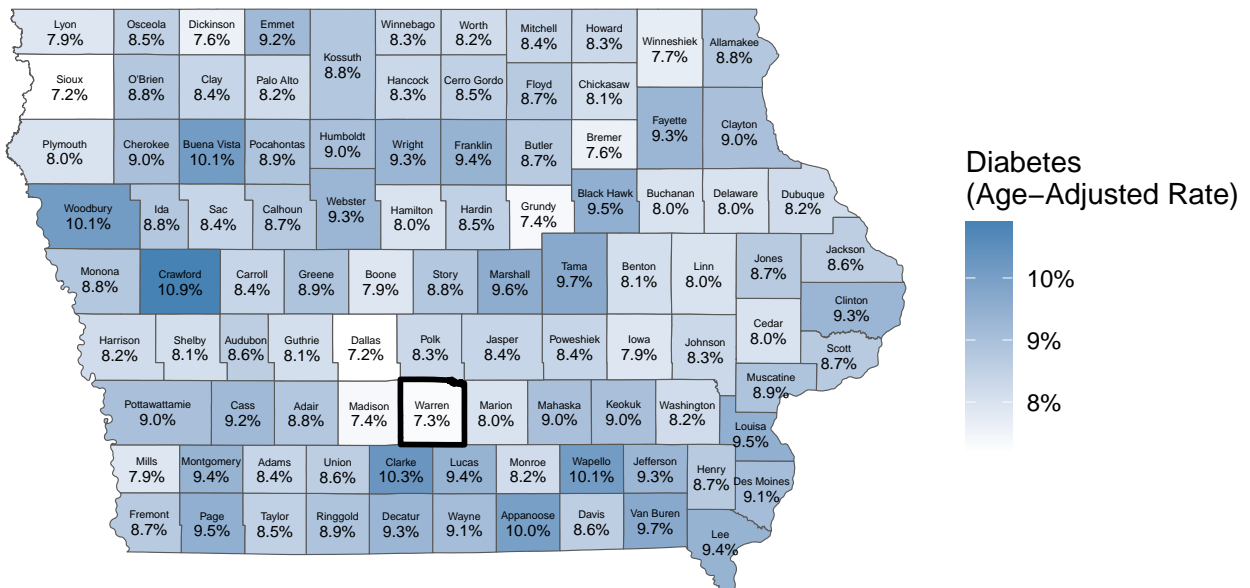
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Diabetes

Diagnosed diabetes among adults aged >=18 years



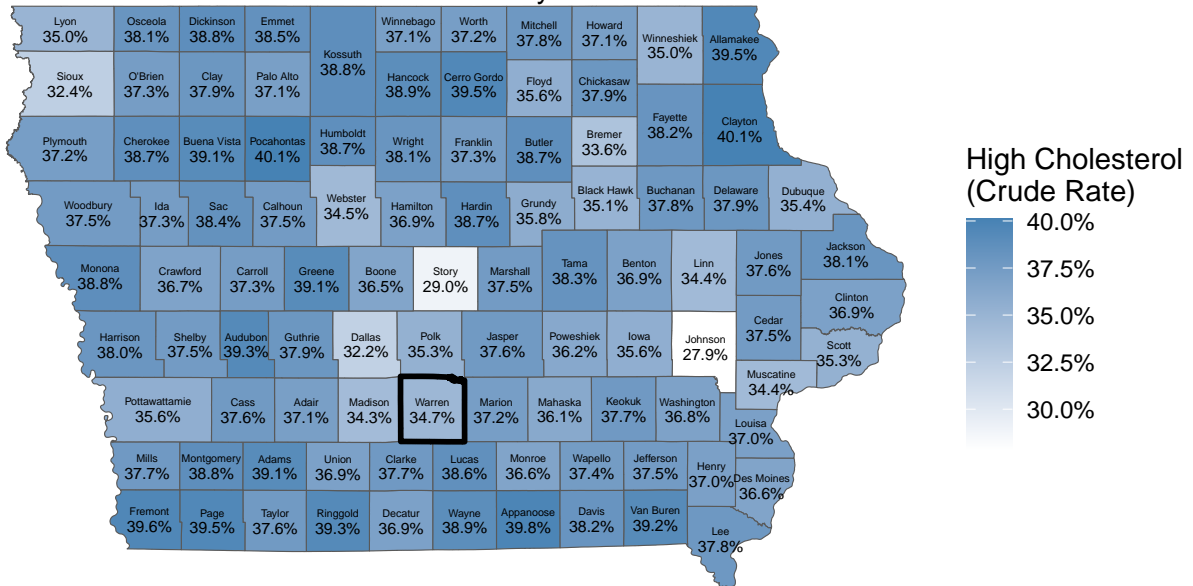
Data Source: CDC PLACES 2023 Release, BRFSS 2021



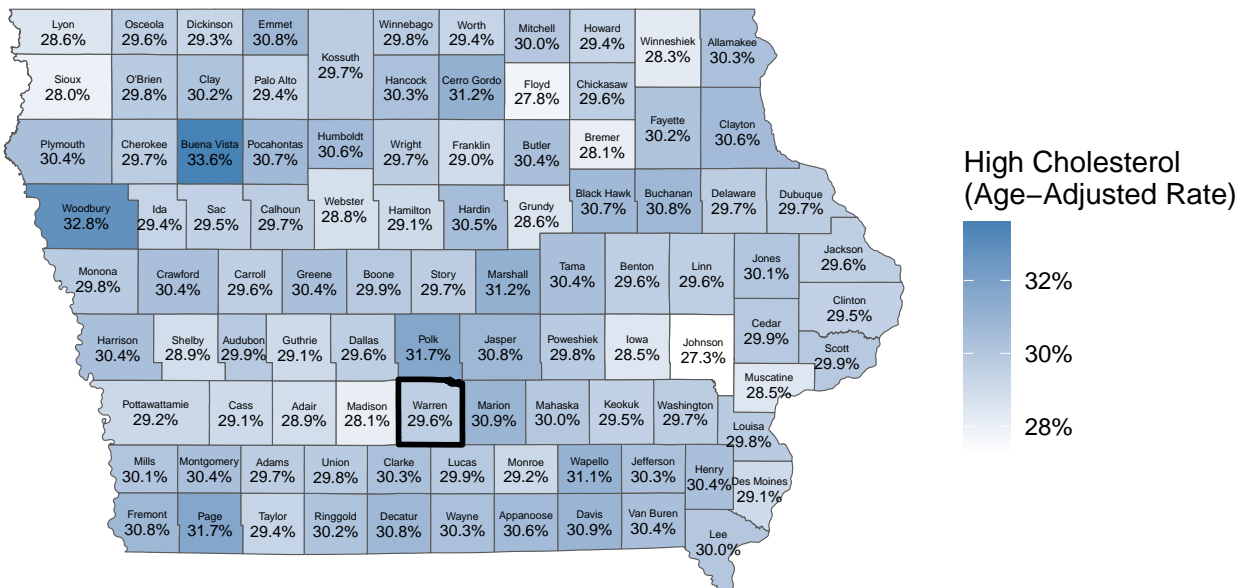
Data Source: CDC PLACES 2023 Release, BRFSS 2021

High Cholesterol

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



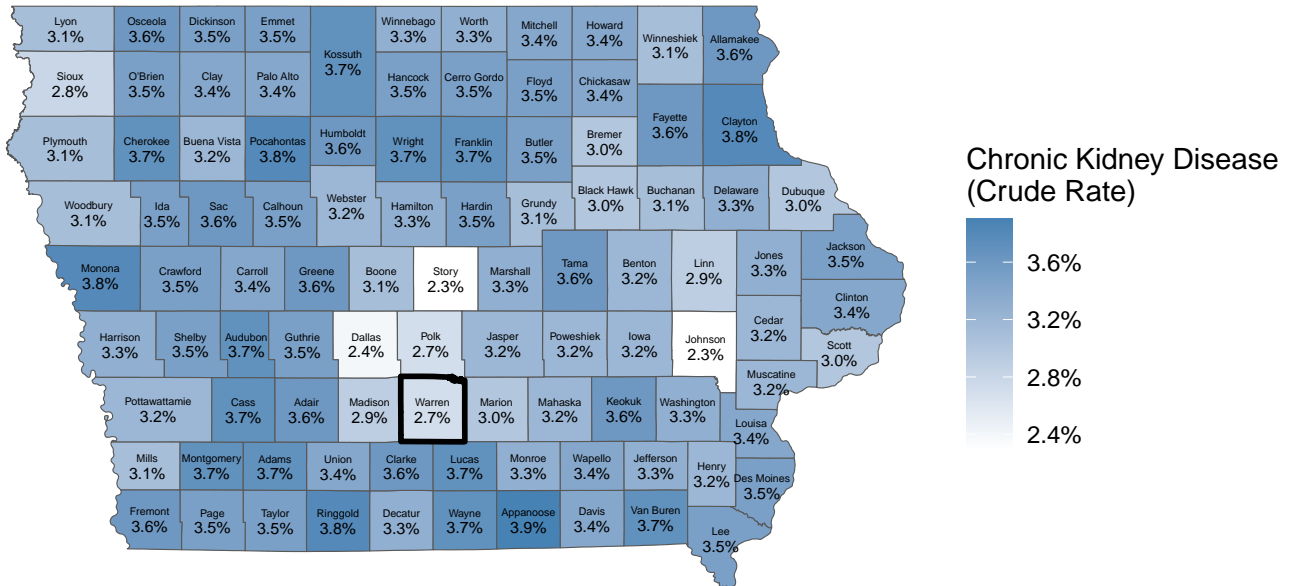
Data Source: CDC PLACES 2023 Release, BRFSS 2021



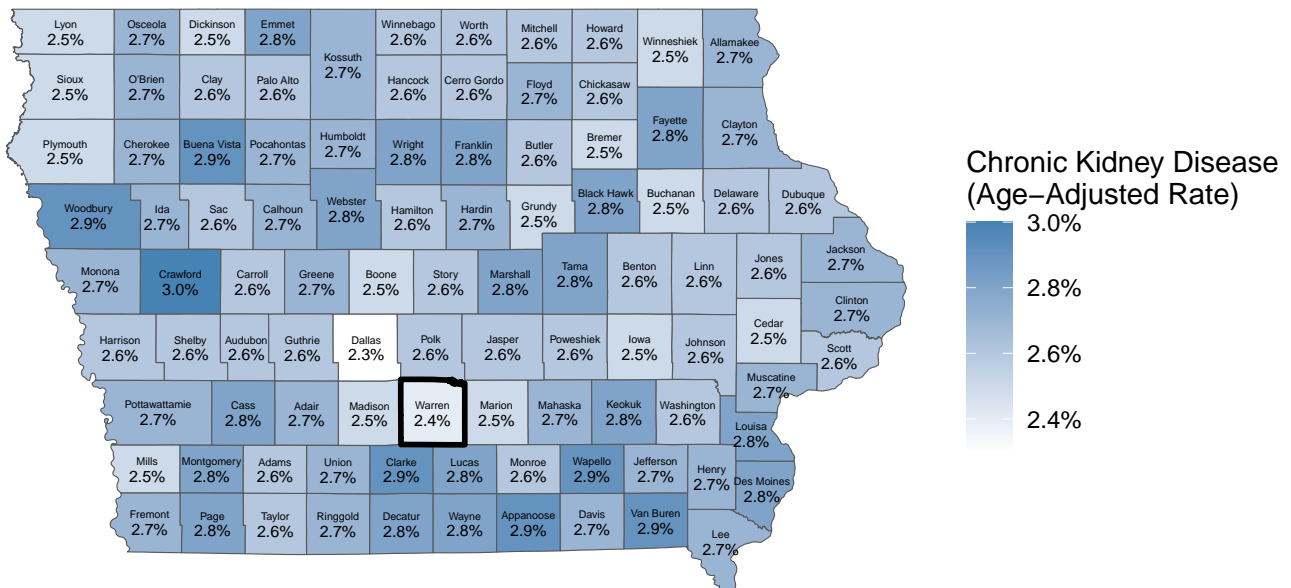
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Chronic Kidney Disease

Chronic kidney disease among adults aged ≥ 18 years



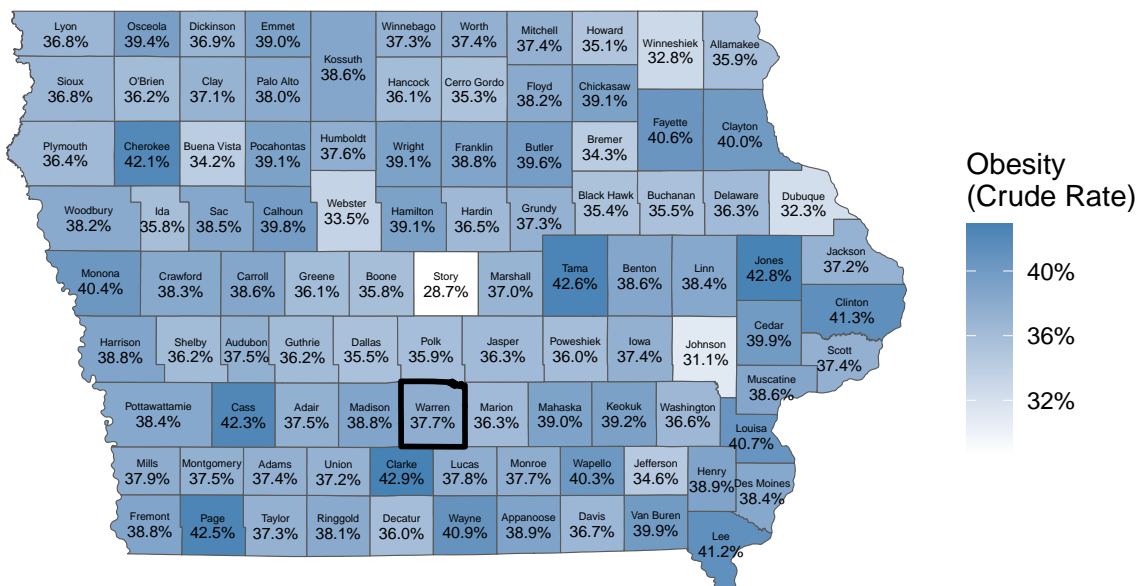
Data Source: CDC PLACES 2023 Release, BRFSS 2021



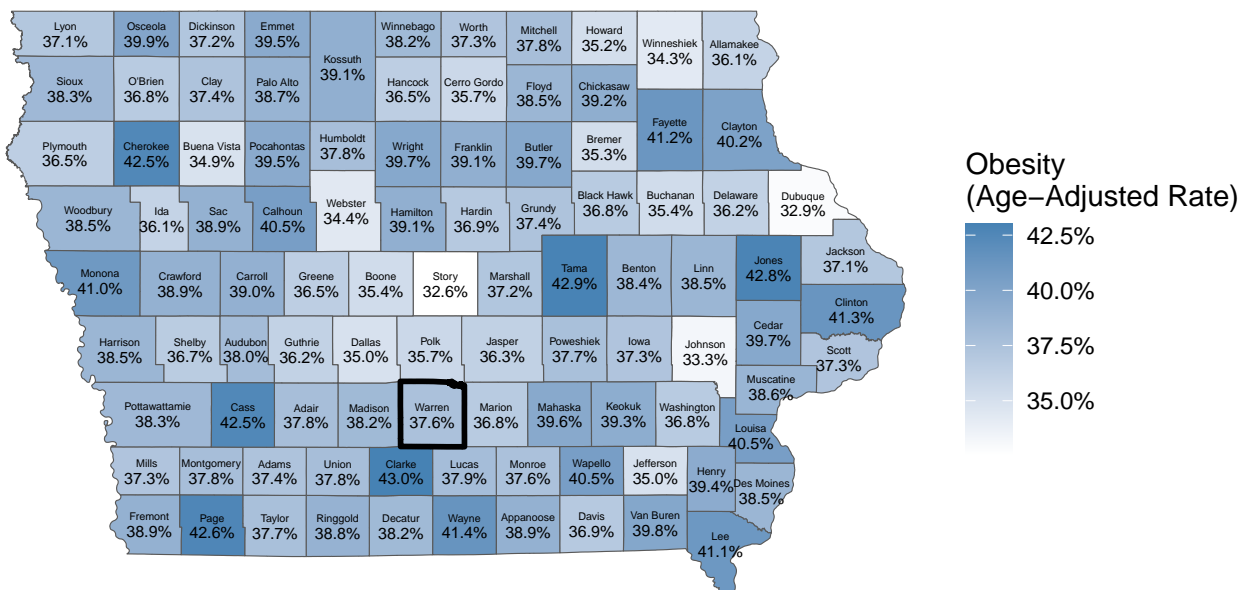
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Obesity

Obesity among adults aged >=18 years



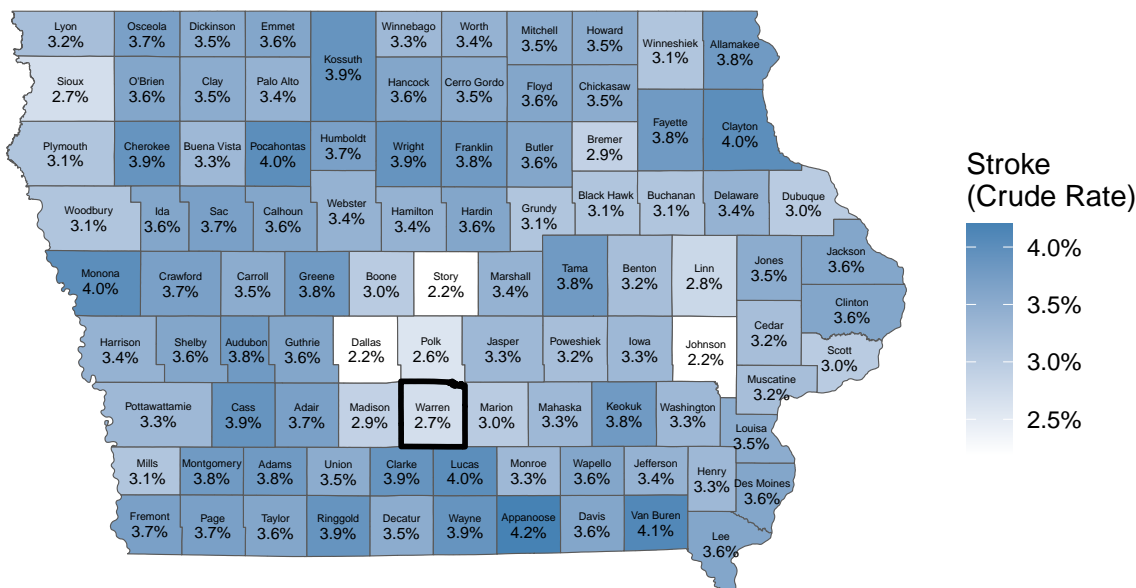
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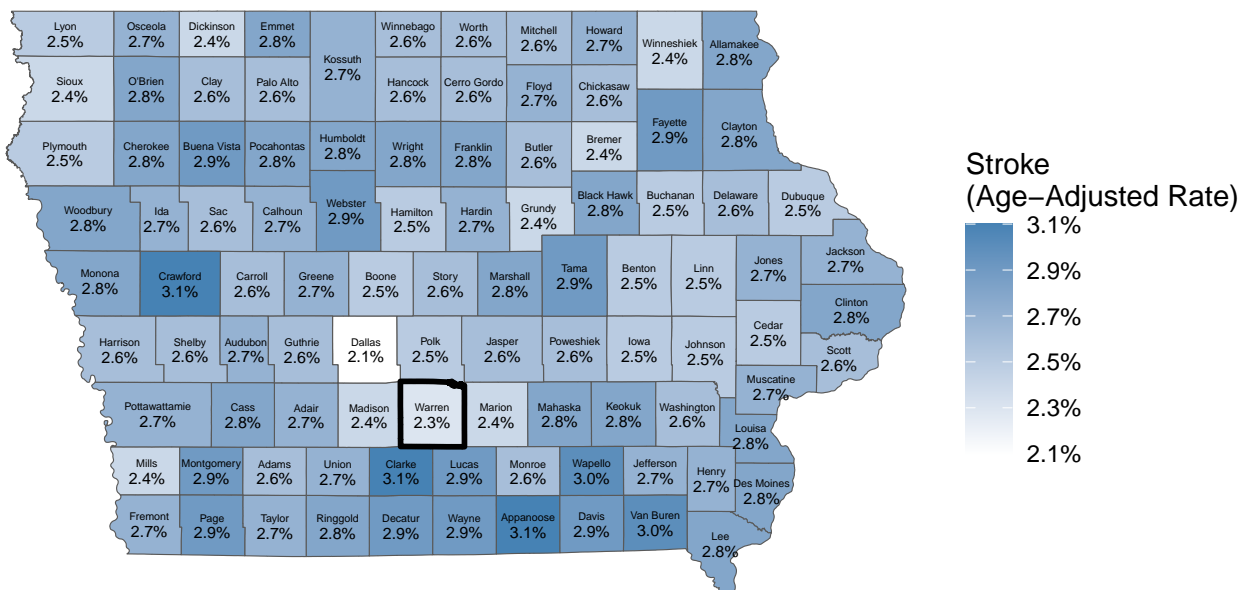
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Stroke

Stroke among adults aged ≥ 18 years



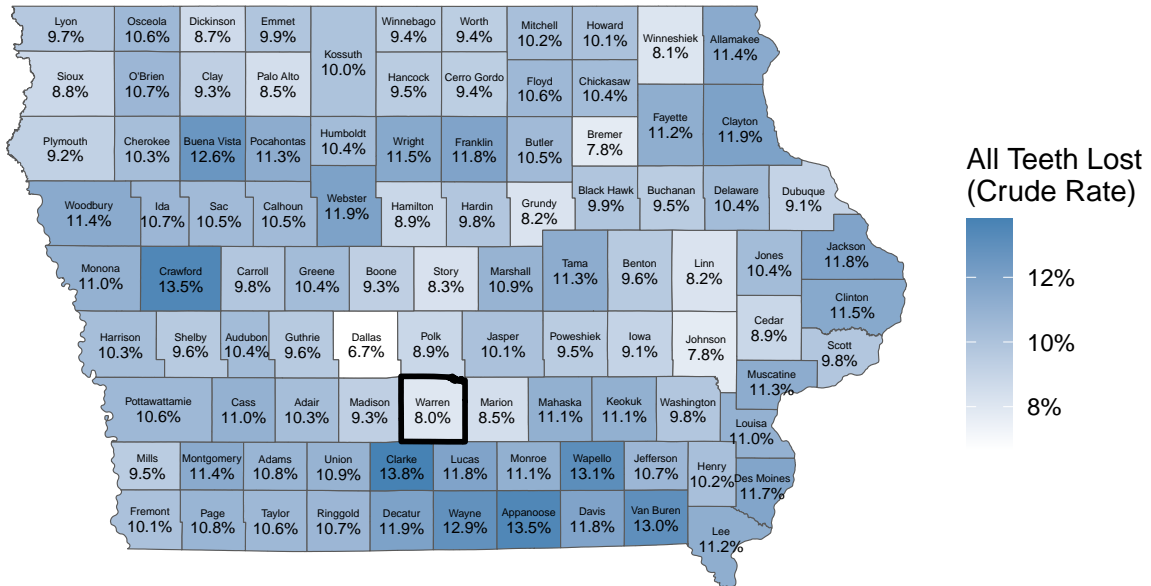
Data Source: CDC PLACES 2023 Release, BRFSS 2021



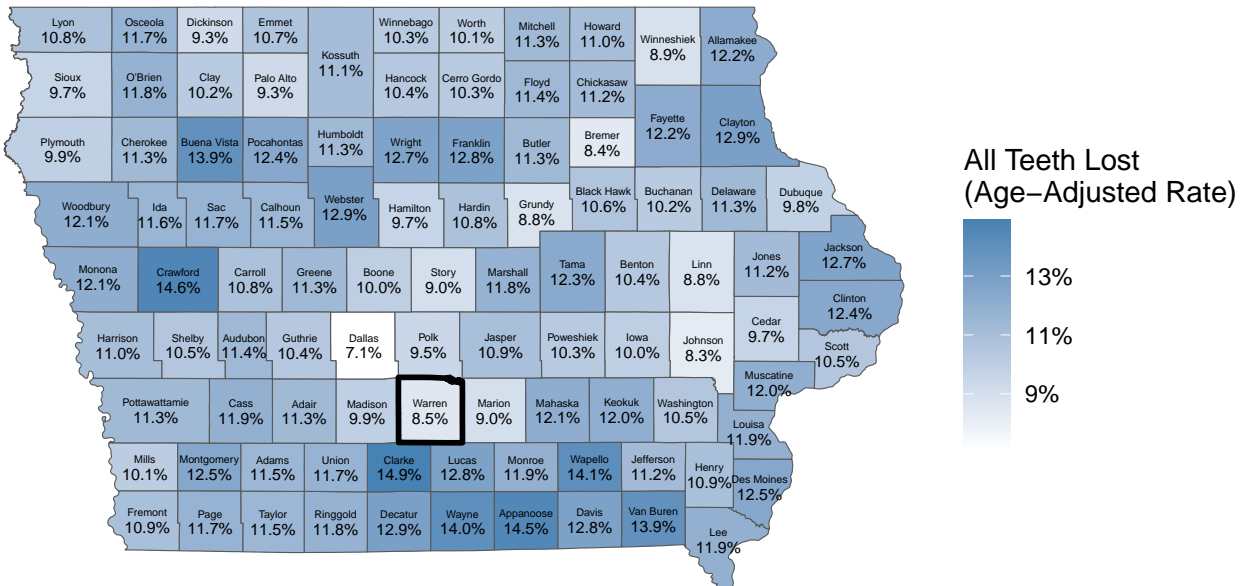
Data Source: CDC PLACES 2023 Release, BRFSS 2021

All Teeth Lost

All teeth lost among adults aged ≥ 65 years



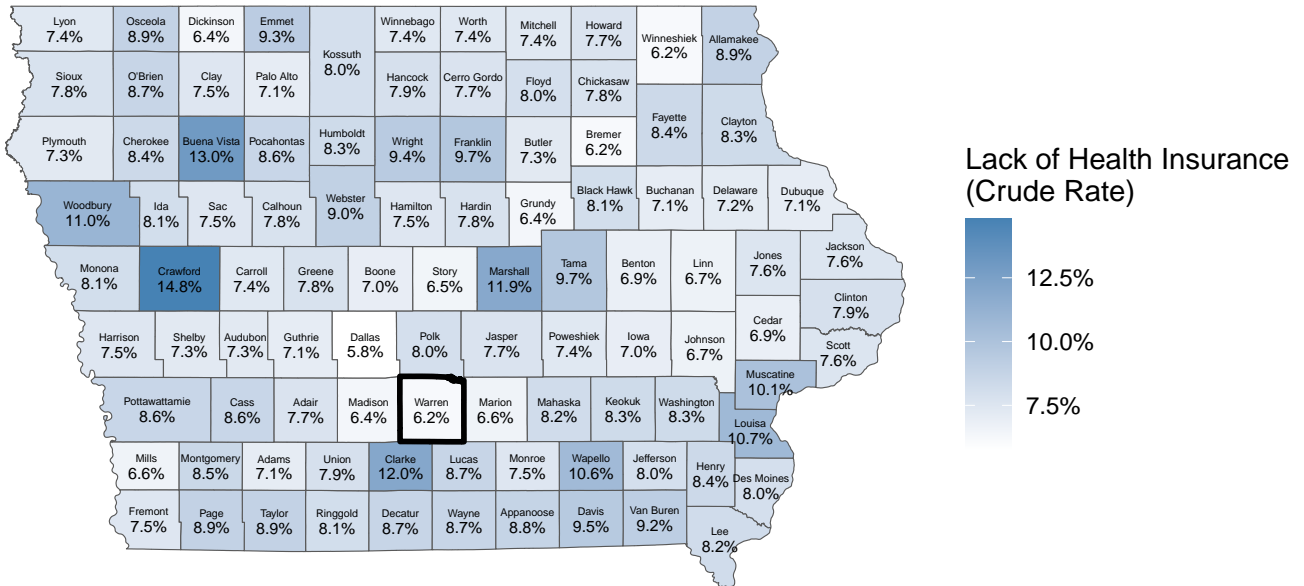
Data Source: CDC PLACES 2023 Release, BRFSS 2020



Data Source: CDC PLACES 2023 Release, BRFSS 2020

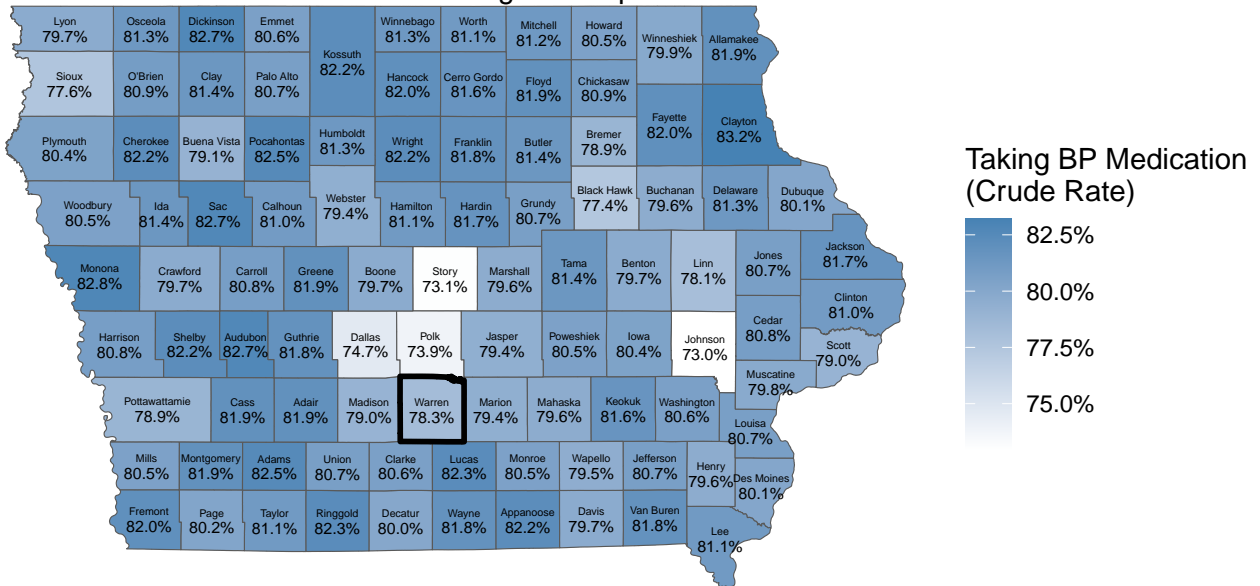
Lack of Health Insurance

Current lack of health insurance among adults aged 18–64 years

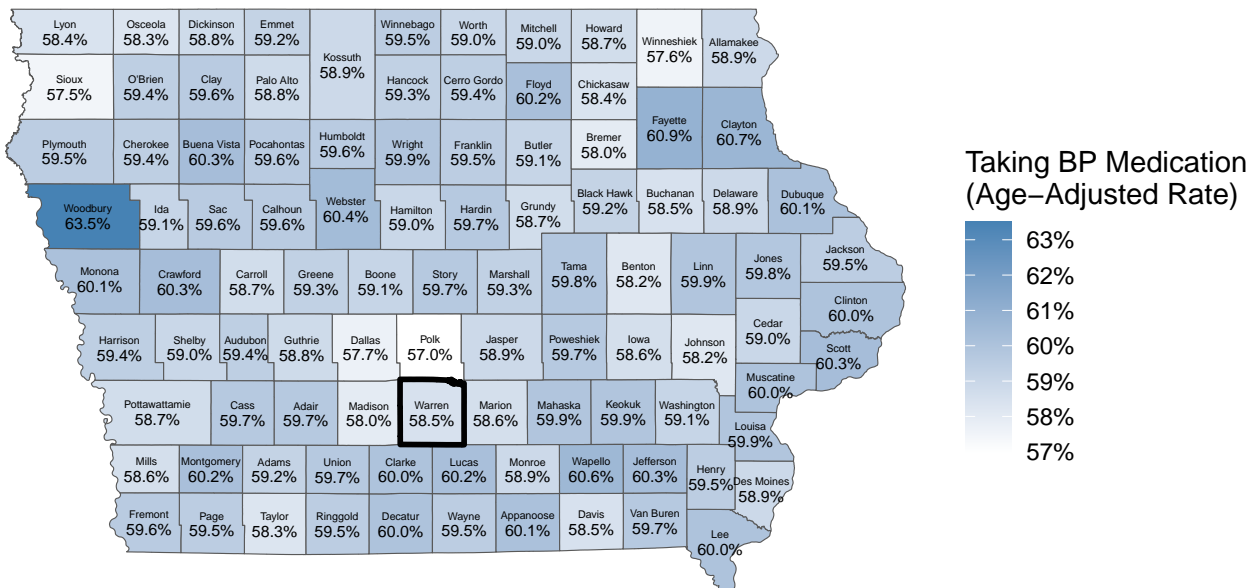


Taking BP Medication

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



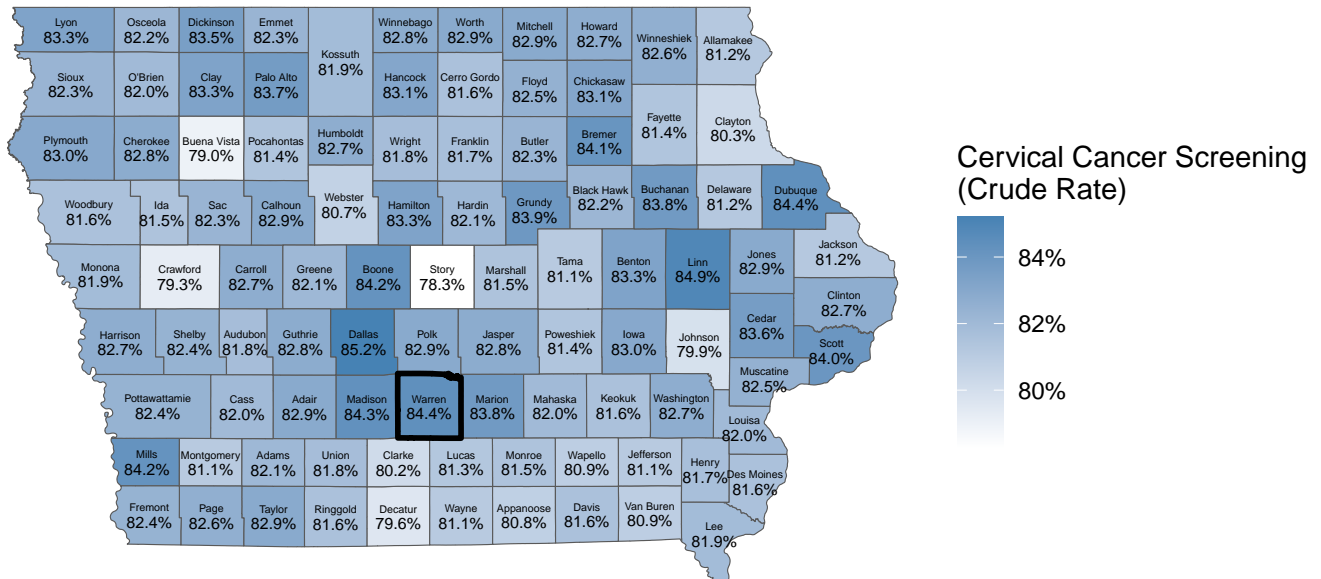
Data Source: CDC PLACES 2023 Release, BRFSS 2021



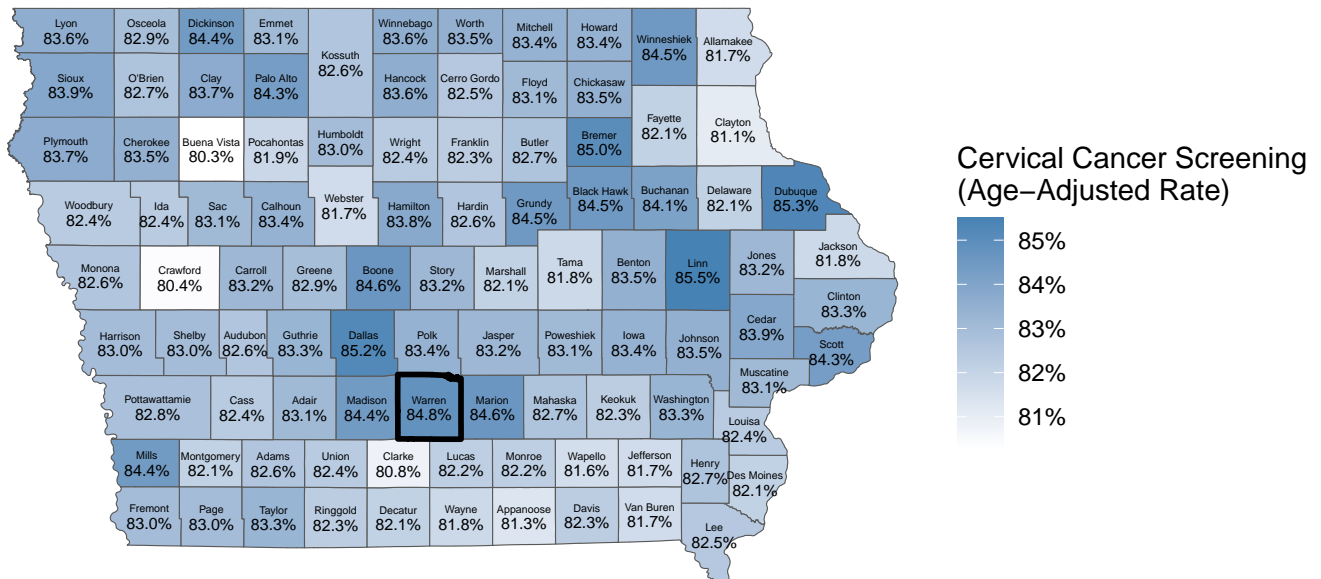
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Cervical Cancer Screening

Cervical cancer screening among adult women aged 21–65 years



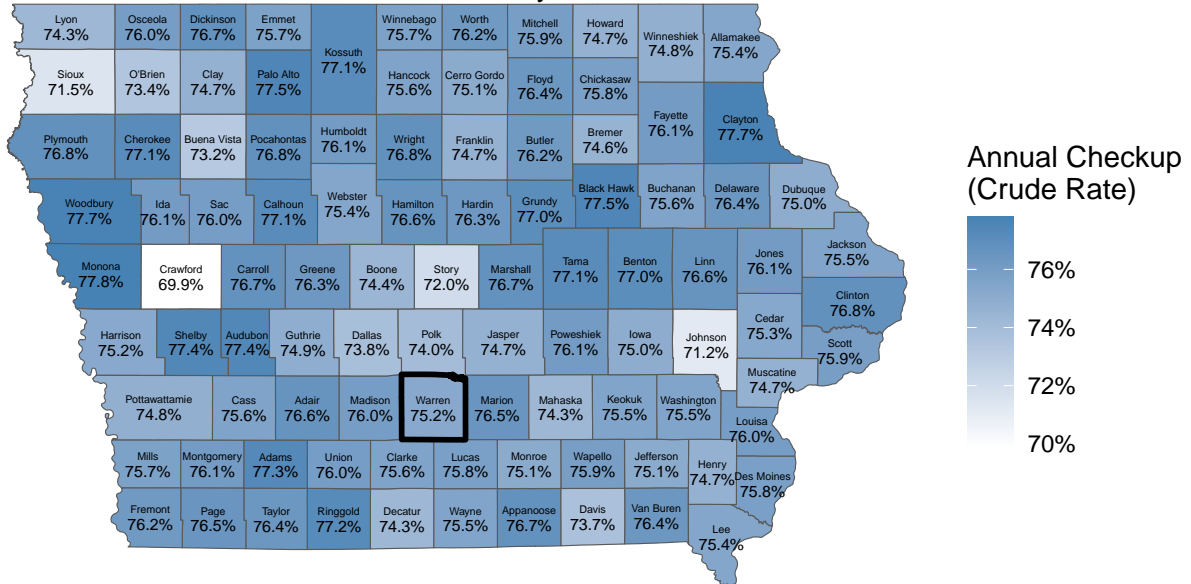
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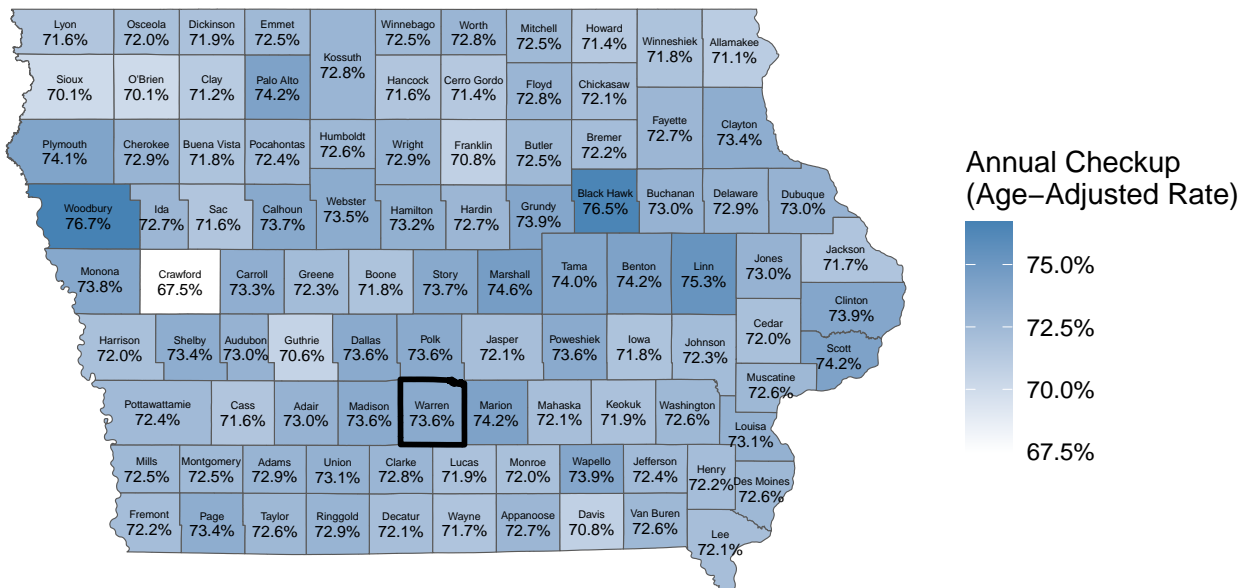
Data Source: CDC PLACES 2023 Release, BRFSS 2020

Annual Checkup

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



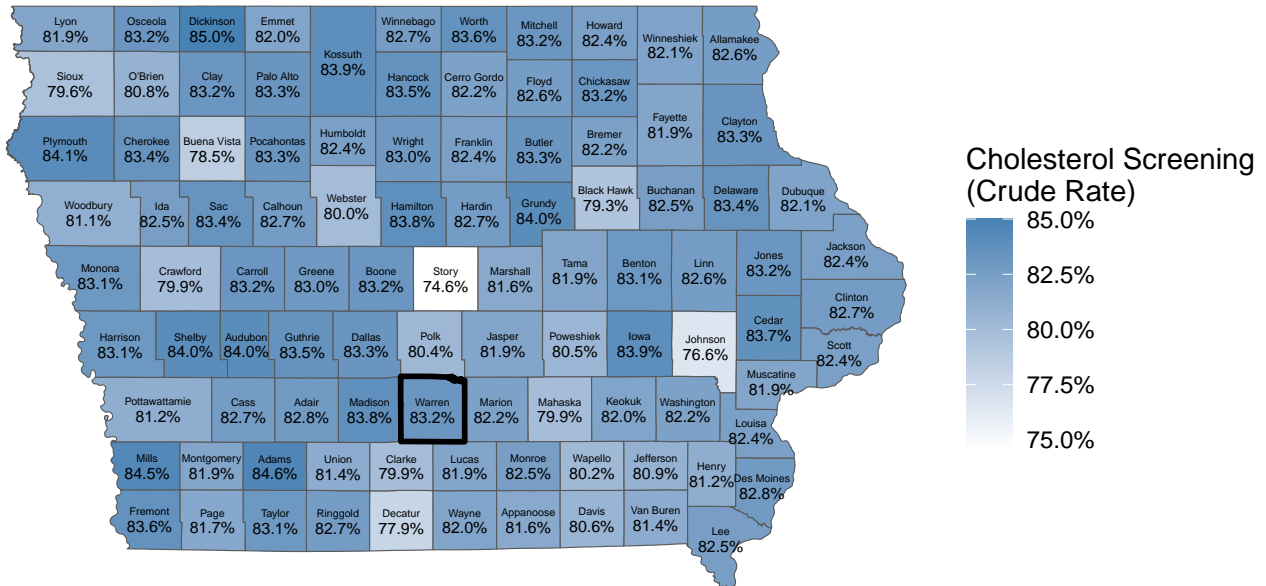
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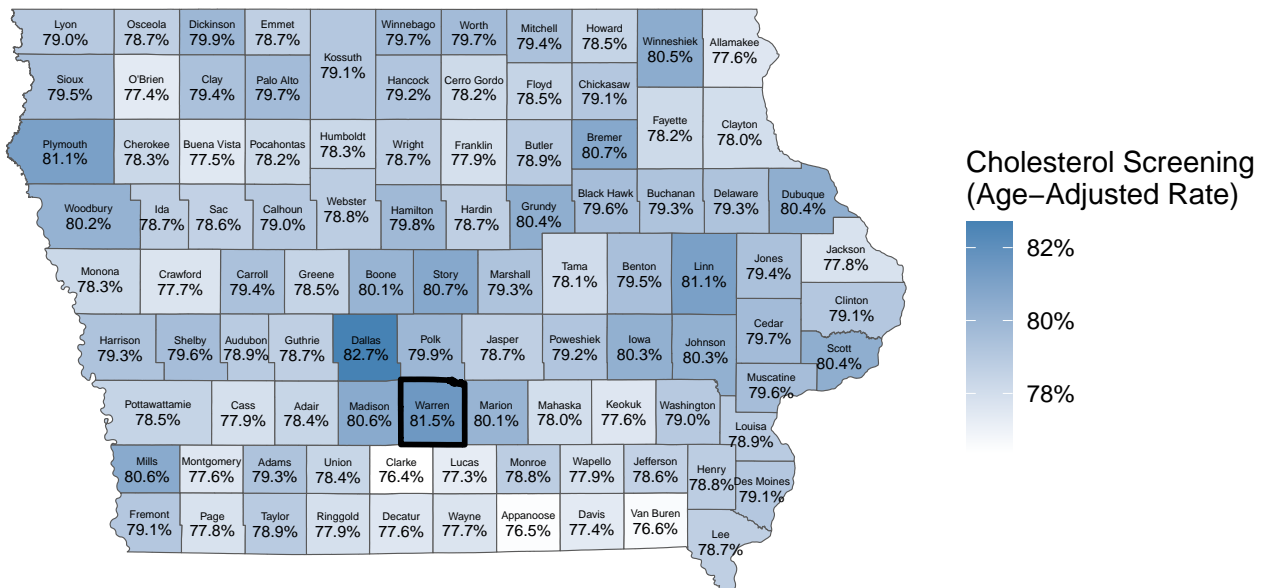
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Cholesterol Screening

Cholesterol screening among adults aged ≥ 18 years



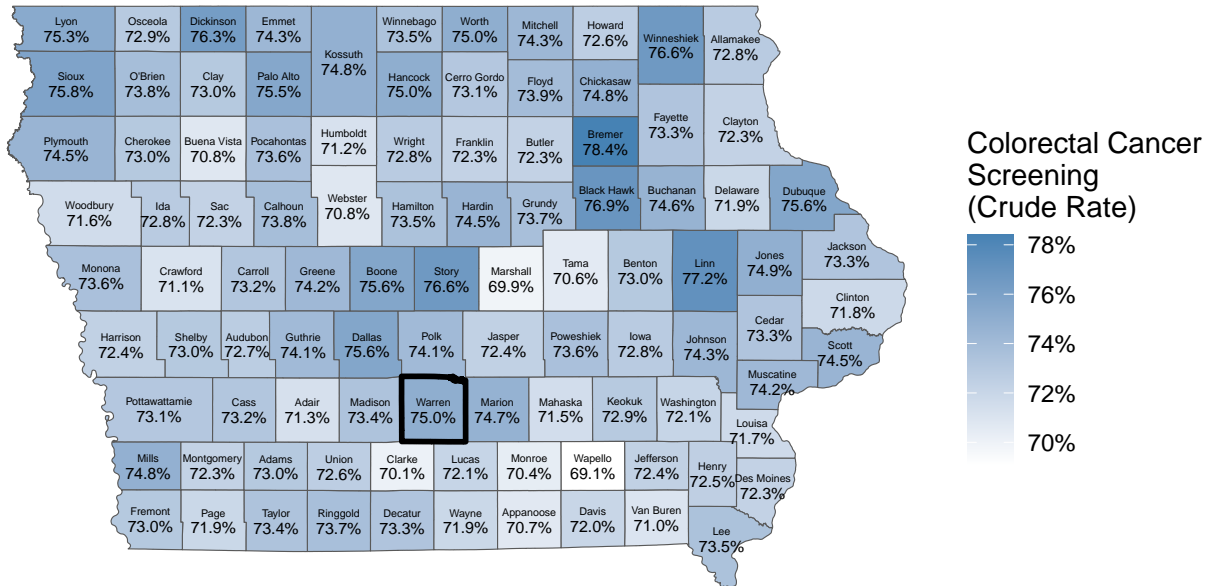
Data Source: CDC PLACES 2023 Release, BRFSS 2021



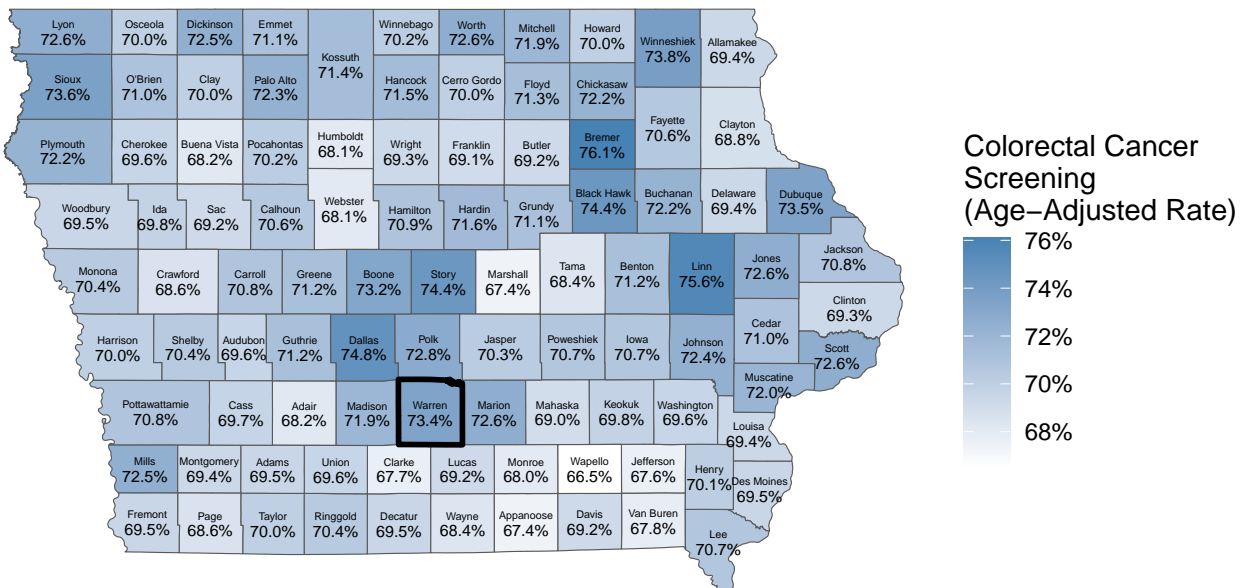
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Colorectal Cancer Screening

Colorectal cancer screening among adults aged 50–75 years



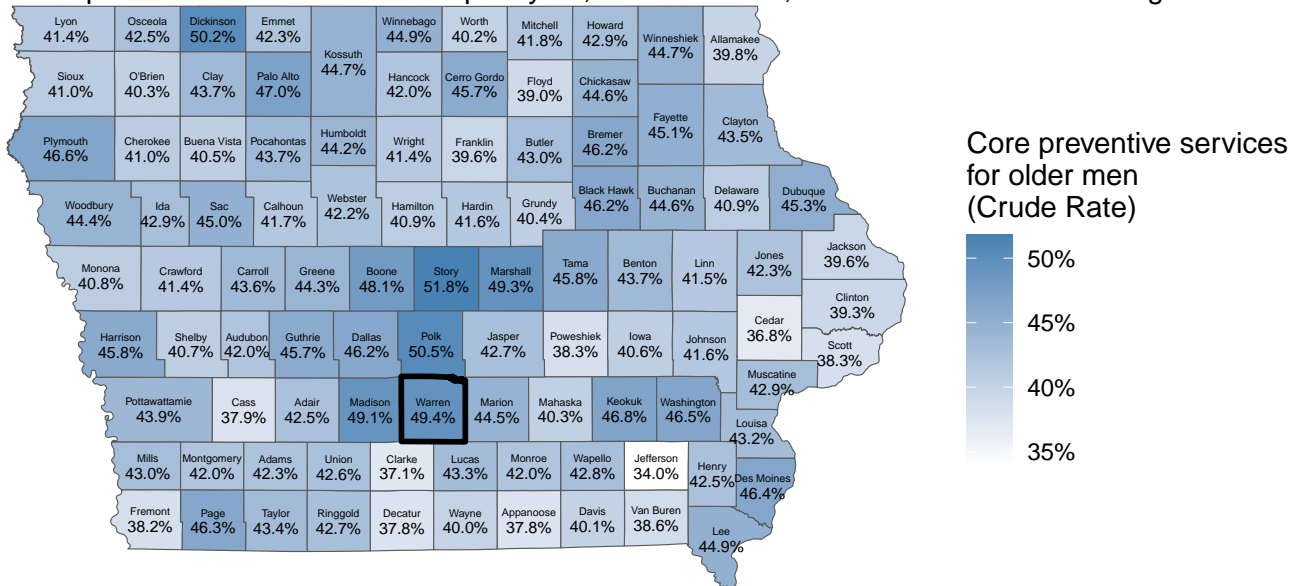
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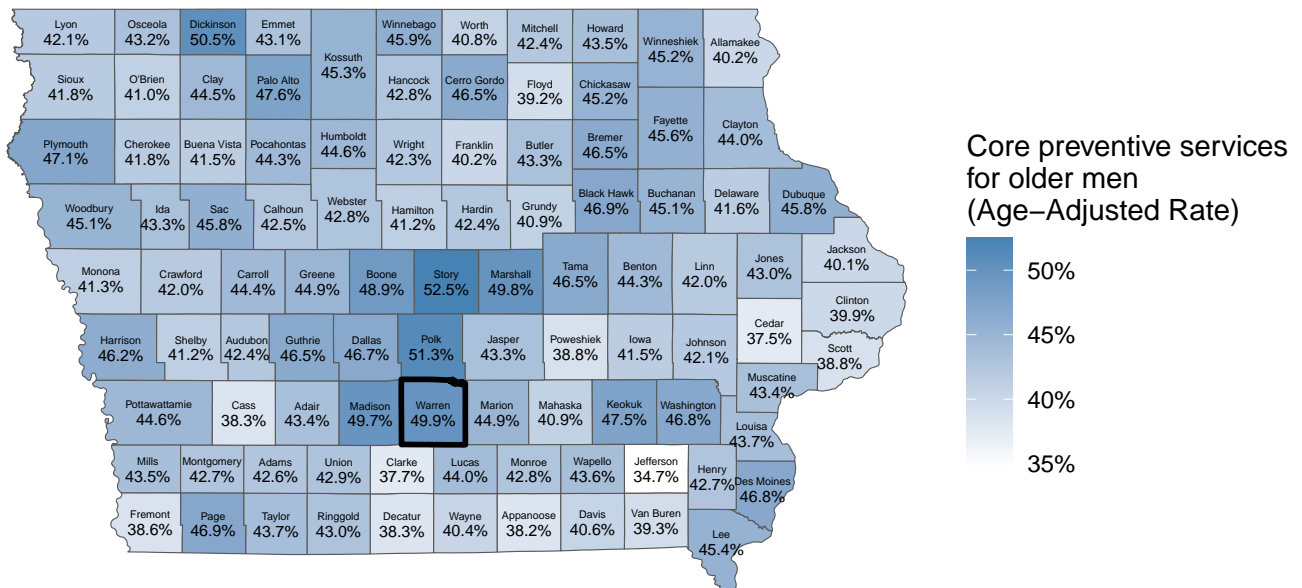
Data Source: CDC PLACES 2023 Release, BRFSS 2020

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



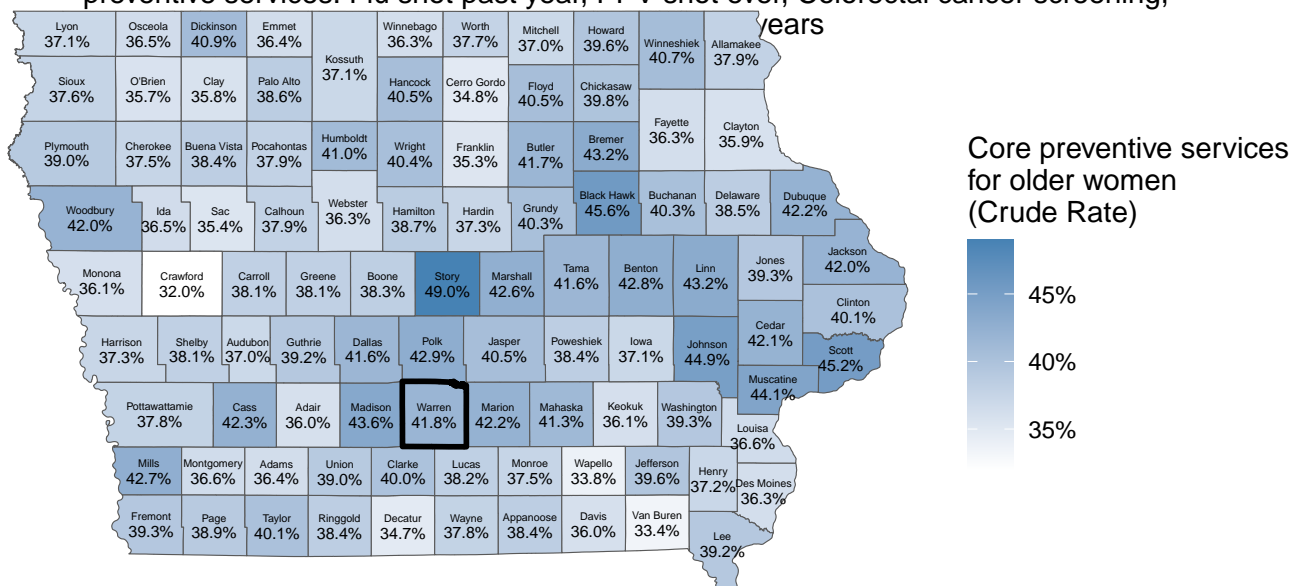
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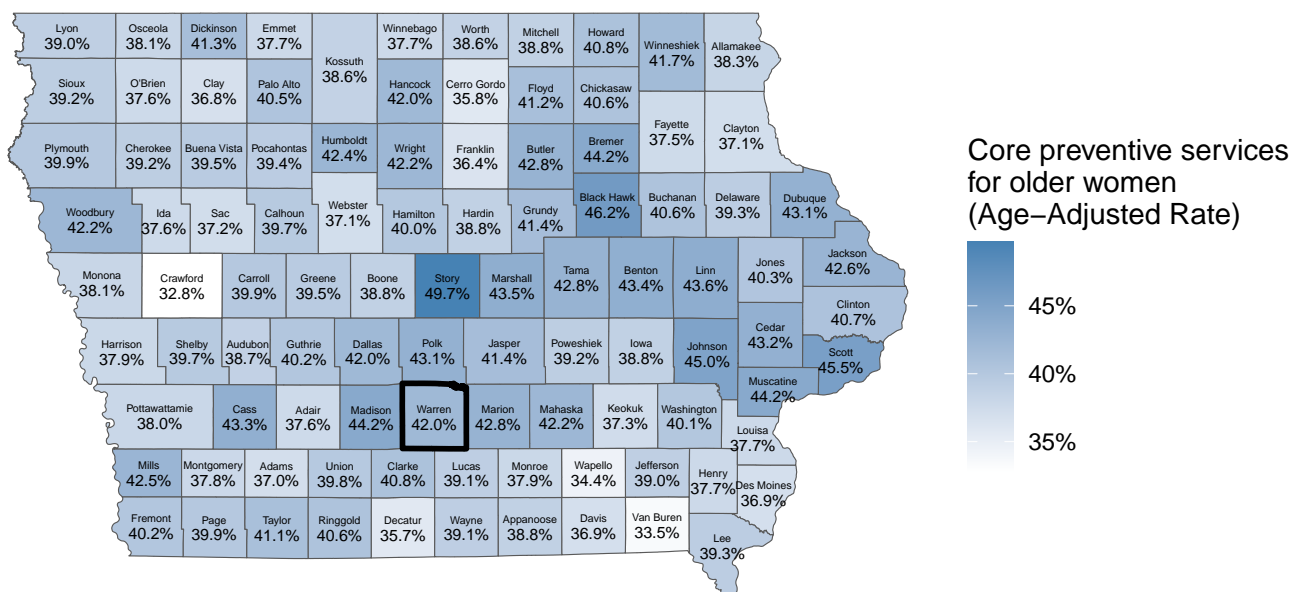
Data Source: CDC PLACES 2023 Release, BRFSS 2020

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,



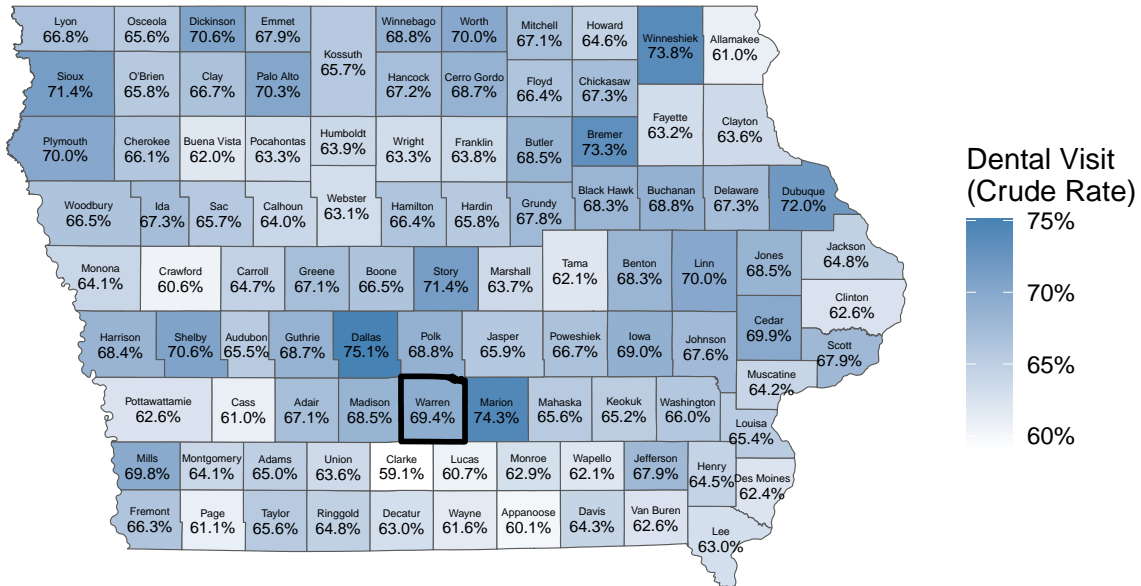
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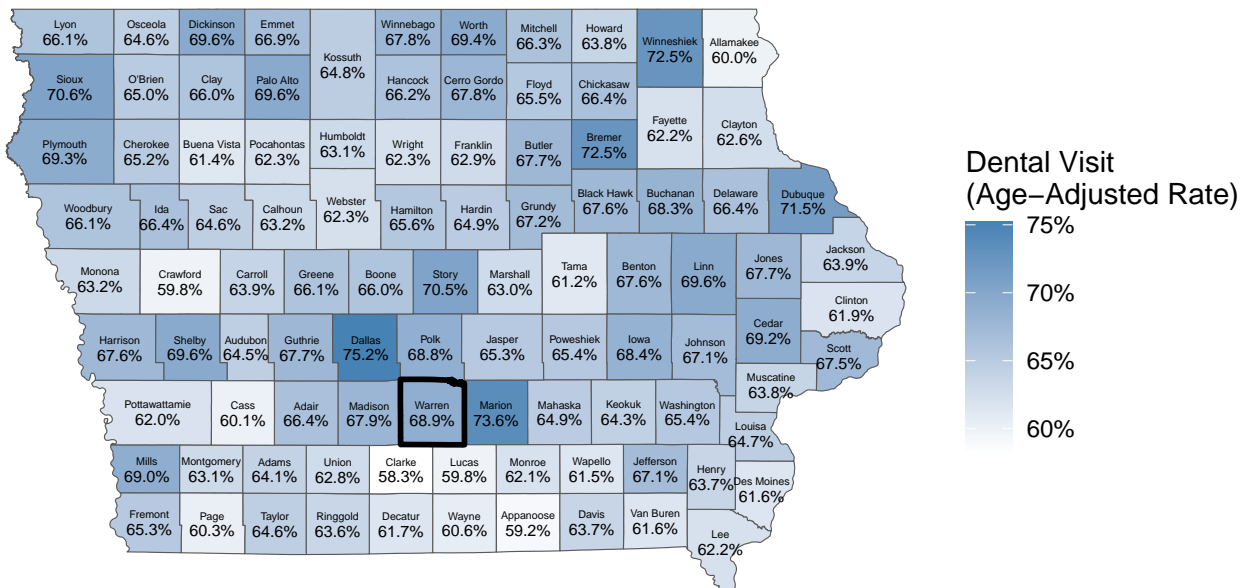
Data Source: CDC PLACES 2023 Release, BRFSS 2020

Dental Visit

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



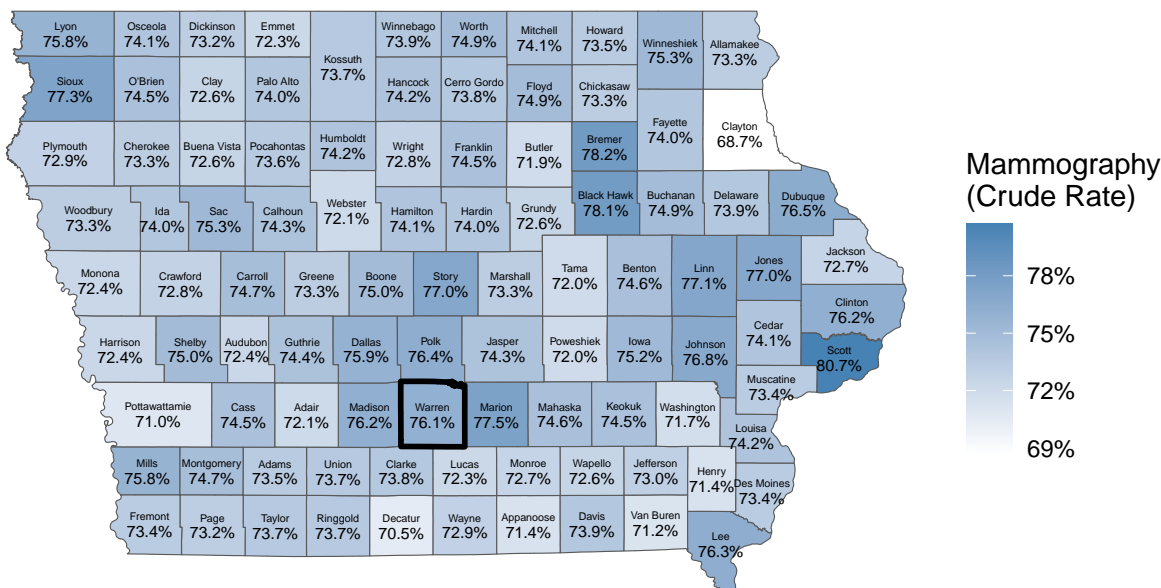
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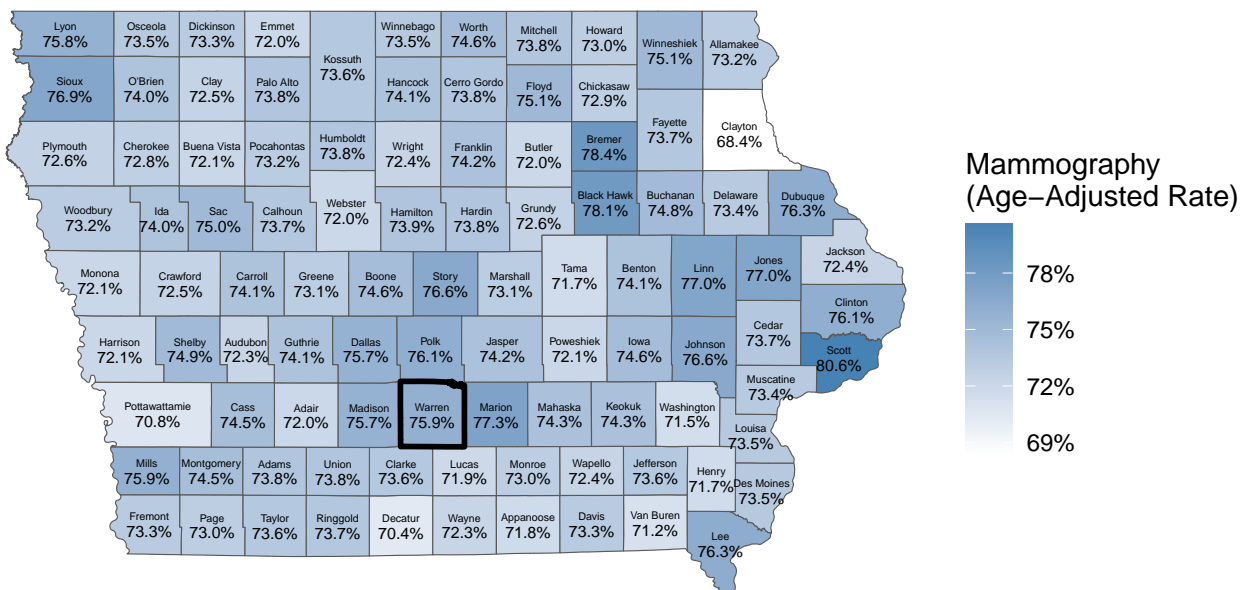
Data Source: CDC PLACES 2023 Release, BRFSS 2020

Mammography

Mammography use among women aged 50–74 years



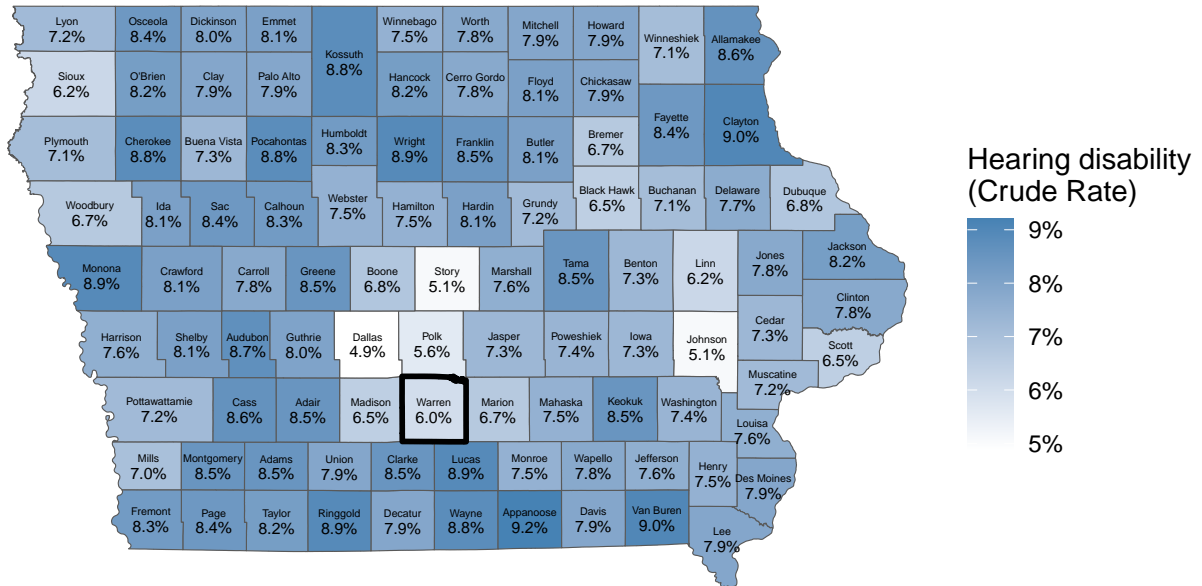
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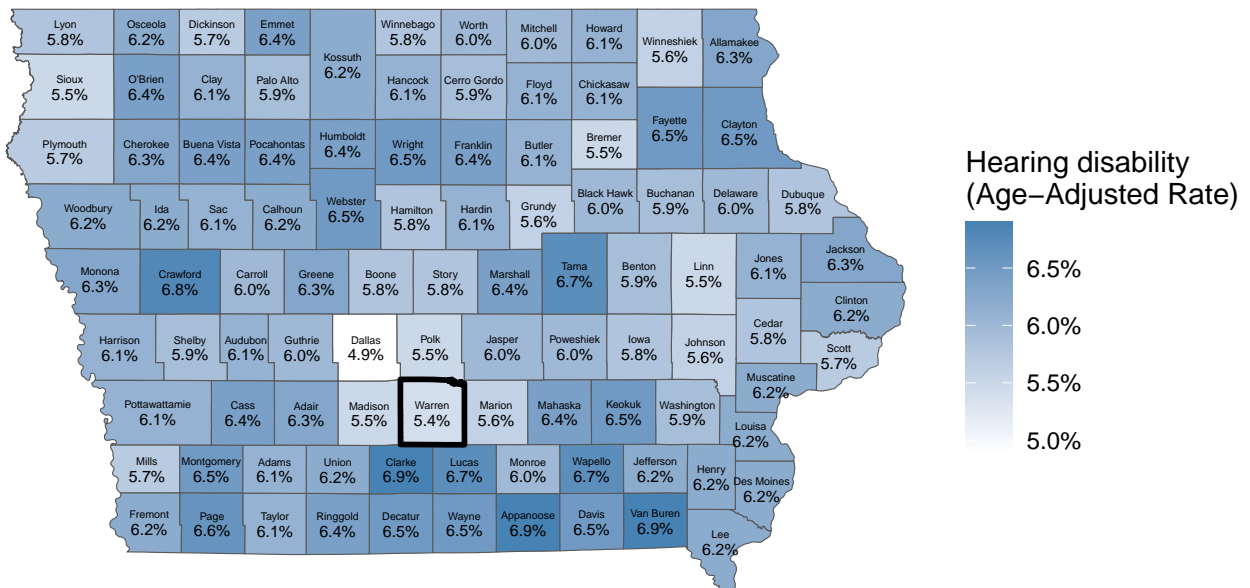
Data Source: CDC PLACES 2023 Release, BRFSS 2020

Hearing disability

Hearing disability among adults aged ≥ 18 years



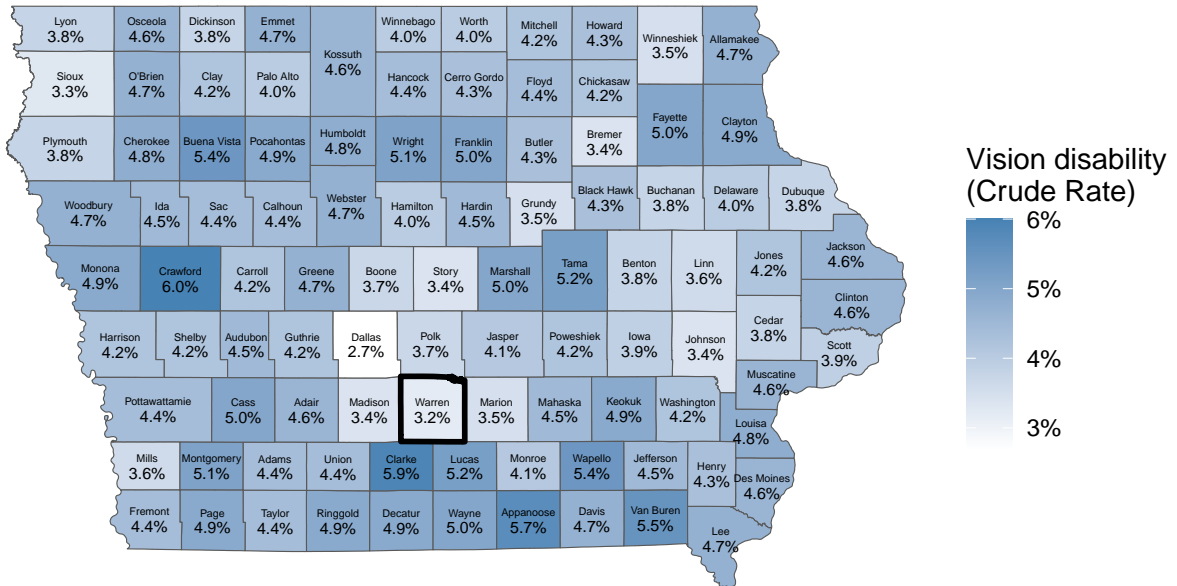
Data Source: CDC PLACES 2023 Release, BRFSS 2021



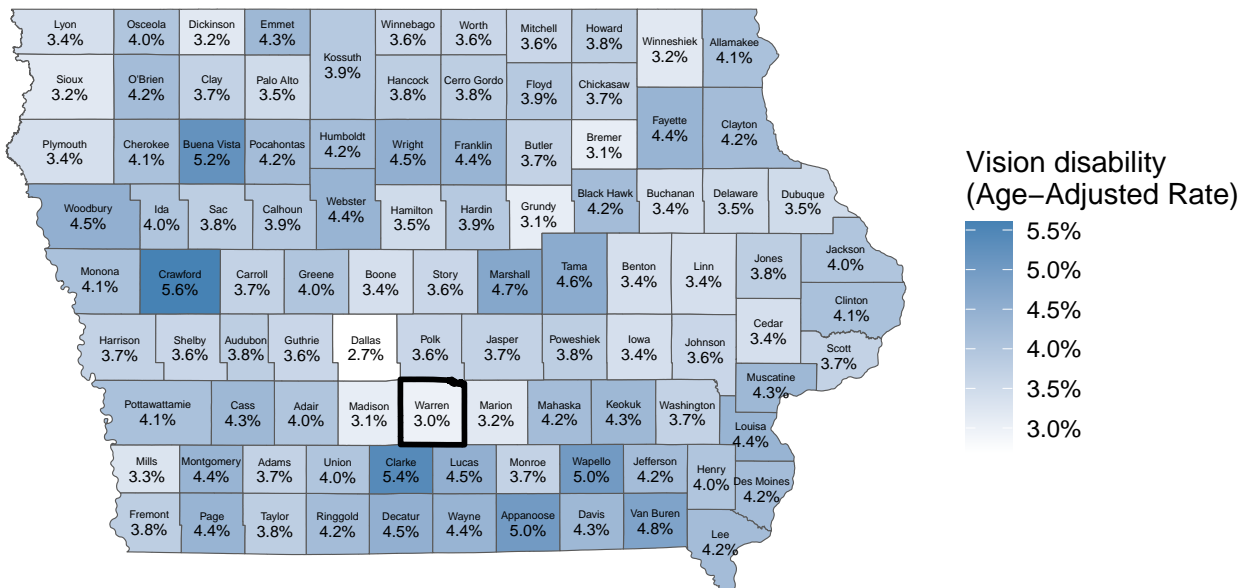
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Vision disability

Vision disability among adults aged >=18 years



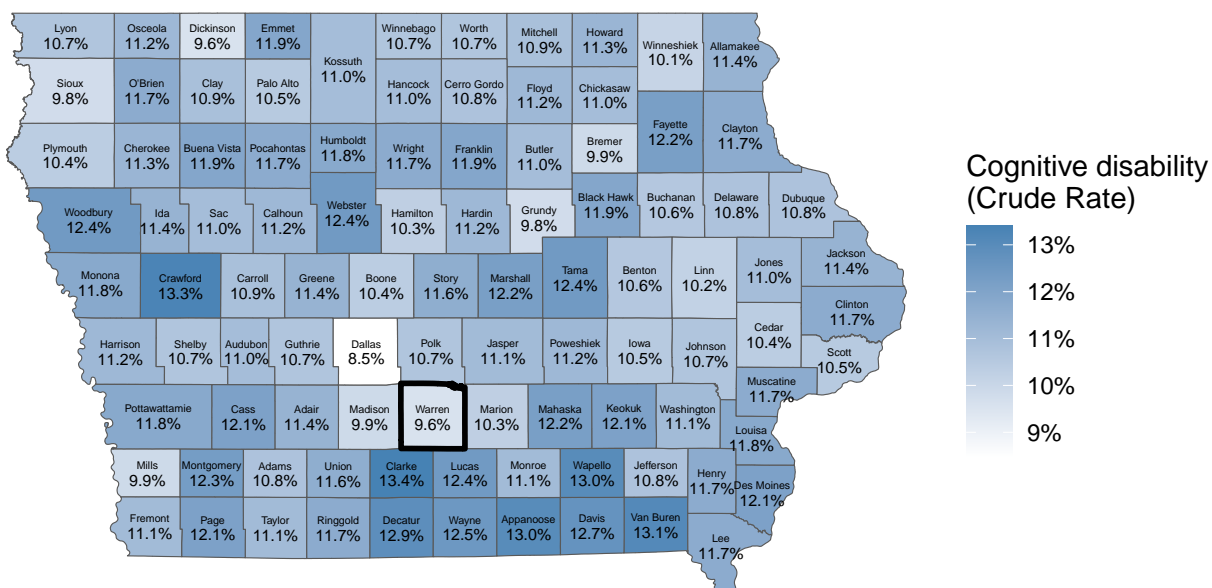
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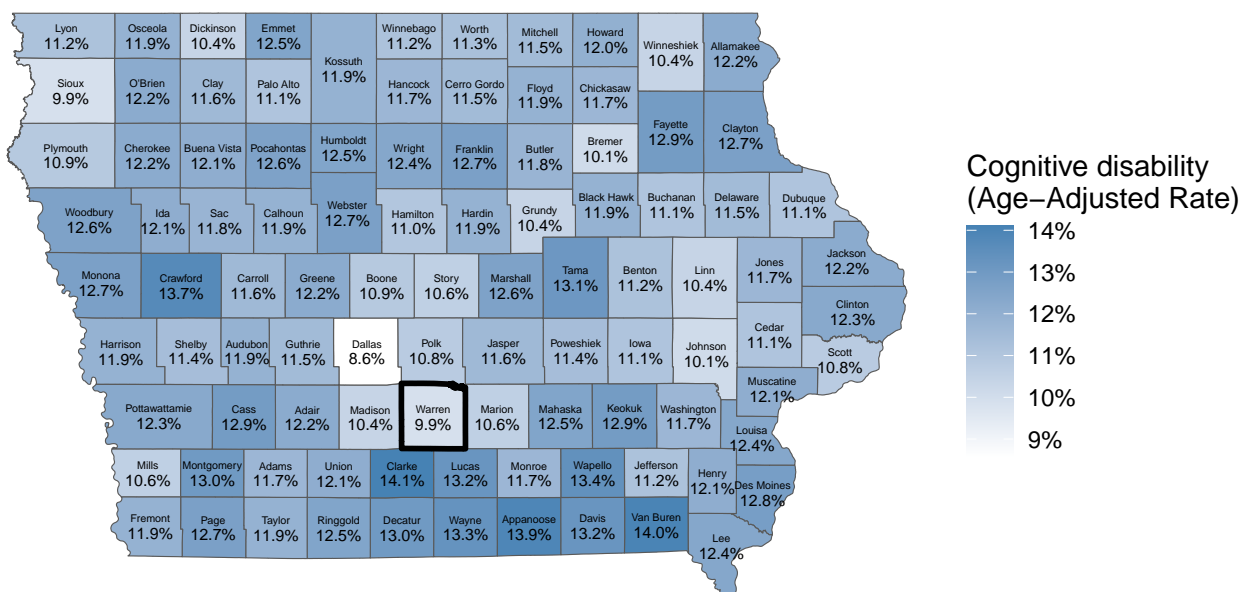
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Cognitive disability

Cognitive disability among adults aged ≥ 18 years



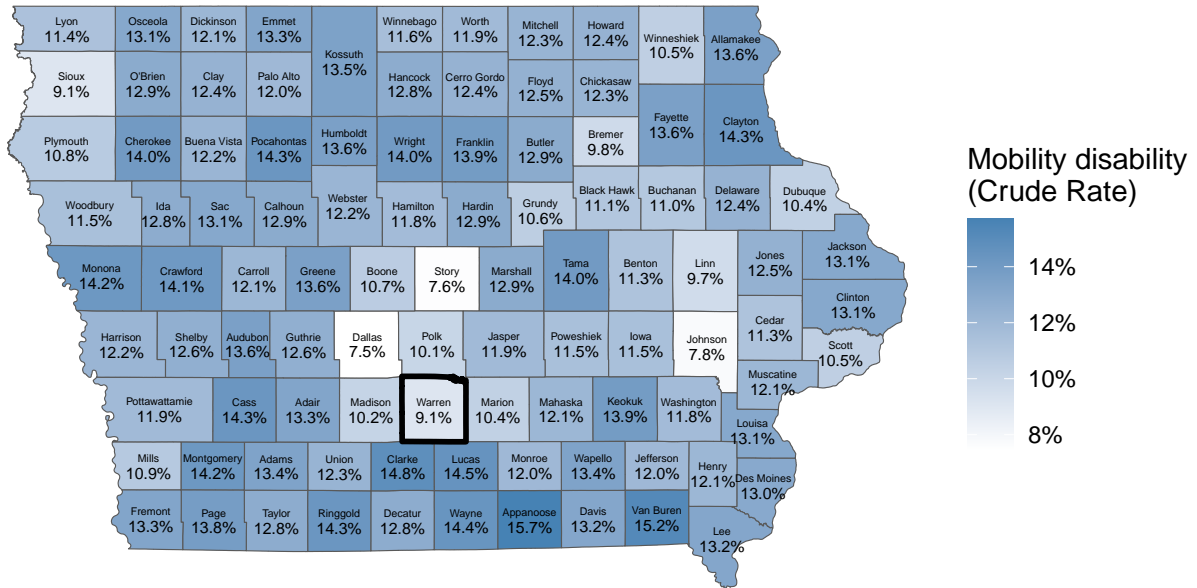
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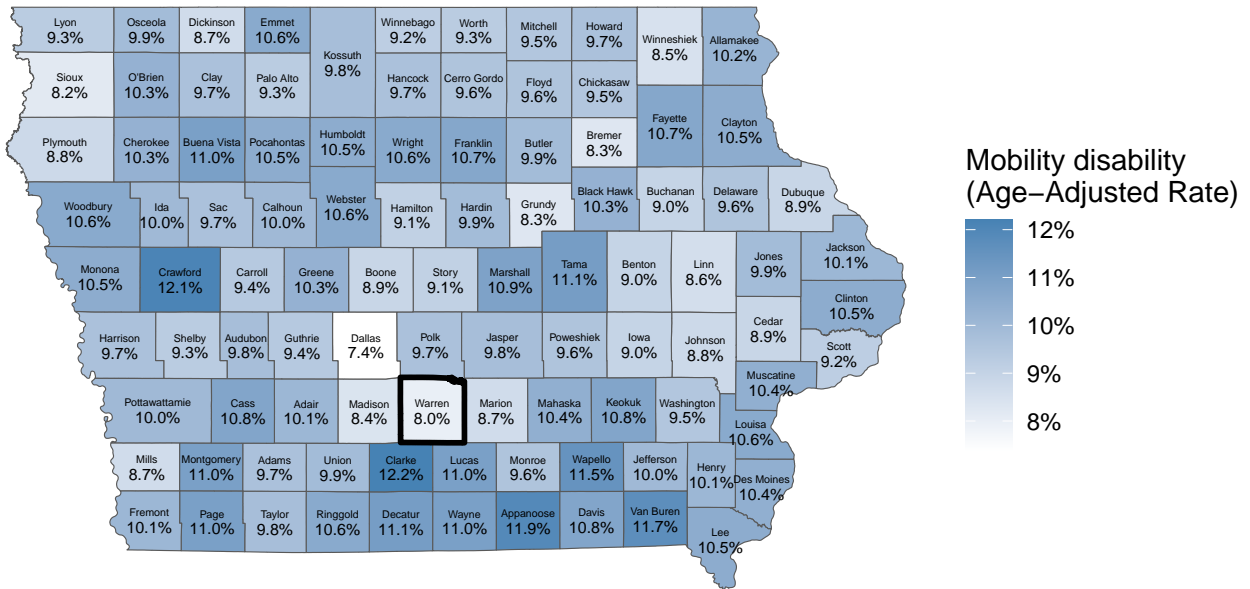
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Mobility disability

Mobility disability among adults aged ≥ 18 years



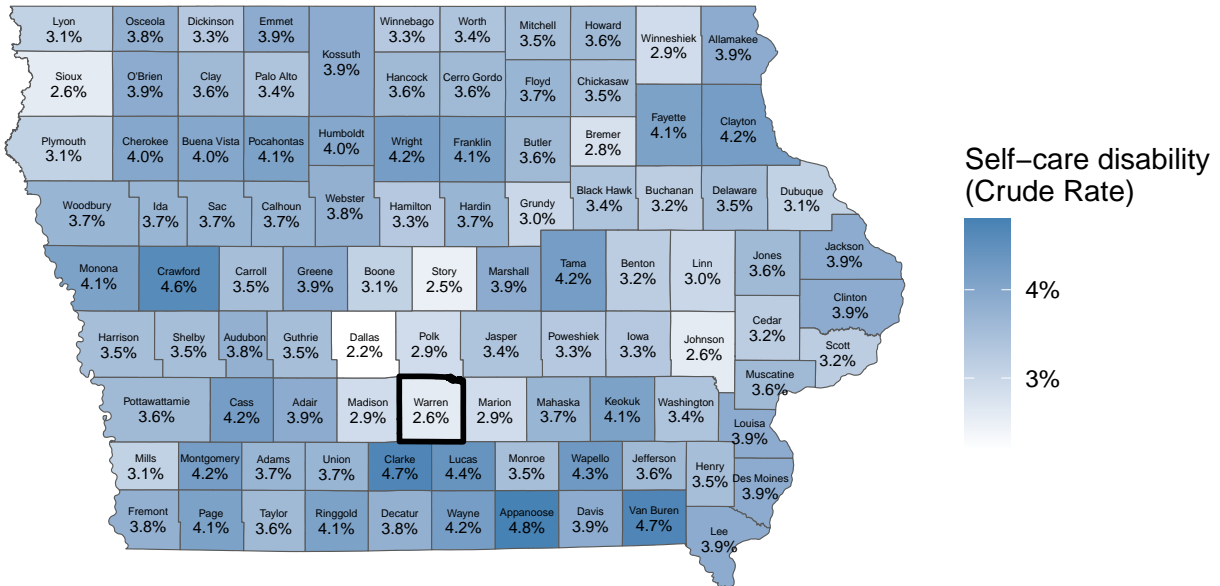
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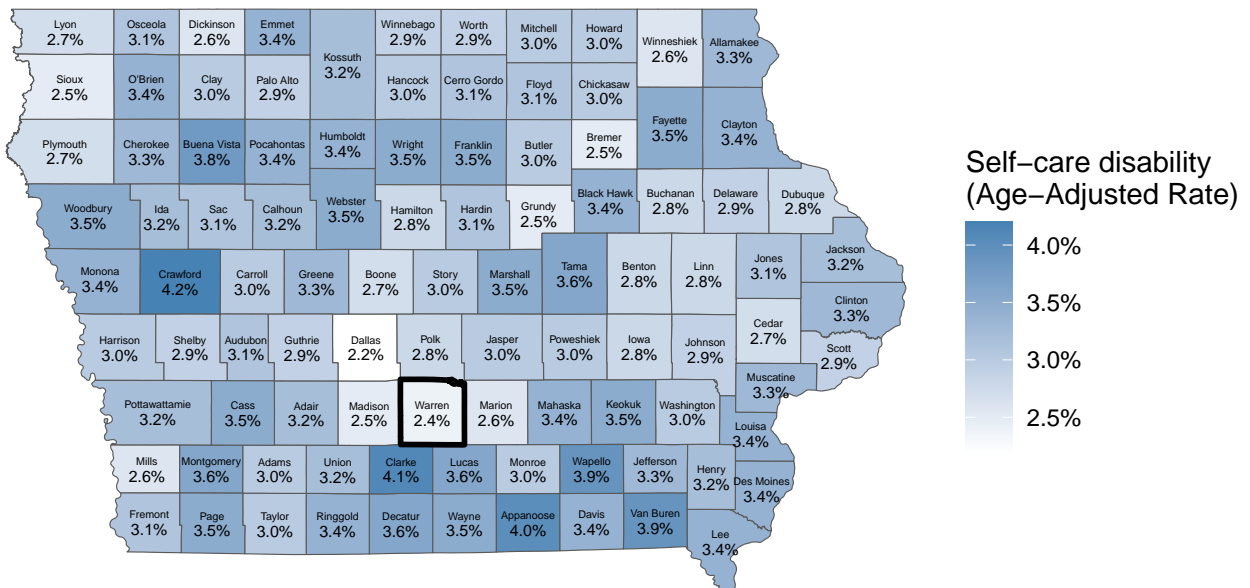
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Self-care disability

Self-care disability among adults aged >=18 years



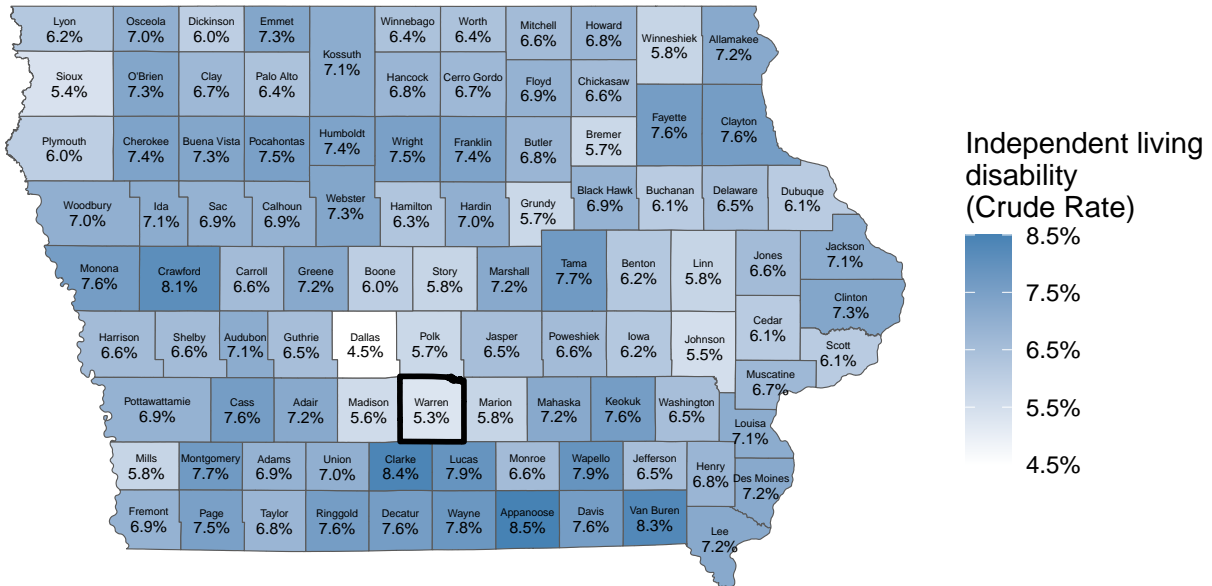
Data Source: CDC PLACES 2023 Release, BRFSS 2021



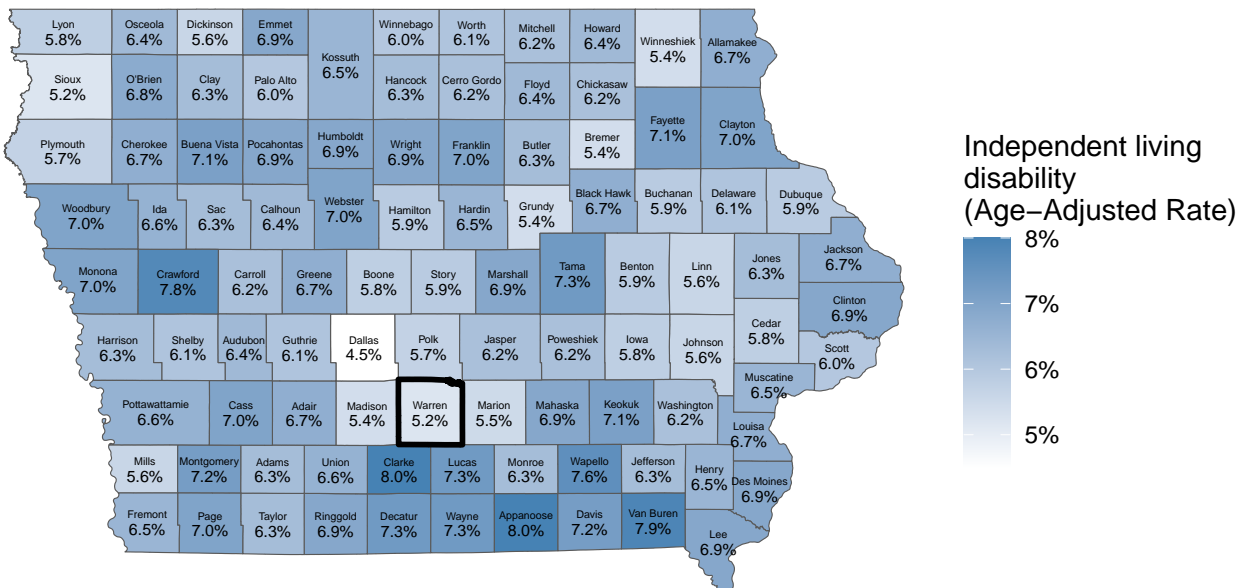
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Independent living disability

Independent living disability among adults aged ≥ 18 years



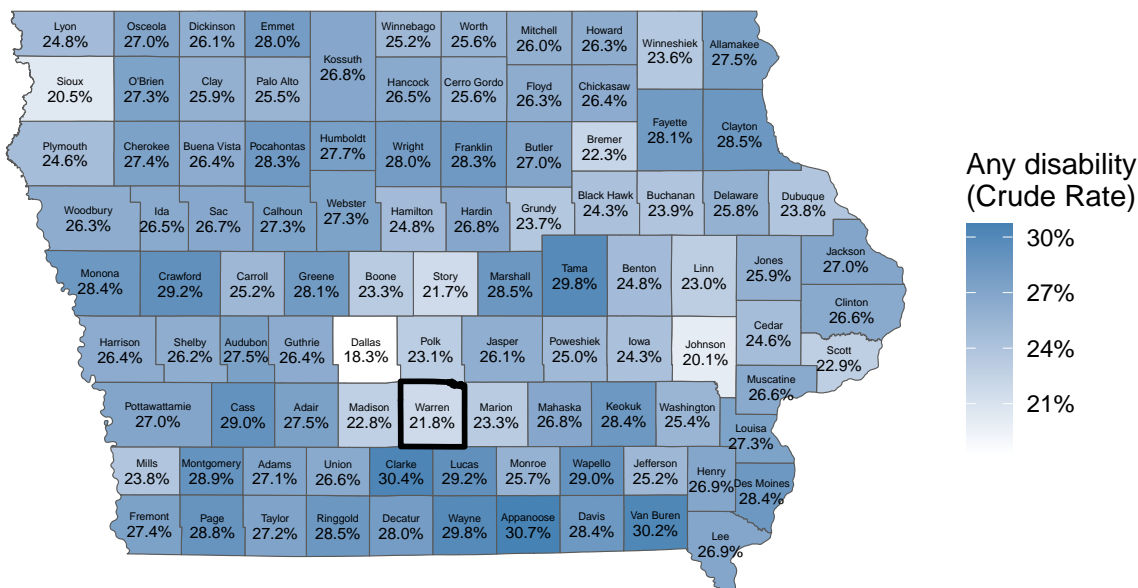
Data Source: CDC PLACES 2023 Release, BRFSS 2021



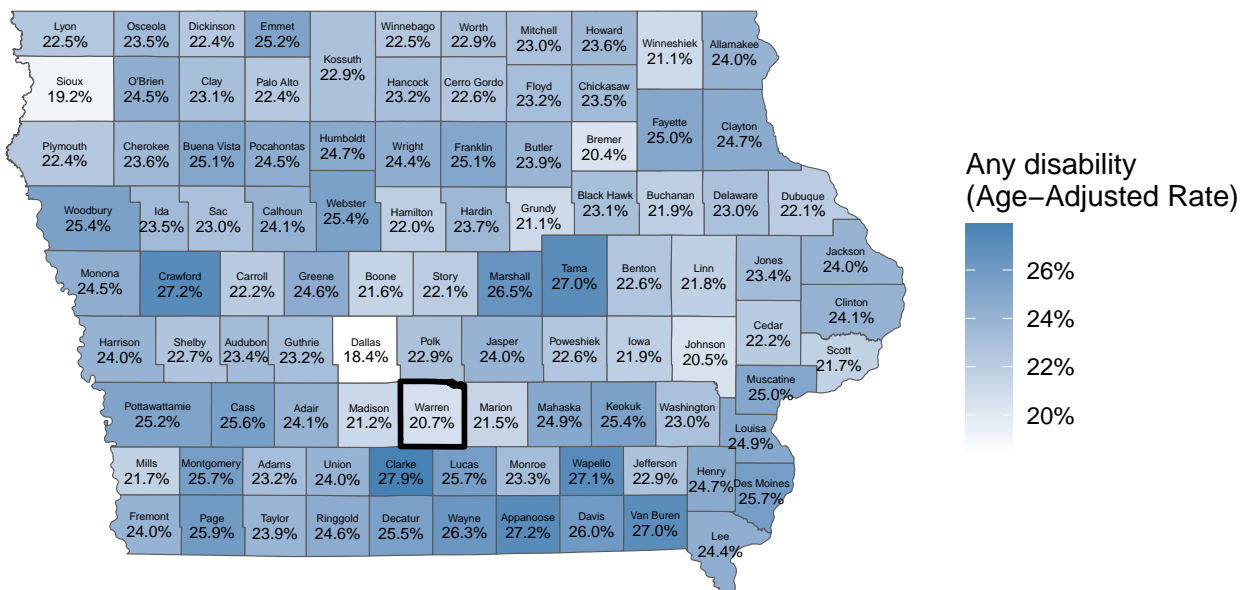
Data Source: CDC PLACES 2023 Release, BRFSS 2021

Any disability

Any disability among adults aged >=18 years



Data Source: CDC PLACES 2023 Release, BRFSS 2021



Data Source: CDC PLACES 2023 Release, BRFSS 2021