

**County Health  
Rankings & Roadmaps**

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

**2016 County Health Rankings**

**Missouri**



A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.



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## INTRODUCTION

The *County Health Rankings & Roadmaps* program brings actionable data and strategies to communities to make it easier for people to be healthy in their homes, schools, workplaces, and neighborhoods. Ranking the health of nearly every county in the nation, the *County Health Rankings* illustrate what we know when it comes to what is making people sick or healthy. The *Roadmaps* show what we can do to create healthier places to live, learn, work, and play. The Robert Wood Johnson Foundation (RWJF) collaborates with the University of Wisconsin Population Health Institute (UWPHI) to bring this program to cities, counties, and states across the nation.

## WHAT ARE THE COUNTY HEALTH RANKINGS?

Published online at [countyhealthrankings.org](http://countyhealthrankings.org), the *Rankings* help counties understand what influences how healthy residents are and how long they will live. The *Rankings* are unique in their ability to measure the current overall health of nearly every county in all 50 states. They also look at a variety of measures that affect the future health of communities, such as high school graduation rates, access to healthy foods, rates of smoking, obesity, and teen births. Communities use the *Rankings* to help identify issues and opportunities for local health improvement, as well as to garner support for initiatives among government agencies, healthcare providers, community organizations, business leaders, policy makers, and the public.



## DIGGING DEEPER INTO HEALTH DATA

Although we know that a range of factors are important for good health, every state has communities that lack both opportunities to shape good health and strong policies to promote health for everyone. Some counties lag far behind others in how well and how long people live – which we refer to as a “health gap.” Find out what's driving health differences across your state and what can be done to close those gaps. Visit [countyhealthrankings.org/reports](http://countyhealthrankings.org/reports).

To further explore health gaps and other data sources in your community, check out the feature to [find more data](#) for your state and [dig deeper](#) on differences in health factors by geography or by population sub-groups. Visit [countyhealthrankings.org/using-the-rankings-data](http://countyhealthrankings.org/using-the-rankings-data).

## MOVING FROM DATA TO ACTION

*Roadmaps to Health* help communities bring people together to look at the many factors that influence health and opportunities to reduce health gaps, select strategies that can improve health for all, and make changes that will have a lasting impact. The *Roadmaps* focus on helping communities move from *awareness* about their county's ranking to *actions* designed to improve everyone's health. The *Roadmaps to Health* Action Center is a one-stop shop of information to help any community member or leader who wants to improve their community's health by addressing factors that we know influence health, such as education, income, and community safety.

Within the Action Center you will find:

- Online step-by-step guidance and tools to move through the Action Cycle
- [What Works for Health](#) – a searchable database of evidence-informed policies and programs that can improve health
- Webinars featuring local community members who share their tips on how to build a healthier community
- Community coaches, located across the nation, who provide customized consultation to local leaders who request guidance in how to accelerate their efforts to improve health. You can contact a coach by activating the Get Help button at [countyhealthrankings.org](http://countyhealthrankings.org)



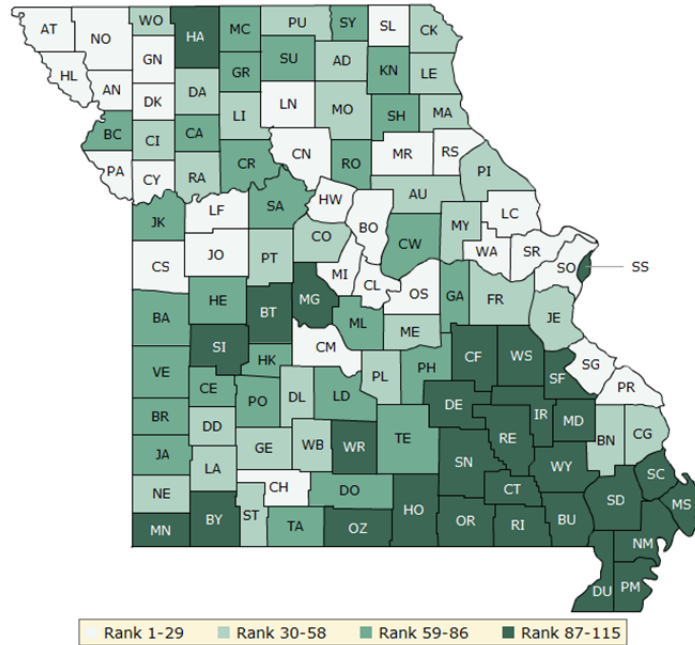
## HOW CAN YOU GET INVOLVED?

You might want to contact your local affiliate of United Way Worldwide, the National Association of Counties, Local Initiatives Support Corporation (LISC), or Neighborworks— their national parent organizations have partnered with us to raise awareness and stimulate action to improve health in their local members' communities. By connecting with other leaders interested in improving health, you can make a difference in your community. In communities large and small, people from all walks of life are taking ownership and action to improve health. Visit [countyhealthrankings.org](http://countyhealthrankings.org) to get ideas and guidance on how you can take action in your community. Working with others, you can improve the health of your community.

## HOW DO COUNTIES RANK FOR HEALTH OUTCOMES?

The green map below shows the distribution of Missouri’s **health outcomes**, based on an equal weighting of length and quality of life.

Lighter shades indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available at [countyhealthrankings.org](http://countyhealthrankings.org).

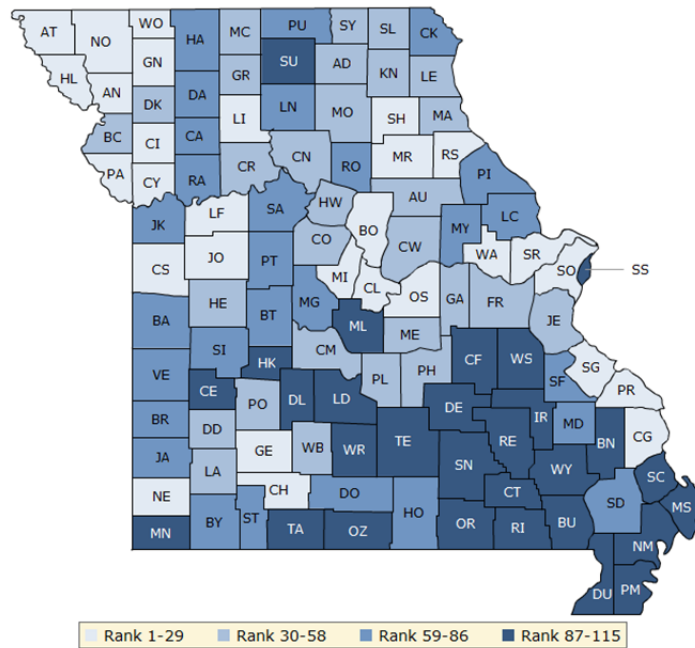


| County         | Rank | County    | Rank | County      | Rank | County         | Rank |
|----------------|------|-----------|------|-------------|------|----------------|------|
| Adair          | 52   | Dallas    | 43   | Livingston  | 34   | Randolph       | 65   |
| Andrew         | 11   | Daviess   | 38   | Macon       | 41   | Ray            | 58   |
| Atchison       | 17   | DeKalb    | 22   | Madison     | 101  | Reynolds       | 103  |
| Audrain        | 39   | Dent      | 94   | Maries      | 30   | Ripley         | 109  |
| Barry          | 90   | Douglas   | 86   | Marion      | 54   | Saline         | 67   |
| Barton         | 69   | Dunklin   | 114  | McDonald    | 104  | Schuyler       | 70   |
| Bates          | 83   | Franklin  | 35   | Mercer      | 79   | Scotland       | 19   |
| Benton         | 87   | Gasconade | 72   | Miller      | 59   | Scott          | 102  |
| Bollinger      | 50   | Gentry    | 15   | Mississippi | 112  | Shannon        | 99   |
| Boone          | 14   | Greene    | 36   | Moniteau    | 6    | Shelby         | 85   |
| Buchanan       | 73   | Grundy    | 61   | Monroe      | 21   | St. Charles    | 1    |
| Butler         | 106  | Harrison  | 89   | Montgomery  | 44   | St. Clair      | 92   |
| Caldwell       | 66   | Henry     | 71   | Morgan      | 88   | St. Francois   | 95   |
| Callaway       | 62   | Hickory   | 82   | New Madrid  | 113  | St. Louis      | 20   |
| Camden         | 23   | Holt      | 28   | Newton      | 47   | St. Louis City | 111  |
| Cape Girardeau | 37   | Howard    | 27   | Nodaway     | 12   | Ste. Genevieve | 26   |
| Carroll        | 68   | Howell    | 97   | Oregon      | 108  | Stoddard       | 91   |
| Carter         | 110  | Iron      | 96   | Osage       | 13   | Stone          | 42   |
| Cass           | 7    | Jackson   | 74   | Ozark       | 98   | Sullivan       | 63   |
| Cedar          | 80   | Jasper    | 76   | Pemiscot    | 115  | Taney          | 60   |
| Chariton       | 25   | Jefferson | 33   | Perry       | 5    | Texas          | 84   |
| Christian      | 3    | Johnson   | 8    | Pettis      | 51   | Vernon         | 64   |
| Clark          | 45   | Knox      | 75   | Phelps      | 77   | Warren         | 10   |
| Clay           | 4    | Laclede   | 81   | Pike        | 57   | Washington     | 107  |
| Clinton        | 40   | Lafayette | 9    | Platte      | 2    | Wayne          | 105  |
| Cole           | 18   | Lawrence  | 53   | Polk        | 78   | Webster        | 32   |
| Cooper         | 56   | Lewis     | 31   | Pulaski     | 48   | Worth          | 49   |
| Crawford       | 93   | Lincoln   | 24   | Putnam      | 46   | Wright         | 100  |
| Dade           | 55   | Linn      | 29   | Ralls       | 16   |                |      |

## HOW DO COUNTIES RANK FOR HEALTH FACTORS?

The blue map displays Missouri’s summary ranks for **health factors**, based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment.

Lighter shades indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available at [countyhealthrankings.org](http://countyhealthrankings.org)



| County         | Rank | County    | Rank | County      | Rank | County         | Rank |
|----------------|------|-----------|------|-------------|------|----------------|------|
| Adair          | 42   | Dallas    | 96   | Livingston  | 25   | Randolph       | 73   |
| Andrew         | 6    | Daviess   | 84   | Macon       | 35   | Ray            | 59   |
| Atchison       | 13   | DeKalb    | 52   | Madison     | 78   | Reynolds       | 102  |
| Audrain        | 53   | Dent      | 100  | Maries      | 57   | Ripley         | 108  |
| Barry          | 64   | Douglas   | 82   | Marion      | 45   | Saline         | 62   |
| Barton         | 70   | Dunklin   | 111  | McDonald    | 103  | Schuyler       | 58   |
| Bates          | 85   | Franklin  | 38   | Mercer      | 30   | Scotland       | 46   |
| Benton         | 77   | Gasconade | 31   | Miller      | 92   | Scott          | 97   |
| Bollinger      | 93   | Gentry    | 21   | Mississippi | 112  | Shannon        | 110  |
| Boone          | 7    | Greene    | 14   | Moniteau    | 22   | Shelby         | 29   |
| Buchanan       | 47   | Grundy    | 43   | Monroe      | 27   | St. Charles    | 1    |
| Butler         | 94   | Harrison  | 74   | Montgomery  | 61   | St. Clair      | 83   |
| Caldwell       | 63   | Henry     | 50   | Morgan      | 81   | St. Francois   | 86   |
| Callaway       | 39   | Hickory   | 95   | New Madrid  | 109  | St. Louis      | 3    |
| Camden         | 33   | Holt      | 12   | Newton      | 28   | St. Louis City | 114  |
| Cape Girardeau | 16   | Howard    | 49   | Nodaway     | 24   | Ste. Genevieve | 20   |
| Carroll        | 56   | Howell    | 66   | Oregon      | 101  | Stoddard       | 71   |
| Carter         | 107  | Iron      | 104  | Osage       | 4    | Stone          | 75   |
| Cass           | 10   | Jackson   | 69   | Ozark       | 105  | Sullivan       | 90   |
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| Chariton       | 37   | Jefferson | 34   | Perry       | 15   | Texas          | 99   |
| Christian      | 8    | Johnson   | 18   | Pettis      | 79   | Vernon         | 67   |
| Clark          | 72   | Knox      | 41   | Phelps      | 48   | Warren         | 23   |
| Clay           | 5    | Laclede   | 88   | Pike        | 80   | Washington     | 113  |
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| Crawford       | 98   | Lincoln   | 65   | Putnam      | 60   | Wright         | 91   |
| Dade           | 54   | Linn      | 76   | Ralls       | 17   |                |      |

## 2016 COUNTY HEALTH RANKINGS: MEASURES AND NATIONAL/STATE RESULTS

| Measure                              | Description  | US Median | State Overall | State Minimum | State Maximum |
|--------------------------------------|--|-----------|---------------|---------------|---------------|
| <b>HEALTH OUTCOMES</b>               |  |           |               |               |               |
| Premature death                      | Years of potential life lost before age 75 per 100,000 population  | 7,700     | 7,700         | 5,000         | 16,200        |
| Poor or fair health                  | % of adults reporting fair or poor health  | 16%       | 17%           | 12%           | 27%           |
| Poor physical health days            | Average # of physically unhealthy days reported in past 30 days  | 3.7       | 4.1           | 3.4           | 5.2           |
| Poor mental health days              | Average # of mentally unhealthy days reported in past 30 days  | 3.7       | 3.8           | 3.4           | 4.5           |
| Low birthweight                      | % of live births with low birthweight (< 2500 grams)   | 8%        | 8%            | 4%            | 14%           |
| <b>HEALTH FACTORS</b>                |  |           |               |               |               |
| <b>HEALTH BEHAVIORS</b>              |  |           |               |               |               |
| Adult smoking                        | % of adults who are current smokers  | 18%       | 20%           | 16%           | 27%           |
| Adult obesity                        | % of adults that report a BMI ≥ 30   | 31%       | 31%           | 27%           | 39%           |
| Food environment index               | Index of factors that contribute to a healthy food environment, (0-10)   | 7.2       | 6.9           | 4.0           | 8.0           |
| Physical inactivity                  | % of adults aged 20 and over reporting no leisure-time physical activity   | 28%       | 26%           | 20%           | 38%           |
| Access to exercise opportunities     | % of population with adequate access to locations for physical activity  | 62%       | 76%           | 4%            | 99%           |
| Excessive drinking                   | % of adults reporting binge or heavy drinking  | 17%       | 16%           | 12%           | 20%           |
| Alcohol-impaired driving deaths      | % of driving deaths with alcohol involvement   | 31%       | 33%           | 0%            | 100%          |
| Sexually transmitted infections      | # of newly diagnosed chlamydia cases per 100,000 population  | 287.7     | 453.8         | 60.1          | 1,297.4       |
| Teen births                          | # of births per 1,000 female population ages 15-19   | 40        | 38            | 11            | 88            |
| <b>CLINICAL CARE</b>                 |  |           |               |               |               |
| Uninsured                            | % of population under age 65 without health insurance  | 17%       | 15%           | 10%           | 25%           |
| Primary care physicians              | Ratio of population to primary care physicians   | 1,990:1   | 1,420:1       | 13,690:1      | 750:1         |
| Dentists                             | Ratio of population to dentists  | 2,590:1   | 1,870:1       | 3,720:0       | 940:1         |
| Mental health providers              | Ratio of population to mental health providers   | 1,060:1   | 600:1         | 17,380:1      | 260:1         |
| Preventable hospital stays           | # of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees  | 60        | 59            | 40            | 139           |
| Diabetic monitoring                  | % of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring  | 85%       | 86%           | 68%           | 93%           |
| Mammography screening                | % of female Medicare enrollees ages 67-69 that receive mammography screening   | 61%       | 62%           | 37%           | 74%           |
| <b>SOCIAL AND ECONOMIC FACTORS</b>   |  |           |               |               |               |
| High school graduation               | % of ninth-grade cohort that graduates in four years   | 86%       | 88%           | 67%           | 98%           |
| Some college                         | % of adults ages 25-44 with some post-secondary education  | 56%       | 65%           | 32%           | 80%           |
| Unemployment                         | % of population aged 16 and older unemployed but seeking work  | 6.0%      | 6.1%          | 3.9%          | 9.6%          |
| Children in poverty                  | % of children under age 18 in poverty  | 23%       | 21%           | 9%            | 48%           |
| Income inequality                    | Ratio of household income at the 80th percentile to income at the 20th percentile  | 4.4       | 4.6           | 3.2           | 6.2           |
| Children in single-parent households | % of children that live in a household headed by a single parent   | 32%       | 33%           | 16%           | 61%           |
| Social associations                  | # of membership associations per 10,000 population   | 13.0      | 11.8          | 6.0           | 34.9          |
| Violent crime                        | # of reported violent crime offenses per 100,000 population  | 199       | 452           | 0             | 1,885         |
| Injury deaths                        | # of deaths due to injury per 100,000 population   | 74        | 74            | 42            | 126           |
| <b>PHYSICAL ENVIRONMENT</b>          |  |           |               |               |               |
| Air pollution – particulate matter   | Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)   | 11.9      | 10.2          | 8.3           | 13.3          |
| Drinking water violations            | Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation. | NA        | NA            | No            | Yes           |
| Severe housing problems              | % of households with overcrowding, high housing costs, or lack of kitchen or plumbing facilities   | 14%       | 15%           | 4%            | 23%           |
| Driving alone to work                | % of workforce that drives alone to work   | 80%       | 82%           | 53%           | 87%           |
| Long commute – driving alone         | Among workers who commute in their car alone, % commuting > 30 minutes   | 29%       | 30%           | 12%           | 61%           |

## 2016 COUNTY HEALTH RANKINGS: DATA SOURCES AND YEARS OF DATA

|                                    | Measure   | Data Source   | Years of Data |
|------------------------------------|---|---|---------------|
| <b>HEALTH OUTCOMES</b>             |   |   |               |
| <b>Length of Life</b>              | Premature death                                 | National Center for Health Statistics – Mortality files               | 2011-2013     |
| <b>Quality of Life</b>             | Poor or fair health                             | Behavioral Risk Factor Surveillance System                            | 2014          |
|                                    | Poor physical health days                       | Behavioral Risk Factor Surveillance System                            | 2014          |
|                                    | Poor mental health days                         | Behavioral Risk Factor Surveillance System                            | 2014          |
|                                    | Low birthweight                                 | National Center for Health Statistics – Natality files                | 2007-2013     |
| <b>HEALTH FACTORS</b>              |   |   |               |
| <b>HEALTH BEHAVIORS</b>            |   |   |               |
| <b>Tobacco Use</b>                 | Adult smoking                                   | Behavioral Risk Factor Surveillance System                            | 2014          |
| <b>Diet and Exercise</b>           | Adult obesity                                   | CDC Diabetes Interactive Atlas  | 2012          |
|                                    | Food environment index                          | USDA Food Environment Atlas, Map the Meal Gap                         | 2013          |
|                                    | Physical inactivity                             | CDC Diabetes Interactive Atlas  | 2012          |
|                                    | Access to exercise opportunities                | Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files | 2010 & 2014   |
| <b>Alcohol and Drug Use</b>        | Excessive drinking                              | Behavioral Risk Factor Surveillance System                            | 2014          |
|                                    | Alcohol-impaired driving deaths                 | Fatality Analysis Reporting System                                    | 2010-2014     |
| <b>Sexual Activity</b>             | Sexually transmitted infections                 | National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention | 2013          |
|                                    | Teen births                                     | National Center for Health Statistics - Natality files                | 2007-2013     |
| <b>CLINICAL CARE</b>               |   |   |               |
| <b>Access to Care</b>              | Uninsured                                       | Small Area Health Insurance Estimates                                 | 2013          |
|                                    | Primary care physicians                         | Area Health Resource File/American Medical Association                | 2013          |
|                                    | Dentists  | Area Health Resource File/National Provider Identification file       | 2014          |
|                                    | Mental health providers                         | CMS, National Provider Identification file                            | 2015          |
| <b>Quality of Care</b>             | Preventable hospital stays                      | Dartmouth Atlas of Health Care  | 2013          |
|                                    | Diabetic monitoring                             | Dartmouth Atlas of Health Care  | 2013          |
|                                    | Mammography screening                           | Dartmouth Atlas of Health Care  | 2013          |
| <b>SOCIAL AND ECONOMIC FACTORS</b> |   |   |               |
| <b>Education</b>                   | High school graduation                          | EDFacts   | 2012-2013     |
|                                    | Some college                                    | American Community Survey   | 2010-2014     |
| <b>Employment</b>                  | Unemployment                                    | Bureau of Labor Statistics  | 2014          |
| <b>Income</b>                      | Children in poverty                             | Small Area Income and Poverty Estimates                               | 2014          |
|                                    | Income inequality                               | American Community Survey   | 2010-2014     |
| <b>Family and Social Support</b>   | Children in single-parent households            | American Community Survey   | 2010-2014     |
|                                    | Social associations                             | County Business Patterns  | 2013          |
| <b>Community Safety</b>            | Violent crime                                   | Uniform Crime Reporting – FBI   | 2010-2012     |
|                                    | Injury deaths                                   | CDC WONDER mortality data   | 2009-2013     |
| <b>PHYSICAL ENVIRONMENT</b>        |   |   |               |
| <b>Air and Water Quality</b>       | Air pollution - particulate matter <sup>1</sup> | CDC WONDER environmental data   | 2011          |
|                                    | Drinking water violations                       | Safe Drinking Water Information System                                | FY2013-14     |
| <b>Housing and Transit</b>         | Severe housing problems                         | Comprehensive Housing Affordability Strategy (CHAS) data              | 2008-2012     |
|                                    | Driving alone to work                           | American Community Survey   | 2010-2014     |
|                                    | Long commute – driving alone                    | American Community Survey   | 2010-2014     |

<sup>1</sup> Not available for AK and HI.

## CREDITS

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