



# County Health Rankings

Mobilizing Action Toward Community Health

2011

**Kansas**



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

**Population Health Institute**

*Translating Research into Policy and Practice*



## Introduction

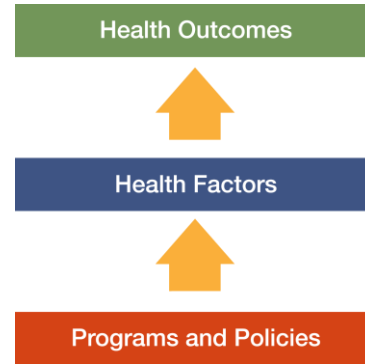
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities with ample park and recreation space are more likely to exercise, which reduces heart disease risk. People who live in communities with smoke-free laws are less likely to smoke or to be exposed to second-hand smoke, which reduces lung cancer risk.

The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute are pleased to present the 2011 *County Health Rankings*, a collection of 50 reports that reflect the overall health of counties in every state across the country. For the second year in a row, counties can get a snapshot of how healthy their residents are by comparing their overall health and the factors that influence their health with other counties in their state. This allows communities to see county-to-county where they are doing well and where they need to improve.

Everyone has a stake in community health. We all need to work together to find solutions. The *County Health Rankings* serve as both a call to action and a needed tool in this effort.

All of the *County Health Rankings* are based upon this model of population health improvement:



In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. These health factors and their outcomes may also be affected by community-based programs and policies designed to alter their distribution in the community. Counties can improve health outcomes by addressing all health factors with effective, evidence-based programs and policies.

To compile the *Rankings*, we built on our prior work in Wisconsin, obtained input from a team of expert advisors, and worked closely with staff from the National Center for Health Statistics. Together we selected a number of population health measures based on scientific relevance, importance, and availability of data at the county level.

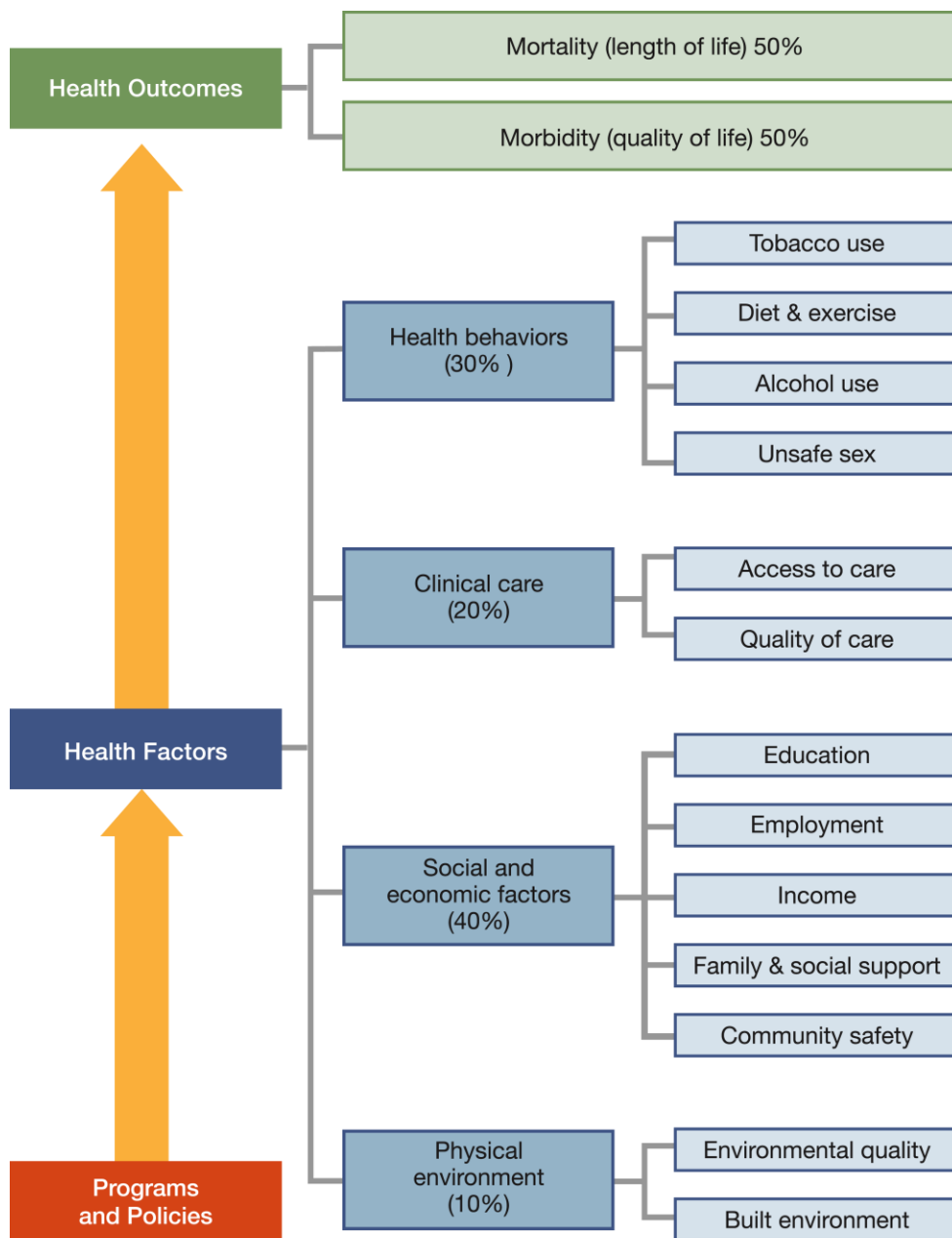
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



## The Rankings

This report ranks Kansas counties according to their summary measures of **health outcomes** and **health factors**, as well as the components used to create each summary measure. The figure below depicts the structure of the *Rankings* model. Counties receive a rank for each population health component; those having high ranks (e.g., 1 or 2) are estimated to be the “healthiest.”

Our summary **health outcomes** rankings are based on an equal weighting of mortality and morbidity measures. The summary **health factors** rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental. The weights for the factors (shown in parentheses in the figure) are based upon a review of the literature and expert input, but represent just one way of combining these factors.

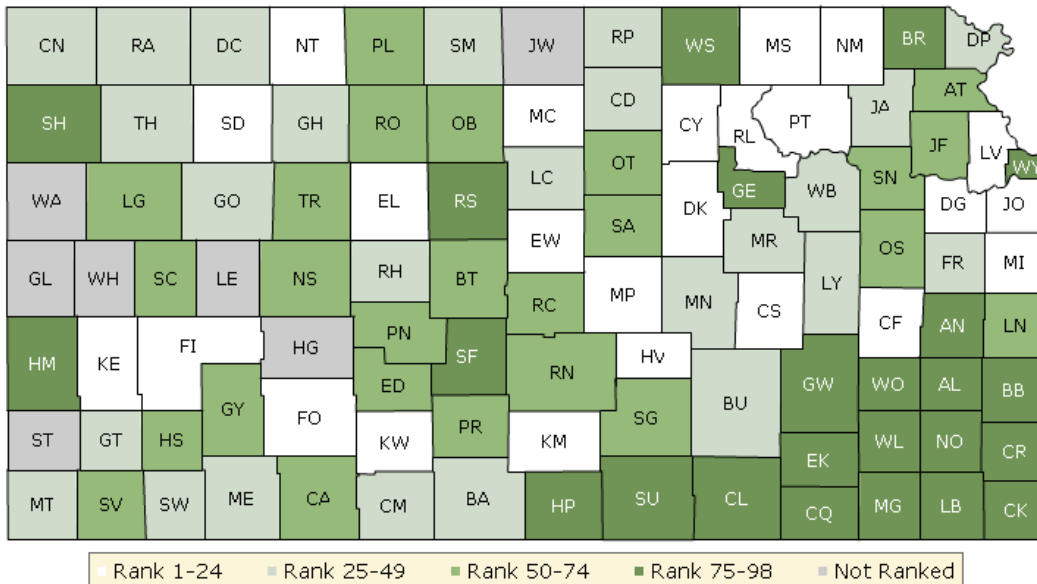


County Health Rankings model ©2010 UWPHI

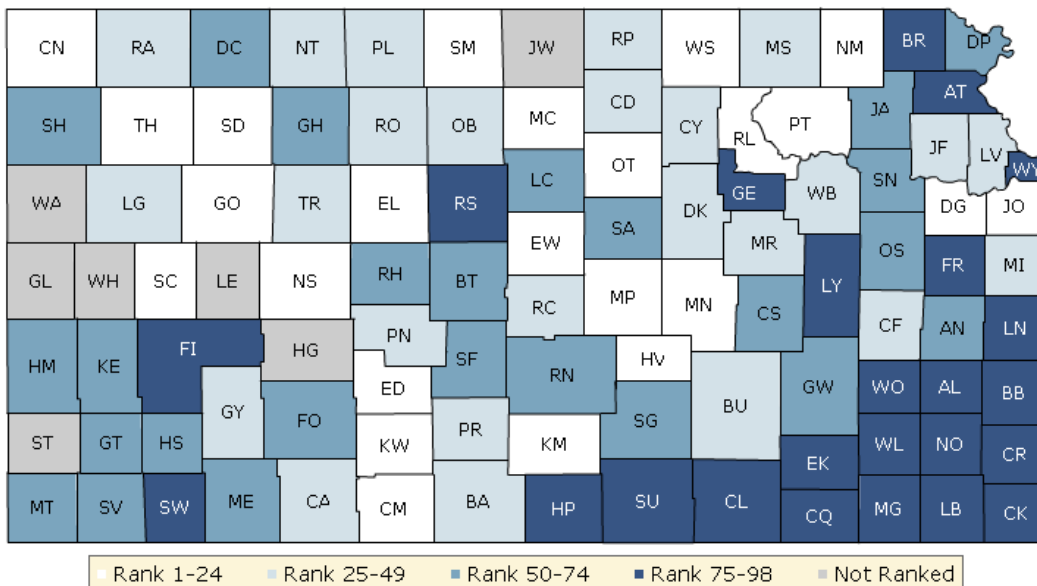
The maps on this page display Kansas's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

Maps help locate the healthiest and least healthy counties in the state. The health factors map appears similar to the health outcomes map, showing how health factors and health outcomes are closely related.

### HEALTH OUTCOMES



### HEALTH FACTORS



## Summary Health Outcomes & Health Factors Rankings

Counties receive two summary ranks:

- Health Outcomes
- Health Factors

Each of these ranks represents a weighted summary of a number of measures.

Health outcomes represent how healthy a county is while health factors are what influences the health of the county.

Rank	Health Outcomes	Rank	Health Factors
1	Riley	1	Johnson
2	Johnson	2	Nemaha
3	Mitchell	3	McPherson
4	Coffey	4	Sheridan
5	Ellis	5	Scott
6	Kingman	6	Mitchell
7	Pottawatomie	7	Riley
8	Douglas	8	Harvey
9	Sheridan	9	Douglas
10	McPherson	10	Ottawa
11	Kiowa	11	Cheyenne
12	Ellsworth	12	Smith
13	Ford	13	Gove
14	Norton	14	Ellis
15	Finney	15	Ellsworth
16	Marshall	16	Kiowa
17	Dickinson	17	Washington
18	Harvey	18	Thomas
19	Leavenworth	19	Comanche
20	Clay	20	Marion
21	Kearny	21	Kingman
22	Miami	22	Pottawatomie
23	Chase	23	Edwards
24	Nemaha	24	Ness
25	Doniphan	25	Butler
26	Thomas	26	Miami
27	Meade	27	Clay
28	Smith	28	Trego
29	Butler	29	Wabaunsee
30	Barber	30	Republic
31	Seward	31	Logan
32	Grant	32	Rooks
33	Morris	33	Rawlins
34	Graham	34	Pratt
35	Gove	35	Cloud
36	Republic	36	Norton
37	Lincoln	37	Osborne
38	Rush	38	Gray
39	Rawlins	39	Dickinson
40	Franklin	40	Coffey
41	Wabaunsee	41	Barber
42	Decatur	42	Leavenworth
43	Morton	43	Morris
44	Lyon	44	Clark
45	Cloud	45	Marshall

Rank	Health Outcomes	Rank	Health Factors
46	Cheyenne	46	Pawnee
47	Comanche	47	Phillips
48	Jackson	48	Rice
49	Marion	49	Jefferson
50	Ottawa	50	Morton
51	Stevens	51	Chase
52	Ness	52	Meade
53	Pratt	53	Kearny
54	Rice	54	Shawnee
55	Reno	55	Reno
56	Gray	56	Rush
57	Edwards	57	Decatur
58	Scott	58	Sherman
59	Osborne	59	Graham
60	Haskell	60	Jackson
61	Shawnee	61	Sedgwick
62	Clark	62	Barton
63	Trego	63	Hamilton
64	Barton	64	Grant
65	Rooks	65	Ford
66	Atchison	66	Anderson
67	Pawnee	67	Stevens
68	Saline	68	Stafford
69	Linn	69	Haskell
70	Jefferson	70	Doniphan
71	Osage	71	Saline
72	Phillips	72	Lincoln
73	Logan	73	Osage
74	Sedgwick	74	Greenwood
75	Sumner	75	Russell
76	Washington	76	Cowley
77	Anderson	77	Franklin
78	Chautauqua	78	Neosho
79	Hamilton	79	Chautauqua
80	Stafford	80	Lyon
81	Neosho	81	Sumner
82	Geary	82	Brown
83	Cowley	83	Harper
84	Brown	84	Bourbon
85	Russell	85	Labette
86	Harper	86	Linn
87	Greenwood	87	Crawford
88	Labette	88	Geary
89	Crawford	89	Atchison
90	Sherman	90	Montgomery
91	Wilson	91	Cherokee
92	Elk	92	Allen
93	Woodson	93	Wilson
94	Allen	94	Woodson
95	Bourbon	95	Finney
96	Wyandotte	96	Seward
97	Montgomery	97	Elk
98	Cherokee	98	Wyandotte

**Not Ranked:** Greeley, Hodgeman, Jewell, Lane, Stanton, Wallace, Wichita

## Health Outcomes Rankings

The summary health outcomes ranking is based on measures of mortality and morbidity. Each county's ranks for mortality and morbidity are displayed here. The mortality rank, representing length of life, is based on a measure of premature death: the years of potential life lost prior to age 75.

The morbidity rank is based on measures that represent health-related quality of life and birth outcomes. We combine four morbidity measures: self-reported fair or poor health, poor physical health days, poor mental health days, and the percent of births with low birthweight.

Rank	Mortality	Rank	Morbidity
1	Kingman	1	Sheridan
2	Riley	2	Coffey
3	Johnson	3	Kiowa
4	Norton	4	Mitchell
5	Douglas	5	Nemaha
6	Ellsworth	6	Riley
7	Ellis	7	Johnson
8	Pottawatomie	8	Clay
9	Marshall	9	Chase
10	Finney	10	Haskell
11	Ford	11	Meade
12	McPherson	12	Smith
13	Dickinson	13	Ellis
14	Leavenworth	14	Kearny
15	Pratt	15	Pottawatomie
16	Doniphan	16	Barber
17	Mitchell	17	Cloud
18	Butler	18	Thomas
19	Miami	19	McPherson
20	Coffey	20	Harvey
21	Grant	21	Graham
22	Harvey	22	Wabaunsee
23	Morris	23	Gove
24	Barton	24	Ford
25	Franklin	25	Republic
26	Seward	26	Gray
27	Lyon	27	Harper
28	Ottawa	28	Lincoln
29	Kearny	29	Rush
30	Pawnee	30	Rawlins
31	Clay	31	Washington
32	Anderson	32	Decatur
33	Rice	33	Morton
34	Thomas	34	Stevens
35	Shawnee	35	Douglas
36	Marion	36	Dickinson
37	Saline	37	Miami
38	Jackson	38	Cheyenne
39	Barber	39	Comanche
39	Chase	40	Rooks
39	Chautauqua	41	Seward
39	Cheyenne	42	Reno
39	Clark	43	Jackson
39	Comanche	44	Marion
39	Decatur	45	Ness



Rank	Mortality	Rank	Morbidity
39	Edwards	46	Brown
39	Elk	47	Leavenworth
39	Gove	48	Ellsworth
39	Graham	49	Finney
39	Hamilton	50	Edwards
39	Kiowa	51	Rice
39	Lincoln	52	Morris
39	Logan	53	Marshall
39	Meade	54	Grant
39	Morton	55	Franklin
39	Ness	56	Scott
39	Osborne	57	Lyon
39	Rawlins	58	Osborne
39	Republic	59	Butler
39	Rush	60	Doniphan
39	Scott	61	Clark
39	Sheridan	62	Russell
39	Smith	63	Phillips
39	Trego	64	Trego
65	Atchison	65	Ottawa
66	Linn	66	Atchison
67	Osage	67	Shawnee
68	Reno	68	Jefferson
69	Wabaunsee	69	Linn
70	Jefferson	70	Osage
71	Stevens	71	Sedgwick
72	Sumner	72	Norton
73	Neosho	73	Saline
74	Phillips	74	Cowley
75	Sedgwick	75	Kingman
76	Cloud	76	Sumner
77	Gray	77	Stafford
78	Nemaha	78	Pawnee
79	Rooks	79	Allen
80	Stafford	80	Logan
81	Geary	81	Wilson
82	Labette	82	Cherokee
83	Crawford	83	Barton
84	Haskell	84	Chautauqua
85	Washington	85	Greenwood
86	Cowley	86	Sherman
87	Greenwood	87	Anderson
88	Woodson	88	Pratt
89	Russell	89	Hamilton
90	Sherman	90	Bourbon
91	Wyandotte	91	Geary
92	Montgomery	92	Neosho
93	Brown	93	Crawford
94	Wilson	94	Wyandotte
95	Bourbon	95	Labette
96	Allen	96	Montgomery
97	Harper	97	Woodson
98	Cherokee	98	Elk

## Health Factors Rankings

The summary health factors ranking is based on four factors: health behaviors, clinical care, social and economic, and physical environment factors. In turn, each of these factors is based on several measures. Health behaviors include measures of smoking, diet and exercise, alcohol use, and risky sex behavior. Clinical

care includes measures of access to care and quality of care. Social and economic factors include measures of education, employment, income, family and social support, and community safety. The physical environment includes measures of environmental quality and the built environment.

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
1	Johnson	1	Johnson	1	Johnson	1	Scott
2	Nemaha	2	McPherson	2	Scott	2	Ellis
3	Sheridan	3	Harvey	3	Nemaha	3	Grant
4	Riley	4	Clay	4	McPherson	4	Logan
5	Harvey	5	Shawnee	5	Thomas	5	Sherman
6	Kiowa	6	Saline	6	Ellis	6	Barber
7	Smith	7	Reno	7	Mitchell	7	Cheyenne
8	Douglas	8	Sedgwick	8	Pottawatomie	7	Clark
9	Rawlins	9	Marion	9	Sheridan	9	Thomas
10	Ottawa	10	Dickinson	10	Trego	10	Kingman
11	Gove	11	Butler	11	Ness	11	McPherson
12	Mitchell	12	Smith	12	Douglas	12	Shawnee
13	McPherson	13	Cowley	13	Riley	13	Pratt
14	Ellsworth	14	Pawnee	14	Ottawa	14	Neosho
15	Washington	15	Franklin	15	Norton	15	Norton
16	Cheyenne	16	Edwards	16	Washington	16	Ford
17	Wabaunsee	17	Osage	17	Comanche	17	Comanche
18	Kingman	18	Brown	18	Cheyenne	17	Doniphan
19	Comanche	19	Ottawa	19	Gove	19	Barton
20	Cloud	20	Bourbon	20	Republic	20	Butler
21	Ness	21	Labette	21	Marion	21	Gove
22	Miami	22	Decatur	22	Ellsworth	21	Osborne
23	Chautauqua	23	Wabaunsee	23	Meade	21	Rooks
24	Greenwood	24	Barton	24	Logan	24	Coffey
25	Morris	25	Morris	25	Marshall	25	Reno
26	Morton	26	Kingman	26	Coffey	26	Seward
27	Edwards	27	Nemaha	27	Edwards	27	Finney
28	Gray	28	Miami	28	Graham	28	Nemaha
29	Anderson	29	Atchison	29	Phillips	29	Johnson
30	Osborne	30	Jefferson	30	Dickinson	30	Woodson
31	Ellis	31	Rice	31	Jefferson	31	Hamilton
32	Thomas	32	Mitchell	32	Morton	31	Haskell
33	Doniphan	33	Trego	33	Butler	31	Kearny
34	Lincoln	34	Scott	34	Leavenworth	31	Rawlins
35	Lyon	35	Douglas	35	Gray	31	Sheridan
36	Pottawatomie	36	Cheyenne	36	Clay	31	Smith
37	Hamilton	37	Jackson	37	Rooks	31	Stafford
38	Clay	38	Pratt	38	Miami	31	Stevens
39	Woodson	39	Rush	39	Pratt	39	Harvey
40	Scott	40	Chase	40	Clark	40	Sedgwick
41	Elk	41	Pottawatomie	41	Wabaunsee	41	Mitchell
42	Coffey	42	Geary	42	Smith	42	Ellsworth
43	Sherman	43	Rooks	43	Kiowa	43	Greenwood
44	Trego	44	Sheridan	44	Kingman	43	Harper
45	Marion	45	Riley	45	Osborne	43	Phillips

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
46	Barber	46	Neosho	46	Harvey	46	Lincoln
47	Kearny	47	Doniphan	47	Barber	47	Gray
48	Republic	48	Linn	48	Chase	48	Cherokee
49	Butler	49	Leavenworth	49	Cloud	49	Miami
50	Rooks	50	Kiowa	50	Stevens	50	Russell
51	Sedgwick	51	Lyon	51	Haskell	51	Marion
52	Rice	52	Sumner	52	Lincoln	52	Allen
53	Chase	53	Wyandotte	53	Grant	53	Cowley
54	Clark	54	Gove	54	Rush	54	Jackson
55	Ford	55	Marshall	55	Jackson	54	Jefferson
56	Logan	56	Republic	56	Pawnee	54	Meade
57	Meade	57	Montgomery	57	Rice	54	Morton
58	Graham	58	Crawford	58	Morris	58	Montgomery
59	Pawnee	59	Anderson	59	Reno	59	Geary
60	Stafford	60	Ellis	60	Kearny	60	Crawford
61	Stevens	61	Cherokee	61	Hamilton	61	Cloud
62	Russell	62	Wilson	62	Osage	62	Atchison
63	Decatur	63	Cloud	63	Rawlins	63	Brown
64	Rush	64	Chautauqua	64	Stafford	64	Labette
65	Pratt	65	Ellsworth	65	Decatur	65	Wilson
66	Leavenworth	66	Kearny	66	Saline	66	Decatur
67	Cowley	67	Sherman	67	Sumner	66	Edwards
68	Phillips	68	Washington	68	Ford	66	Pawnee
69	Shawnee	69	Russell	69	Barton	66	Rice
70	Haskell	70	Osborne	70	Harper	70	Republic
71	Norton	71	Comanche	71	Sherman	71	Osage
72	Wilson	72	Elk	72	Anderson	72	Marshall
73	Cherokee	73	Allen	73	Russell	73	Leavenworth
74	Barton	74	Grant	74	Franklin	74	Ness
75	Linn	75	Finney	75	Shawnee	75	Chautauqua
76	Harper	76	Ford	76	Greenwood	76	Franklin
77	Dickinson	77	Ness	77	Geary	77	Riley
78	Jackson	78	Barber	78	Brown	78	Anderson
79	Labette	79	Thomas	79	Sedgwick	79	Elk
80	Bourbon	80	Norton	80	Neosho	79	Graham
81	Neosho	81	Phillips	81	Linn	79	Kiowa
82	Marshall	82	Logan	82	Crawford	79	Rush
83	Crawford	83	Stafford	83	Atchison	83	Bourbon
84	Franklin	84	Woodson	84	Lyon	84	Dickinson
85	Sumner	85	Gray	85	Cowley	85	Saline
86	Seward	86	Rawlins	86	Bourbon	86	Linn
87	Reno	87	Clark	87	Doniphan	87	Washington
88	Brown	88	Harper	88	Allen	88	Douglas
89	Montgomery	89	Greenwood	89	Seward	89	Ottawa
90	Jefferson	90	Haskell	90	Montgomery	90	Pottawatomie
91	Grant	91	Hamilton	91	Finney	91	Chase
92	Allen	92	Coffey	92	Labette	91	Clay
93	Saline	93	Stevens	93	Chautauqua	93	Morris
94	Osage	94	Graham	94	Cherokee	94	Sumner
95	Geary	95	Meade	95	Wilson	95	Wabaunsee
96	Atchison	96	Seward	96	Woodson	96	Trego
97	Finney	97	Morton	97	Elk	97	Lyon
98	Wyandotte	98	Lincoln	98	Wyandotte	98	Wyandotte

## 2011 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
<b>HEALTH OUTCOMES</b>			
<b>Mortality</b>	Premature death	National Center for Health Statistics	2005-2007
<b>Morbidity</b>	Poor or fair health	Behavioral Risk Factor Surveillance System	2003-2009
	Poor physical health days	Behavioral Risk Factor Surveillance System	2003-2009
	Poor mental health days	Behavioral Risk Factor Surveillance System	2003-2009
	Low birthweight	National Center for Health Statistics	2001-2007
<b>HEALTH FACTORS</b>			
<b>HEALTH BEHAVIORS</b>			
<b>Tobacco</b>	Adult smoking	Behavioral Risk Factor Surveillance System	2003-2009
<b>Diet and Exercise</b>	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2008
<b>Alcohol Use</b>	Excessive drinking	Behavioral Risk Factor Surveillance System	2003-2009
	Motor vehicle crash death rate	National Center for Health Statistics	2001-2007
<b>High Risk Sexual Behavior</b>	Sexually transmitted infections	National Center for Hepatitis, HIV, STD and TB Prevention	2008
	Teen birth rate	National Center for Health Statistics	2001-2007
<b>CLINICAL CARE</b>			
<b>Access to Care</b>	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2007
	Primary care providers	Health Resources & Services Administration	2008
<b>Quality of Care</b>	Preventable hospital stays	Medicare/Dartmouth Institute	2006-2007
	Diabetic screening	Medicare/Dartmouth Institute	2006-2007
	Mammography screening	Medicare/Dartmouth Institute	2006-2007
<b>SOCIOECONOMIC FACTORS</b>			
<b>Education</b>	High school graduation	National Center for Education Statistics <sup>1</sup>	2006-2007
	Some college	American Community Survey	2005-2009
<b>Employment</b>	Unemployment	Bureau of Labor Statistics	2009
<b>Income</b>	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2008
<b>Family and Social Support</b>	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2009
	Single-parent households	American Community Survey	2005-2009
<b>Community Safety</b>	Violent crime <sup>2</sup>	Uniform Crime Reporting, Federal Bureau of Investigation	2006-2008
<b>PHYSICAL ENVIRONMENT</b>			
<b>Air Quality</b> <sup>3</sup>	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2006
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2006
<b>Built Environment</b>	Access to healthy foods	Census Zip Code Business Patterns	2008
	Access to recreational facilities	Census County Business Patterns	2008

<sup>1</sup> State data sources for KY, NH, NC, PA, SC, and UT (2008-2009).

<sup>2</sup> Homicide rate (2001-2007) from National Center for Health Statistics for AK, AZ, AR, CO, CT, GA, ID, IN, IA, KS, KY, LA, MN, MS, MT, NE, NH, NM, NC, ND, OH, SD, UT, and WV. State data source for IL.

<sup>3</sup> Not available for AK and HI.

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Michele Bohm, MPH, Centers for Disease Control and Prevention

### **Research Assistance**

Jennifer Buechner  
Hyojun Park, MA  
Seth Prins, MPH  
Jennifer Robinson  
Matthew Rodock  
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### **Communications and Outreach**

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### **Design**

Forum One, Alexandria, VA  
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### **Robert Wood Johnson Foundation**

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James S. Marks, MD, MPH – Senior Vice President and Group Director, Health Group  
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Suggested citation: University of Wisconsin Population Health Institute. *County Health Rankings 2011*.







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