County Health Rankings

Mobilizing Action Toward Community Health

2010

Kansas

Robert Wood Johnson Foundation

UNIVERSITY OF WISCONSIN
Population Health Institute
Translating Research into Policy and Practice

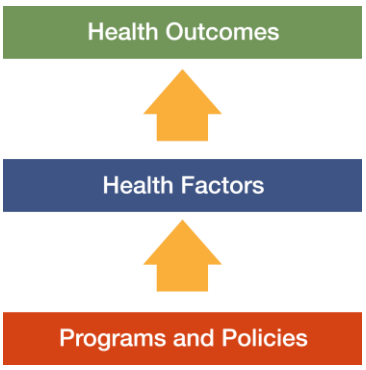
Introduction

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.

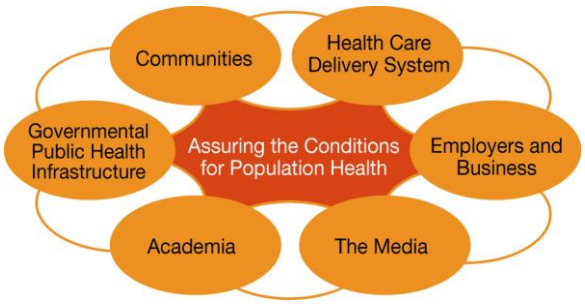
The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute are pleased to present the 2010 *County Health Rankings*, a collection of 50 reports that reflect the overall health of counties in every state across the country. For the first time, 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 will allow them 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.



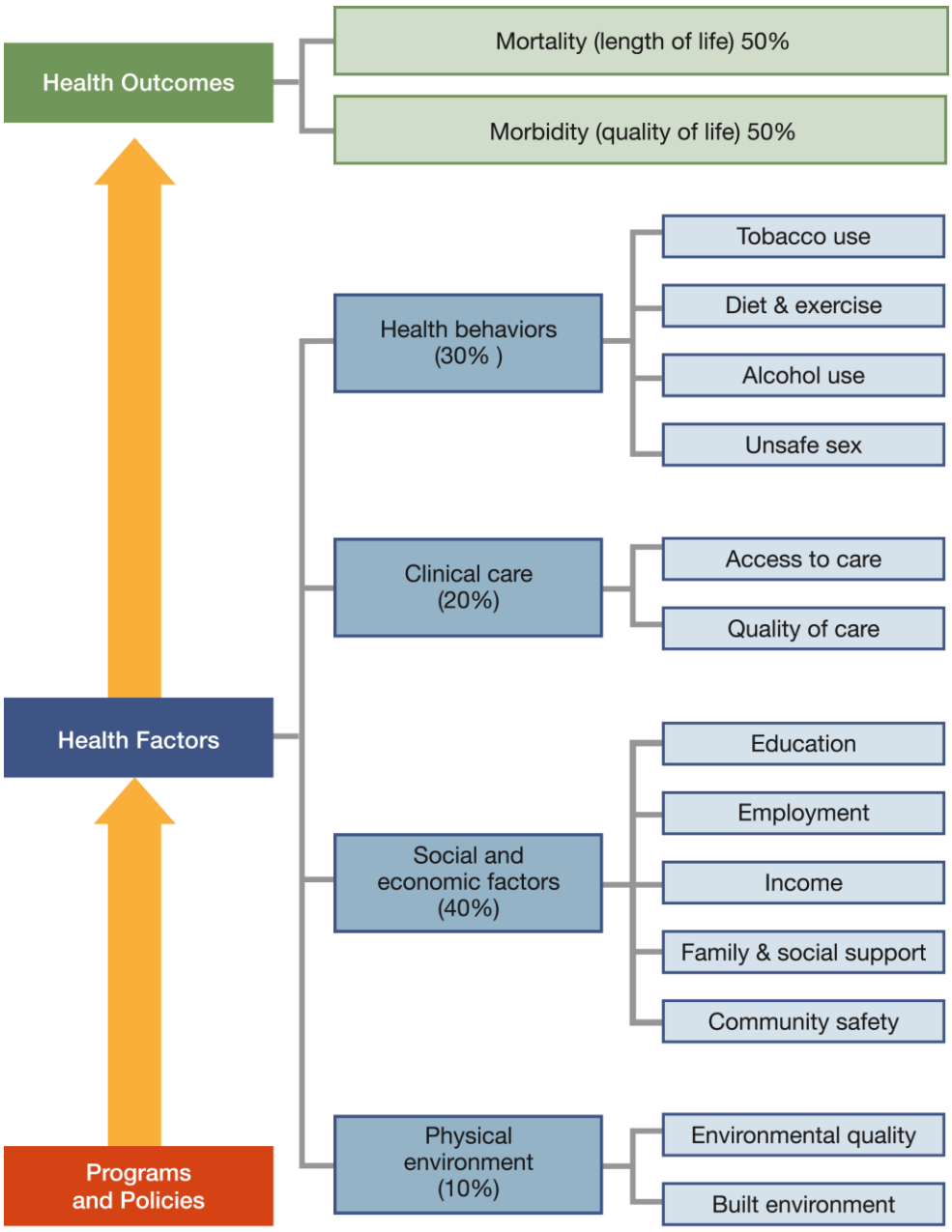
Institute of Medicine, 2002

To compile the *Rankings*, we built on our prior work in Wisconsin, worked closely with staff from the Centers for Disease Control and Prevention and Dartmouth College, and obtained input from a team of expert advisors. 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 the choice of measures, see 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.

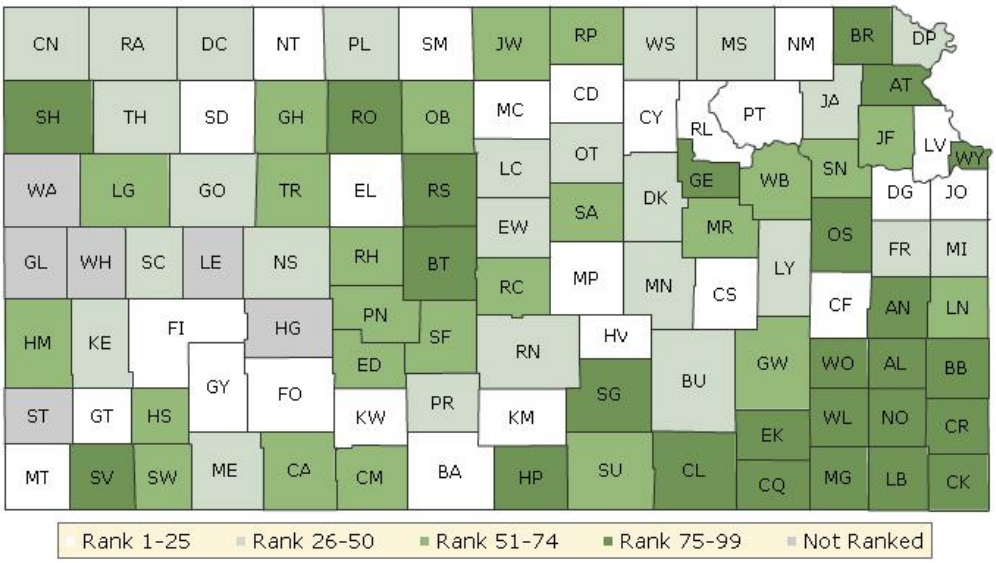


County Health Rankings model ©2010 UWPHI

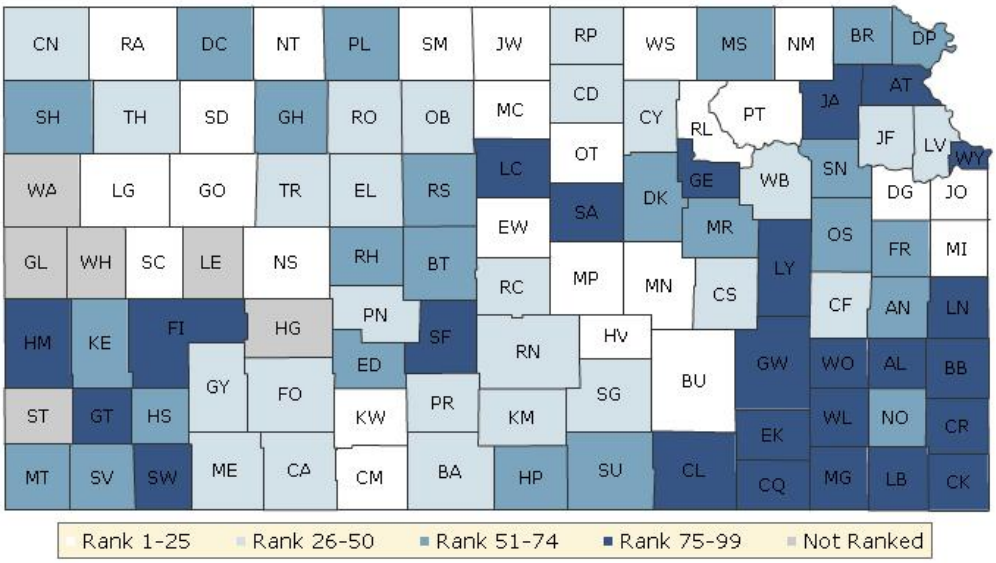
The maps on this page display Kansas's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

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

Rank	Health Outcomes	Rank	Health Factors
41	Marion	41	Pawnee
42	Meade	42	Reno
43	Kearny	43	Trego
44	Jackson	44	Meade
45	Phillips	45	Chase
46	Ness	46	Rice
47	Scott	47	Ford
48	Pratt	48	Sedgwick
49	Ottawa	49	Osborne
50	Rawlins	50	Coffey
51	Graham	51	Rush
52	Wabaunsee	52	Edwards
53	Logan	53	Decatur
54	Comanche	54	Haskell
55	Osborne	55	Morris
56	Morris	56	Dickinson
57	Seward	57	Phillips
58	Greenwood	58	Marshall
59	Jewell	59	Doniphan
60	Haskell	60	Kearny
61	Saline	61	Stevens
62	Republic	62	Barton
63	Pawnee	63	Shawnee
64	Rush	64	Sherman
65	Hamilton	65	Graham
66	Edwards	66	Morton
67	Shawnee	67	Osage
68	Rice	68	Russell
69	Clark	69	Harper
70	Jefferson	70	Franklin
71	Sumner	71	Neosho
72	Trego	72	Anderson
73	Stafford	73	Sumner
74	Linn	74	Brown
75	Barton	75	Jackson
76	Sedgwick	76	Stafford
77	Osage	77	Grant
78	Brown	78	Lincoln
79	Atchison	79	Atchison
80	Woodson	80	Cowley
81	Chautauqua	81	Chautauqua
82	Cowley	82	Saline
83	Sherman	83	Linn
84	Rooks	84	Labette
85	Russell	85	Hamilton
86	Neosho	86	Greenwood
87	Stevens	87	Lyon
88	Crawford	88	Bourbon
89	Elk	89	Seward
90	Wilson	90	Cherokee

Rank	Health Outcomes	Rank	Health Factors
91	Geary	91	Wilson
92	Allen	92	Crawford
93	Anderson	93	Woodson
94	Labette	94	Finney
95	Cherokee	95	Montgomery
96	Wyandotte	96	Elk
97	Harper	97	Allen
98	Bourbon	98	Geary
99	Montgomery	99	Wyandotte

Not Ranked: Greeley, Hodgeman, 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	Johnson	1	Sheridan
2	Riley	2	Mitchell
3	Douglas	3	Kiowa
4	Kingman	4	Nemaha
5	Mitchell	5	Coffey
6	Ellis	6	Riley
7	Finney	7	Chase
8	Pottawatomie	8	Clay
9	Pratt	9	Cloud
10	Ford	10	Johnson
11	Ellsworth	11	Haskell
12	Grant	12	Gray
13	Norton	13	Smith
14	McPherson	14	Morton
15	Leavenworth	15	Barber
16	Butler	16	Wabaunsee
17	Harvey	17	Pottawatomie
18	Lyon	18	Cheyenne
19	Doniphan	19	Harvey
20	Marshall	20	McPherson
21	Clay	21	Decatur
22	Morris	22	Lincoln
23	Nemaha	23	Washington
24	Miami	24	Gove
25	Gray	25	Ford
26	Dickinson	26	Meade
27	Franklin	27	Harper
28	Coffey	28	Ellis
29	Reno	29	Kearny
30	Saline	30	Thomas
31	Ottawa	31	Phillips
32	Marion	32	Ness
33	Jackson	33	Scott
34	Barton	34	Rawlins
35	Thomas	35	Leavenworth
36	Pawnee	36	Douglas
37	Shawnee	37	Graham
38	Linn	38	Dickinson
39	Greenwood	39	Logan
40	Sumner	40	Comanche

Rank	Mortality	Rank	Morbidity
41	Barber	41	Seward
41	Chase	42	Osborne
41	Chautauqua	43	Reno
41	Cheyenne	44	Marion
41	Clark	45	Miami
41	Comanche	46	Rooks
41	Decatur	47	Jackson
41	Edwards	48	Grant
41	Elk	49	Jewell
41	Gove	50	Finney
41	Graham	51	Brown
41	Hamilton	52	Norton
41	Jewell	53	Stevens
41	Kearny	54	Greenwood
41	Kiowa	55	Franklin
41	Lincoln	56	Doniphan
41	Logan	57	Marshall
41	Meade	58	Ottawa
41	Morton	59	Butler
41	Ness	60	Rice
41	Osborne	61	Republic
41	Phillips	62	Lyon
41	Rawlins	63	Ellsworth
41	Republic	64	Russell
41	Rush	65	Rush
41	Scott	66	Hamilton
41	Sheridan	67	Sherman
41	Smith	68	Edwards
41	Stafford	69	Jefferson
41	Trego	70	Clark
41	Washington	71	Pawnee
72	Seward	72	Osage
73	Cloud	73	Atchison
74	Jefferson	74	Shawnee
75	Rice	75	Allen
76	Sedgwick	76	Saline
77	Woodson	77	Sedgwick
78	Osage	78	Sumner
79	Wabaunsee	79	Trego
80	Crawford	80	Stafford
81	Neosho	81	Cowley
82	Atchison	82	Kingman
83	Haskell	83	Linn
84	Cowley	84	Morris
85	Brown	85	Wilson
86	Geary	86	Bourbon
87	Sherman	87	Barton
88	Labette	88	Pratt
89	Russell	89	Anderson
90	Wilson	90	Geary

Rank	Mortality	Rank	Morbidity
91	Rooks	91	Cherokee
92	Anderson	92	Woodson
93	Stevens	93	Neosho
94	Wyandotte	94	Wyandotte
95	Allen	95	Crawford
96	Cherokee	96	Labette
97	Montgomery	97	Chautauqua
98	Bourbon	98	Montgomery
99	Harper	99	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	Norton
2	Nemaha	2	Shawnee	2	Riley	1	Stevens
3	Sheridan	3	Sedgwick	3	Logan	3	Grant
4	Douglas	4	Harvey	4	McPherson	4	Douglas
5	Smith	5	Reno	5	Pottawatomie	5	Clark
6	Ottawa	6	Saline	6	Comanche	5	Comanche
7	Kiowa	7	Clay	7	Marion	5	Kiowa
8	Riley	8	Pratt	8	Scott	5	Meade
9	Harvey	9	McPherson	9	Ellis	9	Ford
10	Jewell	10	Labette	10	Thomas	10	Doniphan
11	Comanche	11	Miami	11	Ellsworth	11	Kearny
12	Mitchell	12	Neosho	12	Nemaha	12	Jewell
13	Rawlins	13	Cowley	13	Ness	13	Haskell
14	Washington	14	Atchison	14	Douglas	14	Barton
15	Gove	15	Osage	15	Meade	15	Jefferson
16	Cheyenne	16	Butler	16	Barber	16	Cheyenne
17	Cloud	17	Jefferson	17	Harvey	17	Osborne
18	Ellsworth	18	Wyandotte	18	Gray	18	Miami
19	McPherson	19	Kiowa	19	Gove	19	Sheridan
20	Pottawatomie	20	Douglas	20	Norton	20	Cherokee
21	Norton	21	Marion	21	Ottawa	21	Ness
22	Rooks	22	Bourbon	22	Sheridan	22	Harper
23	Ness	23	Leavenworth	23	Mitchell	23	Rush
24	Coffey	24	Ottawa	24	Republic	24	Phillips
25	Wabaunsee	25	Brown	25	Haskell	25	Franklin
26	Marion	26	Lyon	26	Pratt	26	Linn
27	Leavenworth	27	Franklin	27	Washington	27	Osage
28	Chautauqua	28	Pottawatomie	28	Marshall	28	Scott
29	Morris	29	Wabaunsee	29	Trego	29	Washington
30	Barber	30	Dickinson	30	Wabaunsee	30	Stafford
31	Morton	31	Chase	31	Clark	31	Labette
32	Ford	32	Kingman	32	Cheyenne	32	Reno
33	Sherman	33	Jackson	33	Pawnee	33	Seward
34	Rice	34	Mitchell	34	Dickinson	34	Rooks
35	Kingman	35	Anderson	35	Butler	35	Smith
36	Logan	36	Barton	36	Decatur	36	Butler
37	Trego	37	Pawnee	37	Jefferson	37	Sherman
38	Butler	38	Doniphan	38	Jewell	38	Crawford
39	Rush	39	Montgomery	39	Chase	39	Wilson
40	Greenwood	40	Geary	40	Phillips	40	Cloud

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
41	Woodson	41	Scott	41	Clay	41	Atchison
42	Elk	42	Ford	42	Rawlins	42	McPherson
43	Edwards	43	Sumner	43	Edwards	43	Logan
44	Republic	44	Cherokee	44	Kiowa	44	Finney
45	Lincoln	45	Rooks	45	Kingman	45	Sedgwick
46	Osborne	46	Crawford	46	Miami	46	Pawnee
47	Russell	47	Clark	47	Stevens	47	Decatur
48	Scott	48	Morris	48	Coffey	48	Shawnee
49	Anderson	49	Decatur	49	Kearny	49	Montgomery
50	Clark	50	Norton	50	Rooks	50	Marshall
51	Graham	51	Riley	51	Morton	51	Neosho
52	Thomas	52	Marshall	52	Smith	52	Morris
53	Gray	53	Finney	53	Rice	53	Ellsworth
54	Miami	54	Rush	54	Leavenworth	54	Pratt
55	Clay	55	Harper	55	Lincoln	55	Graham
56	Ellis	56	Linn	56	Osborne	56	Rawlins
57	Phillips	57	Wilson	57	Harper	57	Gray
58	Stevens	58	Osborne	58	Grant	58	Bourbon
59	Sedgwick	59	Republic	59	Cloud	59	Barber
60	Meade	60	Rice	60	Graham	60	Brown
61	Jackson	61	Kearny	61	Saline	61	Gove
62	Chase	62	Russell	62	Stafford	62	Harvey
63	Sumner	63	Smith	63	Barton	63	Ellis
64	Neosho	64	Edwards	64	Rush	64	Cowley
65	Pawnee	65	Elk	65	Doniphan	65	Ottawa
66	Reno	66	Sherman	66	Reno	66	Thomas
67	Doniphan	67	Nemaha	67	Sumner	67	Kingman
68	Shawnee	68	Rawlins	68	Atchison	68	Chautauqua
69	Haskell	69	Ellis	69	Ford	69	Jackson
70	Lyon	70	Gray	70	Morris	70	Pottawatomie
71	Hamilton	71	Thomas	71	Franklin	71	Rice
72	Linn	72	Comanche	72	Hamilton	72	Nemaha
73	Cherokee	73	Ellsworth	73	Russell	73	Woodson
74	Stafford	74	Chautauqua	74	Sedgwick	74	Republic
75	Jefferson	75	Cloud	75	Sherman	75	Morton
76	Pratt	76	Allen	76	Brown	76	Trego
77	Osage	77	Washington	77	Osage	77	Russell
78	Kearny	78	Trego	78	Anderson	78	Marion
79	Decatur	79	Grant	79	Jackson	79	Dickinson
80	Wilson	80	Greenwood	80	Cowley	80	Clay
81	Brown	81	Coffey	81	Seward	81	Anderson
82	Bourbon	82	Ness	82	Allen	82	Coffey
83	Barton	83	Seward	83	Neosho	83	Lyon
84	Seward	84	Logan	84	Shawnee	84	Allen
85	Dickinson	85	Jewell	85	Chautauqua	85	Hamilton
86	Cowley	86	Sheridan	86	Linn	86	Chase
87	Marshall	87	Phillips	87	Greenwood	87	Wabaunsee
88	Franklin	88	Barber	88	Crawford	88	Elk
89	Harper	89	Stafford	89	Labette	89	Greenwood
90	Crawford	90	Gove	90	Finney	90	Johnson

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
91	Labette	91	Graham	91	Wilson	91	Edwards
92	Finney	92	Cheyenne	92	Bourbon	92	Mitchell
93	Montgomery	93	Woodson	93	Montgomery	93	Geary
94	Grant	94	Hamilton	94	Lyon	94	Lincoln
95	Atchison	95	Haskell	95	Cherokee	95	Leavenworth
96	Geary	96	Meade	96	Woodson	96	Saline
97	Saline	97	Stevens	97	Geary	97	Sumner
98	Allen	98	Lincoln	98	Elk	98	Riley
99	Wyandotte	99	Morton	99	Wyandotte	99	Wyandotte

2010 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
HEALTH OUTCOMES			
Mortality	Premature death	National Center for Health Statistics	2004-2006
Morbidity	Poor or fair health	Behavioral Risk Factor Surveillance System	2002-2008
	Poor physical health days	Behavioral Risk Factor Surveillance System	2002-2008
	Poor mental health days	Behavioral Risk Factor Surveillance System	2002-2008
	Low birthweight	National Center for Health Statistics	2000-2006
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco	Adult smoking	Behavioral Risk Factor Surveillance System	2002-2008
Diet and Exercise	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2006-2008
Alcohol Use	Binge drinking	Behavioral Risk Factor Surveillance System	2002-2008
	Motor vehicle crash death rate	National Center for Health Statistics	2000-2006
High Risk Sexual Behavior	Chlamydia rate	National Center for Health Statistics	2007
	Teen birth rate	National Center for Health Statistics	2000-2006
CLINICAL CARE			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2005
	Primary care provider rate	Health Resources & Services Administration	2006
Quality of Care	Preventable hospital stays	Medicare/Dartmouth Institute	2005-2006
	Diabetic screening	Medicare/Dartmouth Institute	2003-2006
	Hospice use	Medicare/Dartmouth Institute	2001-2005
SOCIOECONOMIC FACTORS			
Education	High school graduation	National Center for Education Statistics[1]	2005-2006
	College degrees	U.S. Census/American Community Survey	2000/2005-2007
Employment	Unemployment	Bureau of Labor Statistics	2008
Income	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2007
	Income inequality	U.S. Census/American Community Survey[2]	2000/2005-2007
Family and Social Support	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2008
	Single-parent households	U.S. Census/American Community Survey	2000/2005-2007
Community Safety	Violent crime[3]	Uniform Crime Reporting, Federal Bureau of Investigation	2005-2007
PHYSICAL ENVIRONMENT			
Air Quality[4]	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2005
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2005
Built Environment	Access to healthy foods	Census Zip Code Business Patterns	2006
	Liquor store density	Census County Business Patterns	2006

[1] State data sources for KY, NH, NC, PA, SC, and UT (2007-2008).

[2] Income inequality estimates for 2000 were calculated by Mark L. Burkey, North Carolina Agricultural & Technical State University, www.ncat.edu/~burkeym/Gini.htm.

[3] Homicide rate (2000-2006) 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.

[4] Not available for AK and HI.

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