County Health Rankings
Mobilizing Action Toward Community Health

2011
Iowa

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:
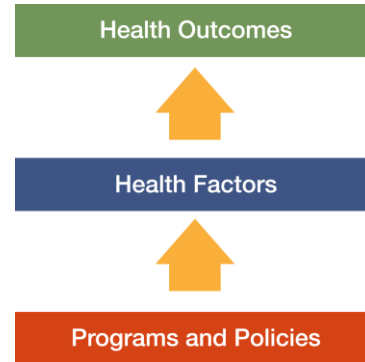
In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. These health factors and their outcomes may also be affected by community-based programs and policies designed to alter their distribution 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.
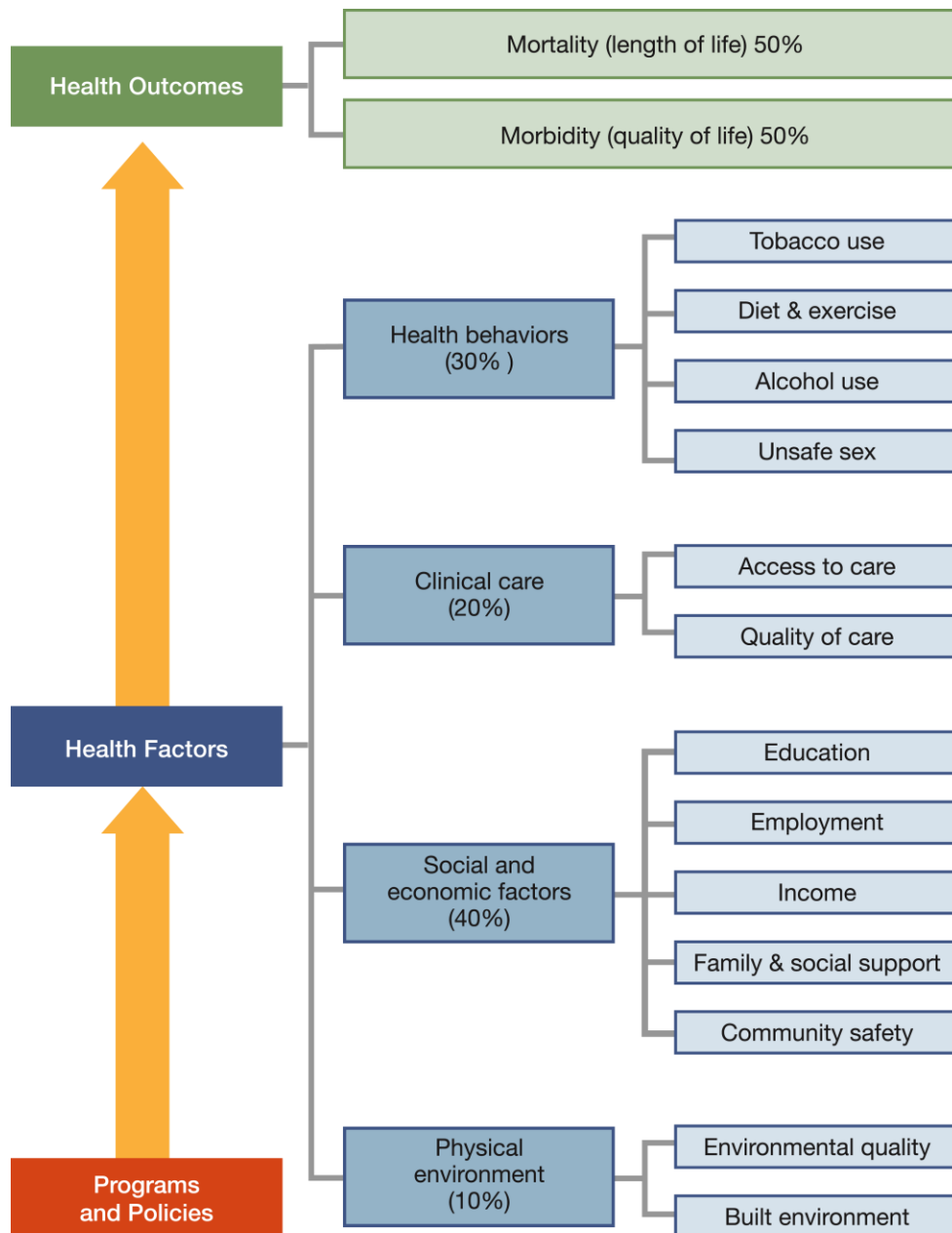
For a more detailed explanation of our approach, the methods used to compile the *Rankings,* information on the action steps communities can take to improve their health, and examples of communities in action, see www.countyhealthrankings.org

The Rankings

This report ranks Iowa 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.

Health Outcomes	
	Mortality (length of life) 50%
	Morbidity (quality of life) 50%

Health Factors

Health behaviors (30%)	Tobacco use
	Diet & exercise
	Alcohol use
	Unsafe sex

| Clinical care (20%) | Access to care |
| | Quality of care |

Social and economic factors (40%)	Education
	Employment
	Income
	Family & social support
	Community safety

| Physical environment (10%) | Environmental quality |
| | Built environment |

Programs and Policies

County Health Rankings model ©2010 UWPHI

The maps on this page display Iowa'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

Rank 1-25 Rank 26-50 Rank 51-74 Rank 75-99

HEALTH FACTORS

Rank 1-25 Rank 26-50 Rank 51-74 Rank 75-99
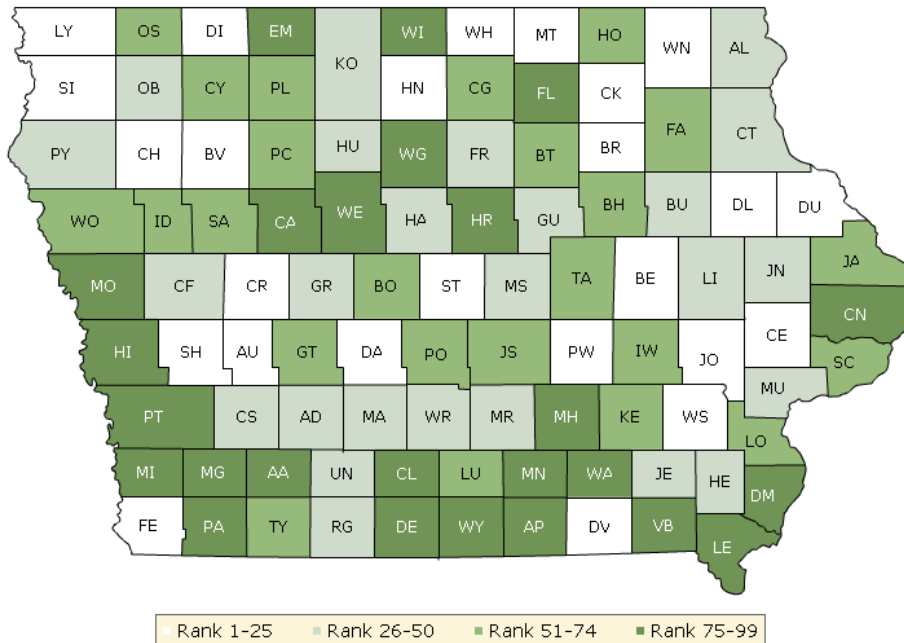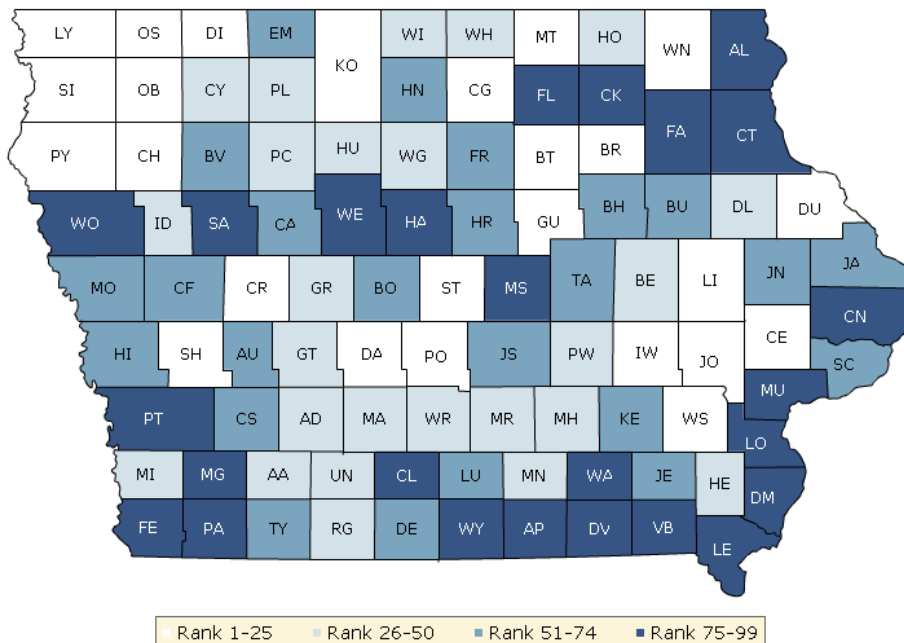
Summary Health Outcomes & Health Factors Rankings

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	Delaware	1	Johnson
2	Sioux	2	Story
3	Story	3	Winneshiek
4	Worth	4	Sioux
5	Johnson	5	Bremer
6	Lyon	6	Grundy
7	Bremer	7	Dallas
8	Winneshiek	8	Dubuque
9	Mitchell	9	Lyon
10	Buena Vista	10	Shelby
11	Davis	11	Cherokee
12	Audubon	12	Kossuth
13	Cherokee	13	Osceola
14	Shelby	14	Cerro Gordo
15	Benton	15	Mitchell
16	Cedar	16	Cedar
17	Hancock	17	Dickinson
18	Dubuque	18	Carroll
19	Fremont	19	Plymouth
20	Washington	20	O'Brien
21	Carroll	21	Linn
22	Chickasaw	22	Butler
23	Poweshiek	23	Iowa
24	Dickinson	24	Polk
25	Dallas	25	Washington
26	Grundy	26	Warren
27	Kossuth	27	Palo Alto
28	O'Brien	28	Marion
29	Marion	29	Ringgold
30	Hamilton	30	Adams
31	Franklin	31	Delaware
32	Plymouth	32	Madison
33	Ringgold	33	Guthrie
34	Warren	34	Pocahontas
35	Linn	35	Humboldt
36	Greene	36	Benton
37	Buchanan	37	Adair
38	Clayton	38	Greene
39	Adair	39	Poweshiek
40	Henry	40	Ida
41	Humboldt	41	Winnebago
42	Jefferson	42	Howard
43	Cass	43	Worth
44	Allamakee	44	Mills
45	Madison	45	Clay

Rank	Health Outcomes	Rank	Health Factors
46	Crawford	46	Wright
47	Jones	47	Henry
48	Muscatine	48	Union
49	Union	49	Monroe
50	Marshall	50	Mahaska
51	Iowa	51	Scott
52	Howard	52	Calhoun
53	Osceola	53	Audubon
54	Boone	54	Boone
55	Louisa	55	Jackson
56	Clay	56	Lucas
57	Lucas	57	Franklin
58	Scott	58	Hardin
59	Taylor	59	Black Hawk
60	Pocahontas	60	Emmet
61	Fayette	61	Decatur
62	Sac	62	Taylor
63	Polk	63	Hancock
64	Jasper	64	Buena Vista
65	Guthrie	65	Monona
66	Keokuk	66	Buchanan
67	Ida	67	Harrison
68	Jackson	68	Tama
69	Cerro Gordo	69	Jefferson
70	Black Hawk	70	Cass
71	Tama	71	Jones
72	Butler	72	Crawford
73	Woodbury	73	Keokuk
74	Palo Alto	74	Jasper
75	Adams	75	Hamilton
76	Emmet	76	Sac
77	Calhoun	77	Davis
78	Hardin	78	Wayne
79	Floyd	79	Chickasaw
80	Winnebago	80	Clayton
81	Monona	81	Marshall
82	Wright	82	Floyd
83	Page	83	Fayette
84	Des Moines	84	Fremont
85	Webster	85	Wapello
86	Mahaska	86	Page
87	Monroe	87	Webster
88	Decatur	88	Appanoose
89	Clinton	89	Pottawattamie
90	Clarke	90	Clinton
91	Pottawattamie	91	Clarke
92	Lee	92	Woodbury
93	Montgomery	93	Muscatine
94	Harrison	94	Des Moines
95	Mills	95	Lee
96	Wapello	96	Montgomery
97	Wayne	97	Allamakee
98	Van Buren	98	Louisa
99	Appanoose	99	Van Buren

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	O'Brien
2	Worth	2	Lyon
3	Bremer	3	Winneshiek
4	Delaware	4	Sioux
5	Story	5	Delaware
6	Kossuth	6	Adair
7	Fremont	7	Pocahontas
8	Sioux	8	Story
9	Mitchell	9	Audubon
10	Shelby	10	Cherokee
11	Buena Vista	11	Mitchell
12	Washington	12	Worth
13	Dallas	13	Dubuque
14	Davis	14	Plymouth
15	Grundy	15	Buena Vista
16	Chickasaw	16	Ringgold
17	Jones	17	Fayette
18	Louisa	18	Bremer
19	Dickinson	19	Johnson
20	Lyon	20	Davis
21	Benton	21	Osceola
22	Cedar	22	Sac
23	Poweshiek	23	Carroll
24	Hancock	24	Hancock
25	Warren	25	Jefferson
26	Franklin	26	Cedar
27	Winneshiek	27	Benton
28	Carroll	28	Humboldt
29	Marion	29	Greene
30	Audubon	30	Clayton
31	Hamilton	31	Calhoun
32	Cherokee	32	Clarke
33	Linn	33	Poweshiek
34	Dubuque	34	Allamakee
35	Muscatine	35	Monona
36	Ida	36	Webster
37	Buchanan	37	Wright
38	Henry	38	Crawford
39	Madison	39	Dickinson
40	Black Hawk	40	Howard
41	Cass	41	Shelby
42	Marshall	42	Union
43	Greene	43	Marion
44	Clayton	44	Clay
45	Jasper	45	Lucas

Rank	Mortality	Rank	Morbidity
46	Plymouth	46	Boone
47	Palo Alto	47	Hamilton
48	Iowa	48	Chickasaw
49	Allamakee	49	Cass
50	Crawford	50	Washington
51	Adams	51	Guthrie
51	Ringgold	52	Henry
51	Taylor	53	Winnebago
54	Union	54	Buchanan
55	Humboldt	55	Emmet
56	Scott	56	Grundy
57	Polk	57	Cerro Gordo
58	Jefferson	58	Dallas
59	Boone	59	Linn
60	Page	60	Fremont
61	Howard	61	Iowa
62	Woodbury	62	Jackson
63	Butler	63	Hardin
64	Monroe	64	Franklin
65	Clay	65	Scott
66	Lucas	66	Tama
67	Keokuk	67	Keokuk
68	Floyd	68	Marshall
69	Tama	69	Madison
70	Jackson	70	Mahaska
71	Osceola	71	Warren
72	Cerro Gordo	72	Polk
73	Guthrie	73	Kossuth
74	O'Brien	74	Taylor
75	Adair	75	Muscatine
76	Des Moines	76	Butler
77	Hardin	77	Floyd
78	Emmet	78	Woodbury
79	Sac	79	Des Moines
80	Clinton	80	Jasper
81	Fayette	81	Adams
82	Winnebago	82	Decatur
83	Mahaska	83	Palo Alto
84	Wayne	84	Jones
85	Pottawattamie	85	Page
86	Calhoun	86	Black Hawk
87	Decatur	87	Lee
88	Pocahontas	88	Mills
89	Monona	89	Montgomery
90	Lee	90	Van Buren
91	Wright	91	Monroe
92	Harrison	92	Ida
93	Webster	93	Pottawattamie
94	Wapello	94	Harrison
95	Montgomery	95	Louisa
96	Mills	96	Clinton
97	Van Buren	97	Wapello
98	Clarke	98	Wayne
99	Appanoose	99	Appanoose

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	Story	1	O'Brien
2	Story	2	Cerro Gordo	2	Bremer	2	Lyon
3	Sioux	3	Dubuque	3	Johnson	3	Wayne
4	Ringgold	4	Linn	4	Lyon	4	Adair
5	Winneshiek	5	Adams	5	Dallas	5	Mitchell
6	Dubuque	6	Winneshiek	6	Grundy	6	Boone
7	Butler	7	Polk	7	Cedar	7	Sac
8	Grundy	8	Des Moines	8	Sioux	8	Howard
9	Shelby	9	Marshall	9	Shelby	9	Polk
10	Kossuth	10	Wapello	10	Winneshiek	10	Hancock
11	Cherokee	11	Scott	11	Warren	11	Monroe
12	Guthrie	12	Marion	12	Plymouth	12	Dickinson
13	Decatur	13	Black Hawk	13	Cherokee	13	Jasper
14	Lyon	14	Poweshiek	14	Ida	14	Emmet
15	Osceola	15	Clinton	15	Carroll	15	Cass
16	Bremer	16	Iowa	16	Kossuth	16	Clay
17	Henry	17	Cass	17	Osceola	17	Louisa
18	Madison	18	Henry	18	Palo Alto	18	Pocahontas
19	Cerro Gordo	19	Cedar	19	Benton	19	Bremer
20	Monona	20	Winnebago	20	Dickinson	20	Davis
21	Howard	21	Delaware	21	O'Brien	21	Lee
22	Davis	22	Mahaska	22	Pocahontas	22	Plymouth
23	Dallas	23	Dallas	23	Marion	23	Cerro Gordo
24	Mitchell	24	Union	24	Mitchell	24	Mills
25	Winnebago	25	Muscatine	25	Harrison	25	Lucas
26	Mahaska	26	Wright	26	Mills	26	Carroll
27	Jackson	27	Hancock	27	Linn	27	Winnebago
28	Palo Alto	28	Greene	28	Washington	28	Page
29	Buena Vista	29	Howard	29	Boone	29	Chickasaw
30	Iowa	30	Lucas	30	Delaware	29	Wright
31	Humboldt	31	Plymouth	31	Iowa	31	Scott
32	Washington	32	Bremer	32	Madison	32	Dallas
33	Franklin	33	Jasper	33	Humboldt	33	Kossuth
34	Scott	34	Boone	34	Dubuque	33	Story
35	Dickinson	35	Worth	35	Calhoun	35	Winneshiek
36	Adams	36	Dickinson	36	Guthrie	36	Henry
37	Lucas	37	Jones	37	Audubon	37	Muscatine
38	Monroe	38	Hardin	38	Adair	38	Franklin
39	Taylor	39	Warren	39	Crawford	39	Cedar
40	Polk	40	Taylor	40	Worth	40	Sioux
41	Adair	41	Woodbury	41	Poweshiek	41	Webster
42	Pocahontas	42	Jefferson	42	Sac	42	Greene
43	Greene	43	Carroll	43	Adams	43	Clarke
44	Carroll	44	Clay	44	Buchanan	44	Pottawattamie
45	Union	45	Sioux	45	Butler	45	Woodbury

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
46	Audubon	46	Benton	46	Greene	46	Union
47	Jefferson	47	Cherokee	47	Polk	47	Butler
48	O'Brien	48	Appanoose	48	Hamilton	48	Warren
49	Worth	49	Washington	49	Clay	49	Black Hawk
50	Calhoun	50	Jackson	50	Wright	50	Buena Vista
51	Linn	51	Kossuth	51	Hardin	51	Jefferson
52	Emmet	52	Page	52	Jasper	52	Madison
53	Delaware	53	Osceola	53	Jones	53	Jones
54	Clayton	54	Emmet	54	Fremont	54	Appanoose
55	Poweshiek	55	Mills	55	Franklin	55	Hardin
56	Buchanan	56	Keokuk	56	Cerro Gordo	56	Floyd
57	Ida	57	Chickasaw	57	Union	57	Wapello
58	Black Hawk	58	Story	58	Ringgold	58	Ida
59	Tama	59	Floyd	59	Tama	58	Osceola
60	Clay	60	Ringgold	60	Monroe	60	Hamilton
61	Van Buren	61	Monroe	61	Buena Vista	61	Linn
62	Benton	62	Lee	62	Jackson	62	Johnson
63	Keokuk	63	Grundy	63	Keokuk	63	Des Moines
64	Page	64	Tama	64	Monona	64	Grundy
65	Wright	65	Clayton	65	Clayton	65	Montgomery
66	Hardin	66	Clarke	66	Chickasaw	66	Mahaska
67	Floyd	67	Shelby	67	Black Hawk	67	Marion
68	Marion	68	Mitchell	68	Winnebago	68	Adams
69	Plymouth	69	Humboldt	69	Emmet	68	Calhoun
70	Wayne	70	Fayette	70	Fayette	68	Fremont
71	Sac	71	O'Brien	71	Hancock	71	Monona
72	Fremont	72	Butler	72	Cass	72	Humboldt
73	Hancock	73	Pottawattamie	73	Mahaska	73	Marshall
74	Hamilton	74	Wayne	74	Taylor	74	Washington
75	Allamakee	75	Palo Alto	75	Marshall	75	Taylor
76	Cedar	76	Decatur	76	Scott	75	Worth
77	Montgomery	77	Buchanan	77	Decatur	77	Fayette
78	Clarke	78	Montgomery	78	Lucas	78	Dubuque
79	Warren	79	Audubon	79	Howard	79	Cherokee
80	Crawford	80	Franklin	80	Wayne	79	Decatur
81	Webster	81	Allamakee	81	Pottawattamie	79	Shelby
82	Chickasaw	82	Adair	82	Davis	82	Keokuk
83	Lee	83	Harrison	83	Clinton	83	Crawford
84	Wapello	84	Calhoun	84	Jefferson	84	Iowa
85	Appanoose	85	Crawford	85	Henry	85	Poweshiek
86	Harrison	86	Louisa	86	Woodbury	86	Guthrie
87	Cass	87	Hamilton	87	Webster	87	Tama
88	Fayette	88	Webster	88	Floyd	88	Audubon
89	Jones	89	Guthrie	89	Louisa	89	Ringgold
90	Mills	90	Buena Vista	90	Appanoose	90	Delaware
91	Des Moines	91	Monona	91	Muscatine	91	Palo Alto
92	Marshall	92	Madison	92	Allamakee	92	Jackson
93	Pottawattamie	93	Lyon	93	Clarke	93	Benton
94	Muscatine	94	Pocahontas	94	Wapello	94	Clinton
95	Louisa	95	Ida	95	Montgomery	95	Allamakee
96	Jasper	96	Davis	96	Page	96	Buchanan
97	Clinton	97	Van Buren	97	Des Moines	97	Van Buren
98	Woodbury	98	Fremont	98	Lee	98	Clayton
99	Boone	99	Sac	99	Van Buren	99	Harrison

2011 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	2005-2007
Morbidity	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
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco	Adult smoking	Behavioral Risk Factor Surveillance System	2003-2009
Diet and Exercise	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2008
Alcohol Use	Excessive drinking	Behavioral Risk Factor Surveillance System	2003-2009
	Motor vehicle crash death rate	National Center for Health Statistics	2001-2007
High Risk Sexual Behavior	Sexually transmitted infections	National Center for Hepatitis, HIV, STD and TB Prevention	2008
	Teen birth rate	National Center for Health Statistics	2001-2007
CLINICAL CARE			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2007
	Primary care providers	Health Resources & Services Administration	2008
Quality of Care	Preventable hospital stays	Medicare/Dartmouth Institute	2006-2007
	Diabetic screening	Medicare/Dartmouth Institute	2006-2007
	Mammography screening	Medicare/Dartmouth Institute	2006-2007
SOCIOECONOMIC FACTORS			
Education	High school graduation	National Center for Education Statistics[1]	2006-2007
	Some college	American Community Survey	2005-2009
Employment	Unemployment	Bureau of Labor Statistics	2009
Income	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2008
Family and Social Support	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2009
	Single-parent households	American Community Survey	2005-2009
Community Safety	Violent crime[2]	Uniform Crime Reporting, Federal Bureau of Investigation	2006-2008
PHYSICAL ENVIRONMENT			
Air Quality[3]	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
Built Environment	Access to healthy foods	Census Zip Code Business Patterns	2008
	Access to recreational facilities	Census County Business Patterns	2008

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[1] State data sources for KY, NH, NC, PA, SC, and UT (2008-2009).

[2] 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.

[3] Not available for AK and HI.

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