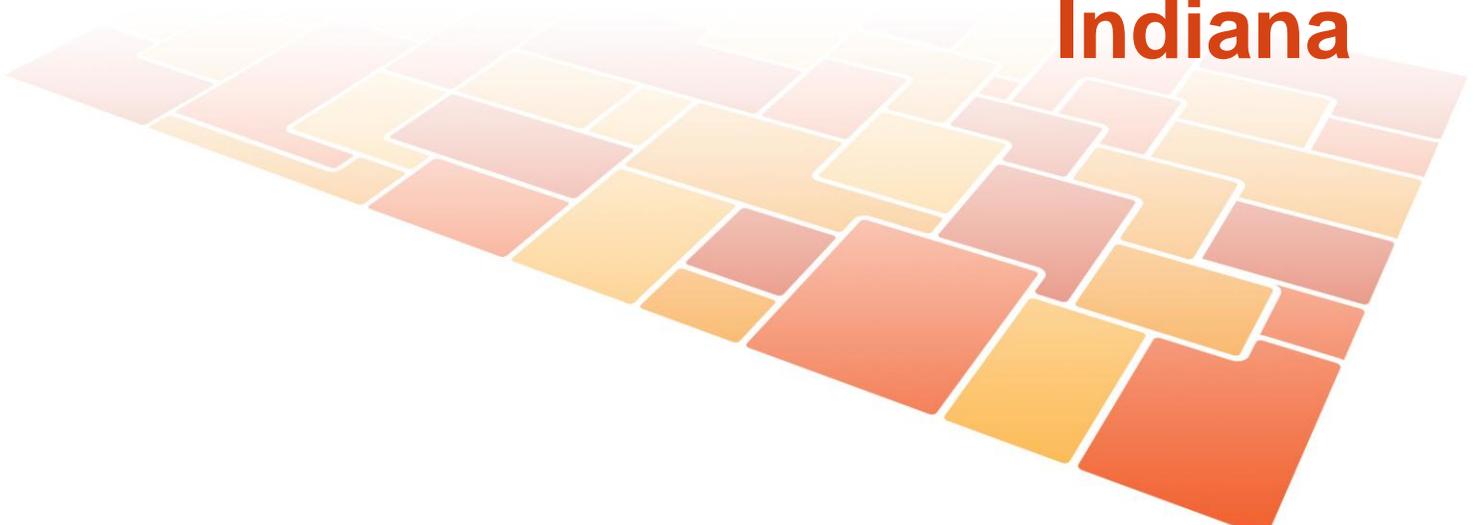# County Health Rankings

Mobilizing Action Toward Community Health

2011
Indiana

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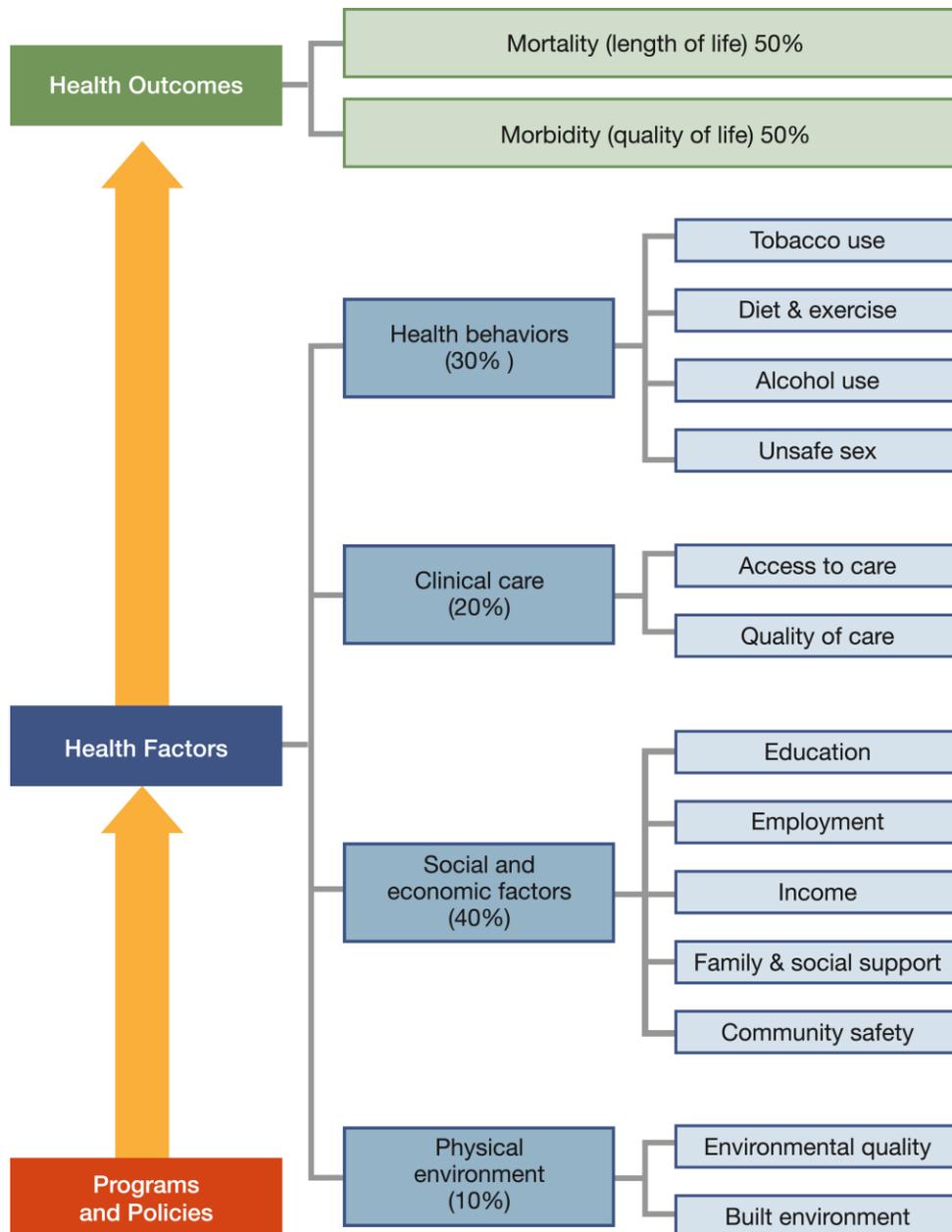
For a more detailed explanation of our approach, the methods used to compile the *Rankings,* information on the action steps communities can take to improve their health, and examples of communities in action, see www.countyhealthrankings.org

The Rankings

This report ranks Indiana 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."
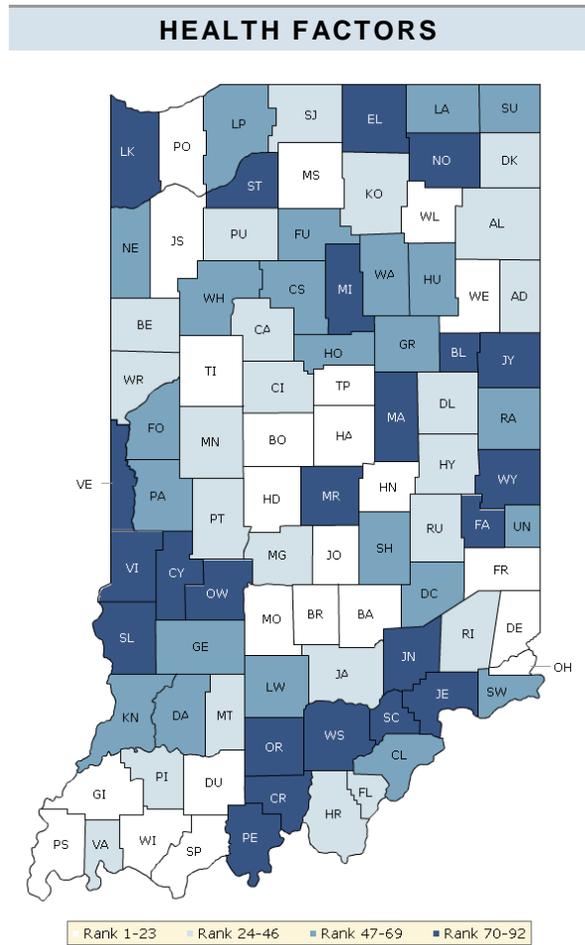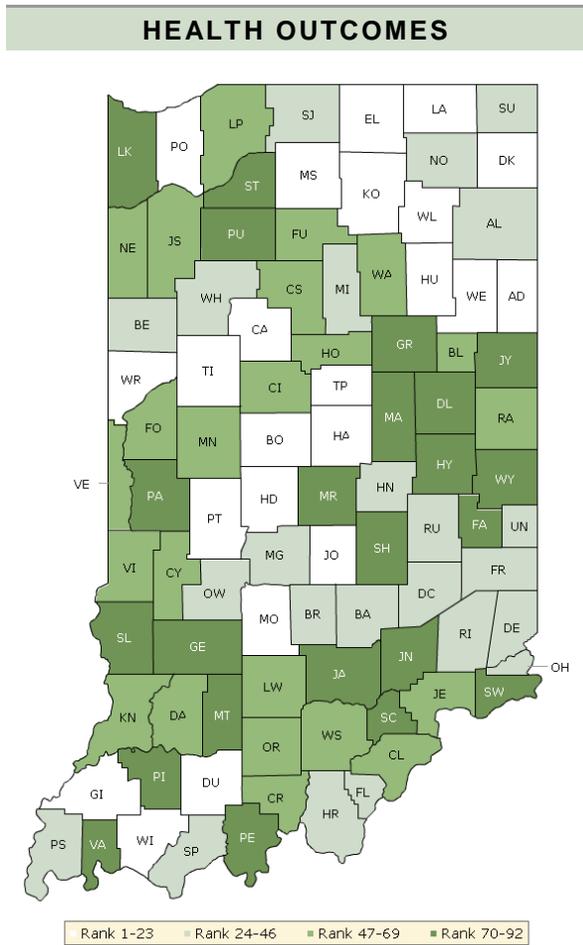
Our summary **health outcomes** rankings are based on an equal weighting of mortality and morbidity measures. The summary **health factors** rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental. The weights for the factors (shown 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 ─┬─ Tobacco use
                │     (30% )          ├─ Diet & exercise
                │                     ├─ Alcohol use
                │                     └─ Unsafe sex
                │
                ├─ Clinical care ─┬─ Access to care
                │     (20%)       └─ Quality of care
                │
                ├─ Social and ─┬─ Education
                │   economic   ├─ Employment
                │   factors    ├─ Income
                │   (40%)      ├─ Family & social support
                │              └─ Community safety
                │
                └─ Physical ─┬─ Environmental quality
                  environment └─ Built environment
                     (10%)

Programs and Policies
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County Health Rankings model ©2010 UWPHI

The maps on this page display Indiana'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 1-23   Rank 24-46   Rank 47-69   Rank 70-92

HEALTH FACTORS

Rank 1-23   Rank 24-46   Rank 47-69   Rank 70-92

Rank	Health Outcomes	Rank	Health Factors
46	Miami	46	Rush
47	Clinton	47	Newton
48	Jasper	48	Daviess
49	Daviess	49	Huntington
50	Randolph	50	Wabash
51	Cass	51	Union
52	Wabash	52	White
53	Clark	53	Cass
54	Fulton	54	Lawrence
55	Fountain	55	Fountain
56	Montgomery	56	Howard
57	Newton	57	Fulton
58	Vigo	58	Clark
59	Orange	59	Shelby
60	Washington	60	Decatur
61	Lawrence	61	Randolph
62	Clay	62	Steuben
63	LaPorte	63	Knox
64	Howard	64	LaGrange
65	Crawford	65	LaPorte
66	Blackford	66	Grant
67	Vermillion	67	Switzerland
68	Knox	68	Greene
69	Jefferson	69	Parke
70	Henry	70	Sullivan
71	Perry	71	Perry
72	Wayne	72	Wayne
73	Parke	73	Jay
74	Jackson	74	Scott
75	Madison	75	Vigo
76	Vanderburgh	76	Vermillion
77	Marion	77	Clay
78	Shelby	78	Miami
79	Pulaski	79	Elkhart
80	Greene	80	Orange
81	Delaware	81	Noble
82	Grant	82	Jefferson
83	Jay	83	Crawford
84	Lake	84	Madison
85	Jennings	85	Fayette
86	Martin	86	Washington
87	Sullivan	87	Owen
88	Fayette	88	Blackford
89	Switzerland	89	Marion
90	Pike	90	Jennings
91	Starke	91	Starke
92	Scott	92	Lake

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	Morbidity
1	Hamilton	Dubois
2	Boone	Hamilton
3	Hendricks	Warren
4	Warrick	LaGrange
5	LaGrange	Boone
6	Gibson	Marshall
7	Wells	Hendricks
8	DeKalb	Brown
9	Dubois	Tipton
10	Johnson	Whitley
11	Huntington	Adams
12	Monroe	Union
13	Whitley	DeKalb
14	Tippecanoe	Putnam
15	Porter	Elkhart
16	Steuben	White
17	Putnam	Posey
18	Marshall	Hancock
19	Adams	Ripley
20	Kosciusko	Porter
21	Elkhart	Tippecanoe
22	Dearborn	Johnson
23	Rush	Wells
24	Franklin	Carroll
25	Benton	Kosciusko
26	Carroll	Warrick
27	Ohio	Benton
28	Morgan	Monroe
29	Allen	Harrison
30	Orange	Spencer
31	Floyd	Noble
32	Hancock	Bartholomew
33	Warren	Owen
34	Harrison	Dearborn
35	Union	Decatur
36	Tipton	Jasper
37	Brown	Ohio
38	Randolph	Newton
39	White	Montgomery
40	Decatur	Miami
41	Ripley	Gibson
42	St. Joseph	Allen
43	Noble	St. Joseph
44	Daviess	Fulton
45	Owen	Clinton

Rank	Mortality	Morbidity
46	Blackford	Clay
47	Bartholomew	Cass
48	Clinton	Henry
49	Miami	Wabash
50	Posey	Huntington
51	Spencer	Morgan
52	Vermillion	Fountain
53	Perry	Daviess
54	Jasper	Clark
55	Cass	Lawrence
56	Clark	LaPorte
57	Wabash	Knox
58	Jefferson	Steuben
59	Vigo	Parke
60	Fountain	Howard
61	Washington	Martin
62	Madison	Pulaski
63	Fulton	Floyd
64	Vanderburgh	Crawford
65	Crawford	Franklin
66	Montgomery	Randolph
67	Howard	Vigo
68	Lawrence	Washington
69	LaPorte	Wayne
70	Wayne	Jackson
71	Jackson	Shelby
72	Knox	Rush
73	Newton	Jennings
74	Grant	Marion
75	Clay	Lake
76	Greene	Jay
77	Delaware	Starke
78	Marion	Jefferson
79	Sullivan	Vermillion
80	Parke	Delaware
81	Henry	Greene
82	Shelby	Blackford
83	Fayette	Grant
84	Jay	Madison
85	Lake	Vanderburgh
86	Pulaski	Perry
87	Jennings	Switzerland
88	Switzerland	Orange
89	Pike	Sullivan
90	Martin	Fayette
91	Scott	Pike
92	Starke	Scott

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	Hamilton	1	Hamilton	1	Hamilton	1	Ohio
2	Monroe	2	Warrick	2	Hendricks	2	Howard
3	Tipton	3	Boone	3	Boone	3	Adams
4	Brown	4	Vanderburgh	4	Hancock	4	Dearborn
5	Marshall	5	Howard	5	Dubois	5	DeKalb
6	Hancock	6	Hendricks	6	Warrick	6	Jasper
7	Tippecanoe	7	Johnson	7	Posey	7	Lawrence
8	Hendricks	8	Dubois	8	Spencer	8	Martin
9	Warrick	9	Bartholomew	9	Johnson	9	Scott
10	Warren	10	St. Joseph	10	Porter	10	Franklin
11	Gibson	11	Wells	11	Monroe	11	Newton
12	Wells	12	Wabash	12	Dearborn	12	St. Joseph
13	Adams	13	Hancock	13	Wells	13	Jefferson
14	Dubois	14	Delaware	14	Franklin	14	Hendricks
15	Clinton	15	Marion	15	Harrison	15	Tippecanoe
16	LaGrange	16	Adams	16	Benton	16	Boone
17	Johnson	17	Gibson	17	Tippecanoe	17	Orange
18	Spencer	18	Marshall	18	Whitley	18	Delaware
19	Lawrence	19	Carroll	19	Jasper	19	Carroll
20	Putnam	20	DeKalb	20	Warren	20	Fayette
21	Boone	21	Huntington	21	Gibson	21	Brown
22	Pike	22	Allen	22	Tipton	22	Dubois
23	Jasper	23	Spencer	23	Bartholomew	23	Fulton
24	Wayne	24	Whitley	24	Floyd	24	Allen
25	Whitley	25	Miami	25	Ohio	25	Porter
26	Scott	26	Jackson	26	Carroll	26	Blackford
27	Fulton	27	Madison	27	Pike	27	Henry
28	Grant	28	Vigo	28	Ripley	28	Marshall
29	Elkhart	29	Harrison	29	Morgan	29	Hamilton
30	Benton	30	Dearborn	30	Martin	30	Decatur
31	Posey	31	Steuben	31	Jackson	31	Huntington
32	DeKalb	32	Floyd	32	Clark	32	Miami
33	Kosciusko	33	Clark	33	Shelby	33	Madison
34	Morgan	34	Kosciusko	34	Montgomery	34	Steuben
35	Harrison	35	Henry	35	Putnam	35	Bartholomew
36	Cass	36	Wayne	36	Union	36	Whitley
37	Ripley	37	Montgomery	37	Pulaski	37	Wayne
38	Vanderburgh	38	Grant	38	Daviess	38	Vigo
39	Ohio	39	Elkhart	39	Brown	39	Ripley
40	Dearborn	40	Franklin	40	Knox	40	Rush
41	Union	41	LaPorte	41	Rush	41	Monroe
42	Greene	42	Putnam	42	Marshall	42	Fountain
43	St. Joseph	43	Ohio	43	Newton	43	Grant
44	Newton	44	Jasper	44	White	44	Washington
45	Franklin	45	Cass	45	Fountain	45	Morgan

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
46	Daviess	46	Morgan	46	Kosciusko	46	LaPorte
47	Parke	47	Jefferson	47	DeKalb	47	Randolph
48	Porter	48	Posey	48	Huntington	48	Lake
49	Noble	49	Tipton	49	Allen	49	Clay
50	Switzerland	50	Jennings	50	Sullivan	50	Shelby
51	Carroll	51	Pulaski	51	Perry	51	LaGrange
52	Decatur	52	Lawrence	52	Henry	52	Warren
53	Jay	53	Fayette	53	Greene	53	Kosciusko
54	Bartholomew	54	Orange	54	Clay	54	Vermillion
55	Martin	55	Clinton	55	Wabash	55	Jay
56	Crawford	56	Porter	56	Vanderburgh	56	Jackson
57	Fountain	57	Scott	57	Vermillion	57	Pulaski
58	Rush	58	Jay	58	Switzerland	58	Tipton
59	Pulaski	59	White	59	Steuben	59	Owen
60	Sullivan	60	Shelby	60	Cass	60	Elkhart
61	Randolph	61	Perry	61	Clinton	61	Parke
62	LaPorte	62	LaGrange	62	Decatur	62	Hancock
63	Knox	63	Brown	63	Randolph	63	Montgomery
64	White	64	Pike	64	Delaware	64	Noble
65	Allen	65	Monroe	65	Parke	65	Gibson
66	Jackson	66	Randolph	66	Fulton	66	Wabash
67	Floyd	67	Crawford	67	Adams	67	Sullivan
68	Henry	68	Tippecanoe	68	Washington	68	Crawford
69	Howard	69	Clay	69	St. Joseph	68	Switzerland
70	Fayette	70	Rush	70	Jefferson	70	Vanderburgh
71	Delaware	71	Fulton	71	Owen	71	Starke
72	Vermillion	72	Decatur	72	Orange	72	Clinton
73	Perry	73	Washington	73	Madison	73	Jennings
74	Montgomery	74	Blackford	74	LaPorte	74	White
75	Clark	75	Martin	75	Vigo	75	Warrick
76	Wabash	76	Warren	76	Jay	76	Benton
77	Vigo	77	Parke	77	Noble	76	Union
78	Miami	78	Daviess	78	Miami	78	Daviess
79	Blackford	79	Owen	79	Lawrence	79	Cass
80	Shelby	80	Ripley	80	LaGrange	80	Posey
81	Steuben	81	Fountain	81	Howard	81	Pike
82	Huntington	82	Lake	82	Grant	82	Floyd
83	Marion	83	Starke	83	Scott	83	Spencer
84	Orange	84	Noble	84	Crawford	84	Wells
85	Clay	85	Benton	85	Blackford	85	Greene
86	Starke	86	Union	86	Jennings	86	Putnam
87	Jennings	87	Switzerland	87	Wayne	87	Johnson
88	Owen	88	Knox	88	Starke	88	Knox
89	Jefferson	89	Vermillion	89	Marion	89	Perry
90	Lake	90	Newton	90	Fayette	90	Harrison
91	Madison	91	Greene	91	Elkhart	91	Marion
92	Washington	92	Sullivan	92	Lake	92	Clark

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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