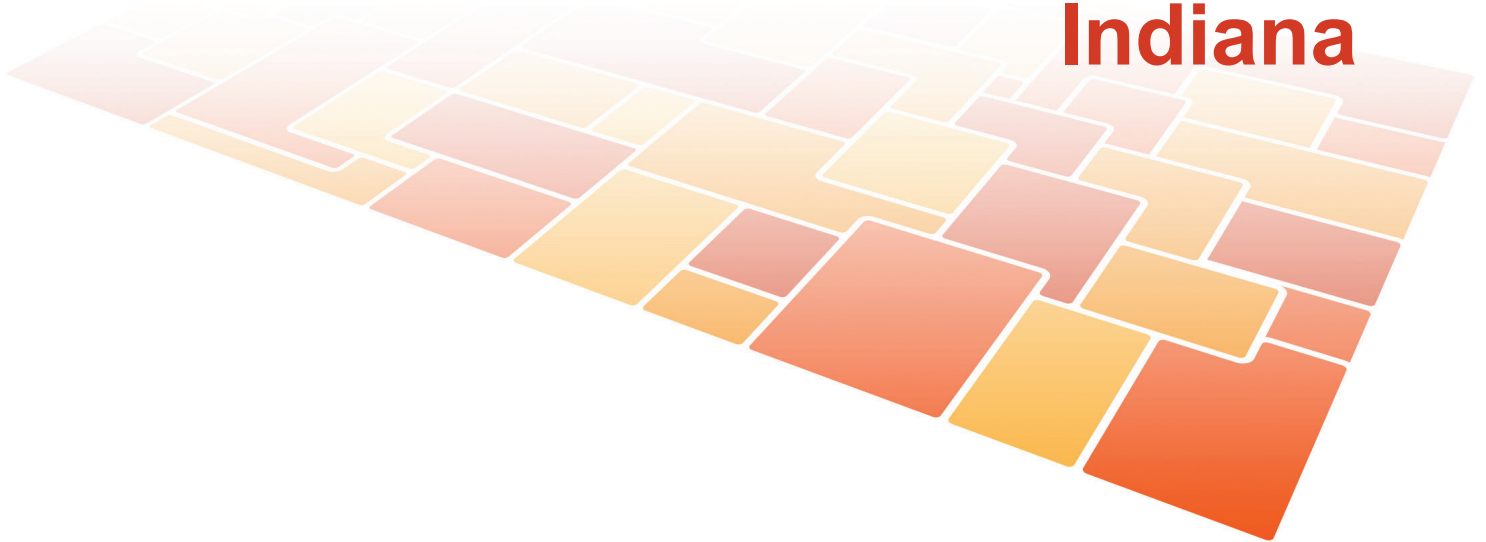# County Health Rankings
Mobilizing Action Toward Community Health

2010
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 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:
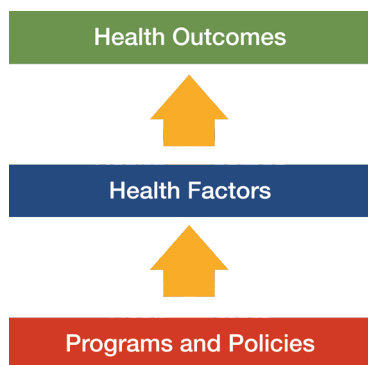
In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. These health factors and their outcomes may also be affected by community-based programs and policies designed to alter their distribution in the community. Counties can improve health outcomes by addressing all health factors with effective, evidence-based programs and policies.
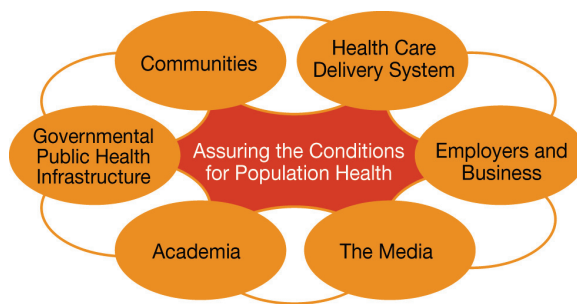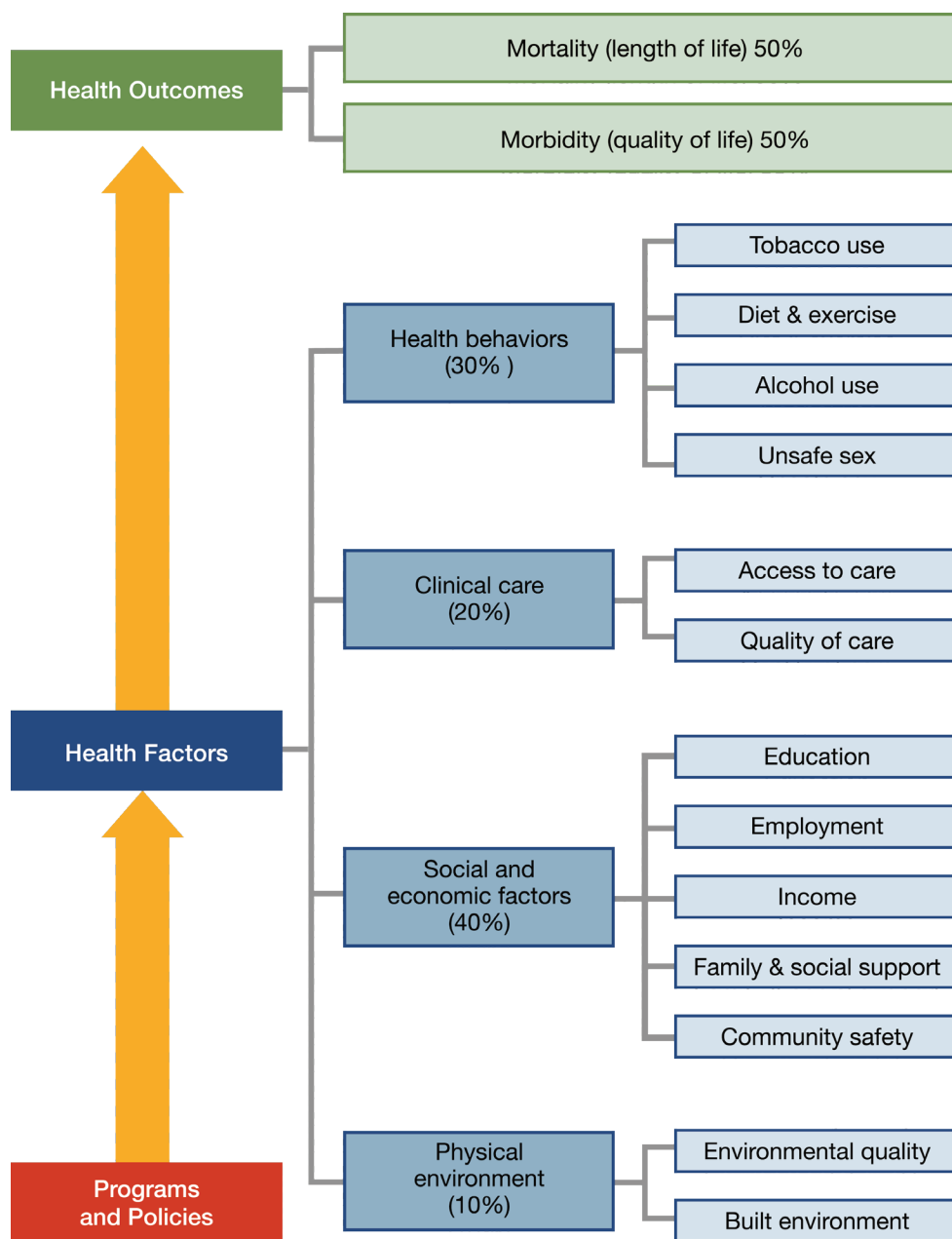

Institute of Medicine, 2002

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.
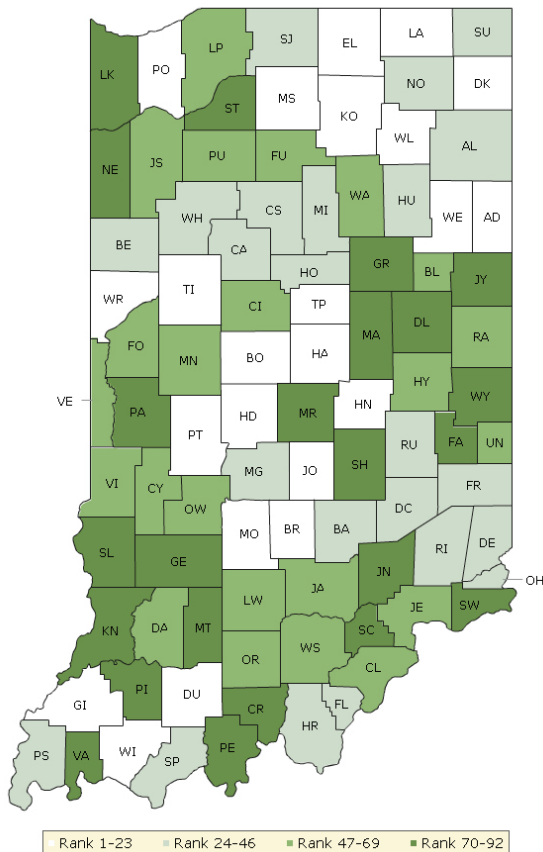
The Rankings

This report ranks 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 (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 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

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

Rank	Health Outcomes	Rank	Health Factors
43	Floyd	43	Martin
44	Spencer	44	Decatur
45	Rush	45	Montgomery
46	Howard	46	LaGrange
47	Jasper	47	Huntington
48	Daviess	48	Newton
49	Wabash	49	Howard
50	Fountain	50	St. Joseph
51	Clinton	51	Shelby
52	Montgomery	52	Perry
53	Randolph	53	Randolph
54	Jefferson	54	Cass
55	Blackford	55	Henry
56	Fulton	56	Jackson
57	Pulaski	57	Union
58	Owen	58	Blackford
59	Clark	59	Fulton
60	Washington	60	Knox
61	LaPorte	61	Fountain
62	Union	62	Steuben
63	Vermillion	63	Clark
64	Henry	64	Jay
65	Orange	65	Miami
66	Lawrence	66	Parke
67	Jackson	67	Rush
68	Clay	68	Switzerland
69	Vigo	69	Greene
70	Shelby	70	Orange
71	Vanderburgh	71	Delaware
72	Newton	72	Sullivan
73	Parke	73	Noble
74	Wayne	74	Lawrence
75	Jay	75	Elkhart
76	Knox	76	Jefferson
77	Grant	77	LaPorte
78	Greene	78	Vigo
79	Madison	79	Scott
80	Marion	80	Wayne
81	Delaware	81	Clay
82	Jennings	82	Owen
83	Crawford	83	Washington
84	Lake	84	Grant
85	Fayette	85	Vermillion
86	Perry	86	Crawford
87	Sullivan	87	Marion
88	Pike	88	Jennings
89	Martin	89	Madison
90	Switzerland	90	Fayette
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	Hendricks	Hamilton
3	Boone	Warren
4	Warrick	Marshall
5	LaGrange	Boone
6	Whitley	Hendricks
7	Wells	Tipton
8	Dubois	LaGrange
9	Gibson	Brown
10	DeKalb	DeKalb
11	Monroe	Adams
12	Johnson	Whitley
13	Franklin	Putnam
14	Marshall	White
15	Huntington	Elkhart
16	Porter	Ripley
17	Putnam	Tippecanoe
18	Tippecanoe	Benton
19	Steuben	Kosciusko
20	Adams	Posey
21	Elkhart	Wells
22	Brown	Porter
23	Hancock	Hancock
24	Floyd	Decatur
25	Dearborn	Carroll
26	Tipton	Warrick
27	Rush	Bartholomew
28	Carroll	Union
29	Allen	Miami
30	Kosciusko	Dearborn
31	Morgan	Cass
32	Ripley	Noble
33	Orange	Monroe
34	Posey	Jasper
35	Ohio	Johnson
36	Decatur	Harrison
37	Randolph	Gibson
38	St. Joseph	Ohio
39	Daviess	Pulaski
40	Warren	Spencer
41	Harrison	Newton
42	White	Wabash

Rank	Mortality	Morbidity
43	Bartholomew	St. Joseph
44	Spencer	Henry
45	Noble	Allen
46	Jefferson	Howard
47	Blackford	Owen
48	Cass	Fountain
49	Howard	Huntington
50	Clinton	Fulton
51	Miami	Morgan
52	Montgomery	LaPorte
53	Fountain	Clark
54	Benton	Montgomery
55	Washington	Franklin
56	Wabash	Clay
57	Vanderburgh	Lawrence
58	Shelby	Clinton
59	Vermillion	Knox
60	Fulton	Steuben
61	Clark	Daviess
62	Jasper	Jefferson
63	Jackson	Washington
64	Wayne	Floyd
65	Owen	Vermillion
66	Grant	Blackford
67	Parke	Jay
68	Vigo	Vigo
69	LaPorte	Randolph
70	Madison	Jackson
71	Jay	Rush
72	Pulaski	Martin
73	Greene	Marion
74	Perry	Parke
75	Lawrence	Wayne
76	Clay	Lake
77	Henry	Shelby
78	Fayette	Jennings
79	Delaware	Crawford
80	Marion	Vanderburgh
81	Jennings	Greene
82	Knox	Delaware
83	Union	Grant
84	Crawford	Starke
85	Newton	Madison
86	Lake	Fayette
87	Pike	Orange
88	Sullivan	Sullivan
89	Switzerland	Switzerland
90	Martin	Pike
91	Starke	Perry
92	Scott	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	Clinical Care	Social & Economic Factors	Physical Environment
1	Hamilton	Hamilton	Hamilton	Ohio
2	Monroe	Warrick	Hendricks	Jasper
3	Tipton	Boone	Hancock	Warren
4	Dubois	Vanderburgh	Dubois	Switzerland
5	Brown	Wabash	Boone	Franklin
6	Hendricks	Bartholomew	Warren	Fountain
7	Tippecanoe	Marion	Warrick	Daviess
8	Warrick	Wells	Posey	DeKalb
9	Clinton	St. Joseph	Whitley	Scott
10	Adams	Allen	Porter	Washington
11	Hancock	Howard	Johnson	Orange
12	Johnson	DeKalb	Wells	Fulton
13	Putnam	Johnson	Spencer	Newton
14	Gibson	Hancock	Tippecanoe	Dearborn
15	Wells	Floyd	Monroe	Clay
16	Howard	Huntington	Benton	Sullivan
17	Marshall	Hendricks	Dearborn	Monroe
18	Boone	Vigo	Bartholomew	Starke
19	LaGrange	Delaware	Gibson	Brown
20	Randolph	Madison	Franklin	Marshall
21	Dearborn	Dubois	Jasper	Martin
22	Pike	Decatur	Montgomery	Warrick
23	Ohio	Gibson	Carroll	Owen
24	White	Whitley	Morgan	Putnam
25	Porter	Spencer	Harrison	Morgan
26	Jasper	Jasper	Brown	Ripley
27	Warren	Jackson	Ohio	Jefferson
28	Spencer	Blackford	Daviess	Lawrence
29	Parke	Orange	Pulaski	Miami
30	Vanderburgh	Jennings	DeKalb	Vermillion
31	Greene	Jefferson	Jackson	Adams
32	Franklin	Marshall	Shelby	Pulaski
33	Fulton	Carroll	Fountain	Jennings
34	Rush	Steuben	White	Hendricks
35	Elkhart	Henry	Newton	Steuben
36	Whitley	Harrison	Clinton	Benton
37	Ripley	Miami	Martin	Parke
38	Harrison	Porter	Pike	Fayette
39	Lawrence	Dearborn	Floyd	Grant
40	Wayne	LaPorte	Kosciusko	Whitley
41	Posey	Elkhart	Tipton	Montgomery
42	Decatur	Adams	Marshall	St. Joseph

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

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	2006
	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

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[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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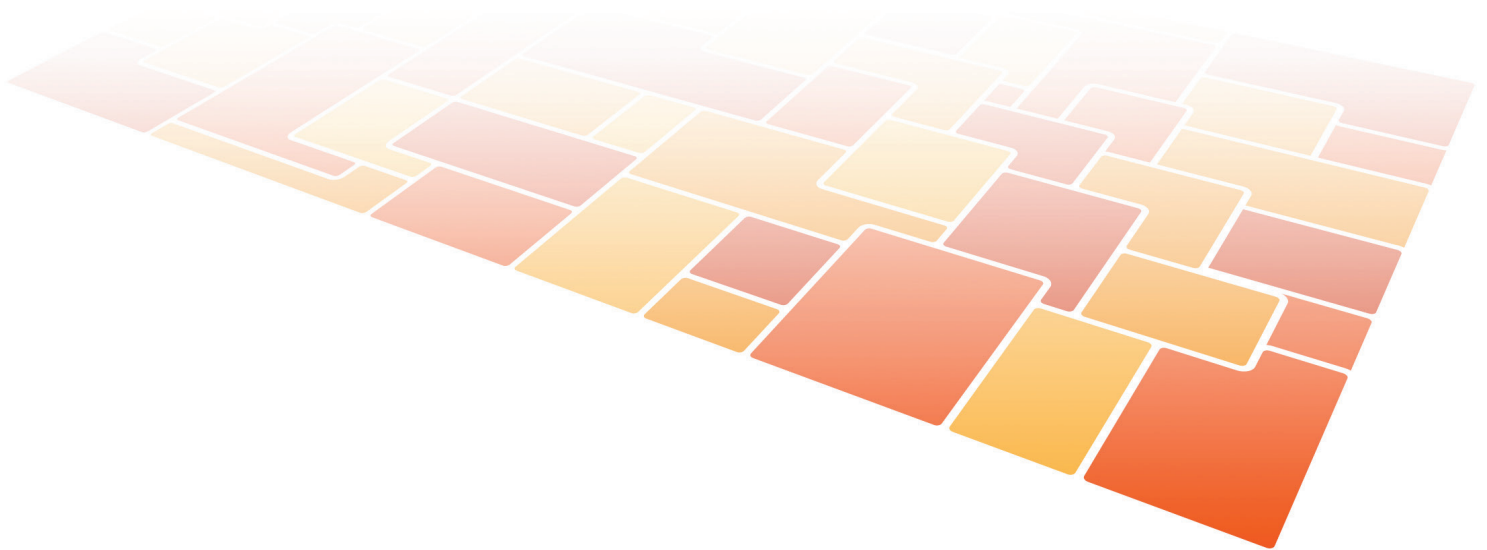Julie Willems Van Dijk, PhD, RN, former Marathon County, WI Health Officer

Suggested citation: University of Wisconsin Population Health Institute. *County Health Rankings 2010*.

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