



County Health Rankings

Mobilizing Action Toward Community Health

2011

Wisconsin



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

Introduction

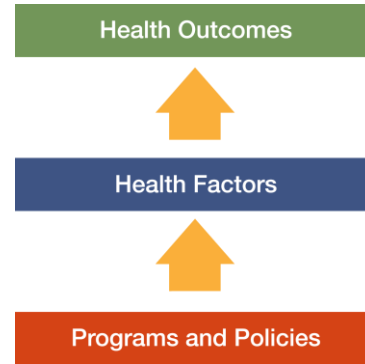
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities 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.

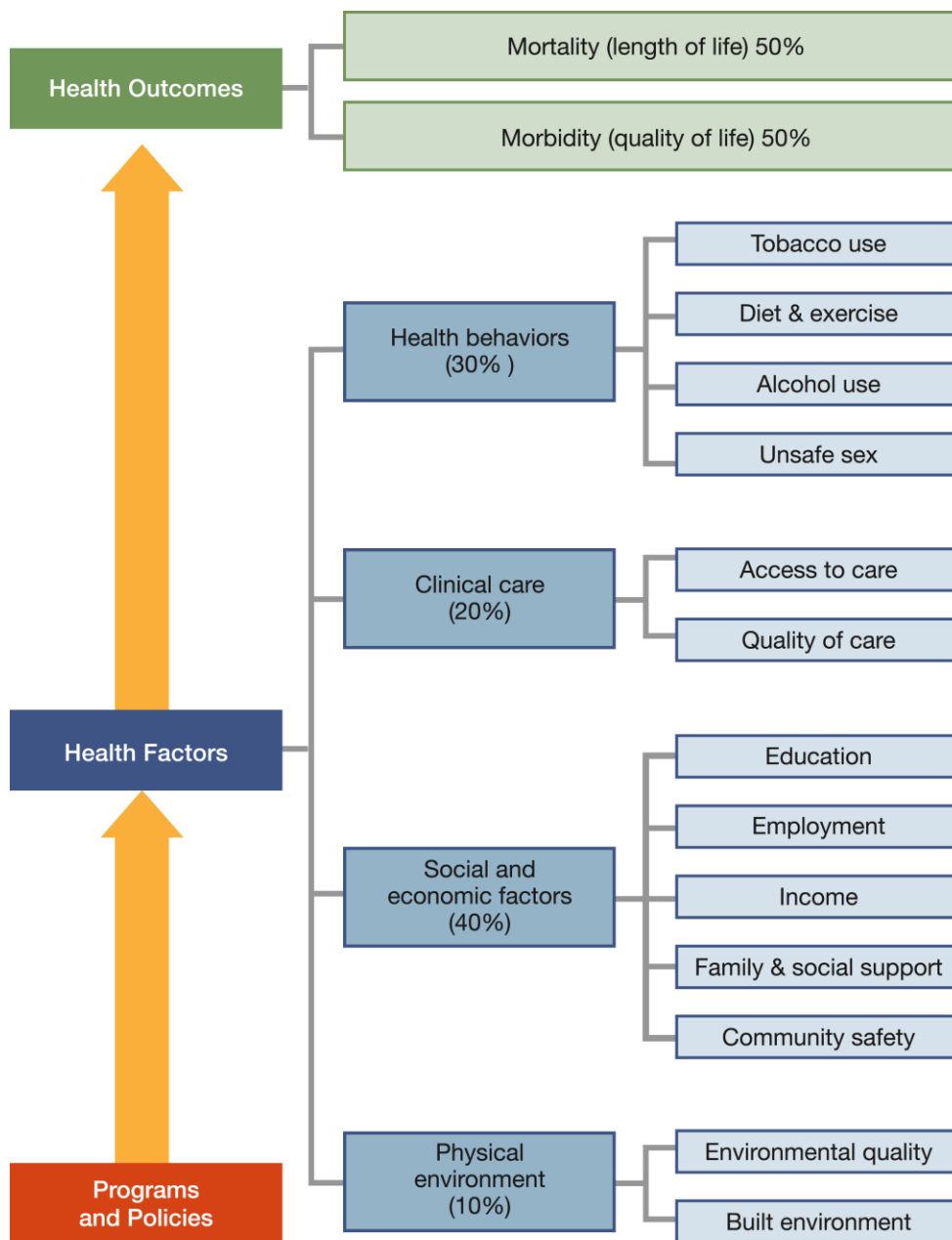
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see www.countyhealthrankings.org



The Rankings

This report ranks Wisconsin 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.

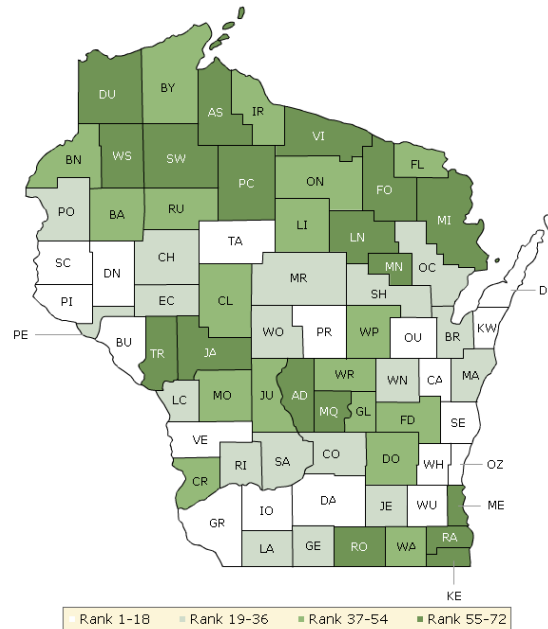


County Health Rankings model ©2010 UWPHI

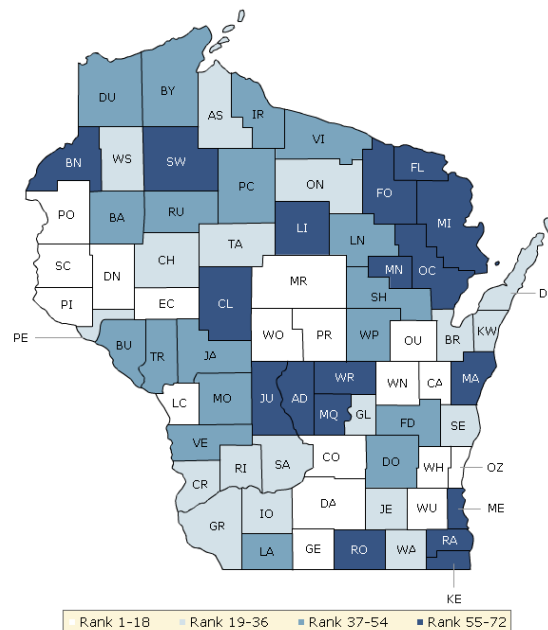
The maps on this page display Wisconsin's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health 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	Ozaukee	1	Ozaukee
2	St. Croix	2	Waukesha
3	Washington	3	Dane
4	Waukesha	4	La Crosse
5	Taylor	5	Washington
6	Pierce	6	Eau Claire
7	Calumet	7	Pierce
8	Dunn	8	Wood
9	Dane	9	St. Croix
10	Buffalo	10	Outagamie
11	Kewaunee	11	Calumet
12	Iowa	12	Portage
13	Outagamie	13	Winnebago
14	Grant	14	Green
15	Vernon	15	Marathon
16	Portage	16	Dunn
17	Sheboygan	17	Columbia
18	Door	18	Polk
19	Eau Claire	19	Chippewa
20	Marathon	20	Door
21	Green	21	Brown
22	La Crosse	22	Sauk
23	Columbia	23	Oneida
24	Wood	24	Crawford
25	Jefferson	25	Green Lake
26	Sauk	26	Iowa
27	Brown	27	Taylor
28	Winnebago	28	Richland
29	Oconto	29	Jefferson
30	Chippewa	30	Kewaunee
31	Polk	31	Ashland
32	Shawano	32	Walworth
33	Pepin	33	Grant
34	Lafayette	34	Sheboygan
35	Manitowoc	35	Pepin
36	Richland	36	Washburn
37	Iron	37	Vilas
38	Dodge	38	Iron
39	Clark	39	Lafayette
40	Bayfield	40	Monroe

Rank	Health Outcomes	Rank	Health Factors
41	Barron	41	Barron
42	Burnett	42	Fond du Lac
43	Florence	43	Waupaca
44	Fond du Lac	44	Buffalo
45	Green Lake	45	Trempealeau
46	Rusk	46	Shawano
47	Lincoln	47	Vernon
48	Waushara	48	Dodge
49	Monroe	49	Jackson
50	Walworth	50	Bayfield
51	Crawford	51	Rusk
52	Juneau	52	Douglas
53	Waupaca	53	Price
54	Oneida	54	Langlade
55	Vilas	55	Lincoln
56	Trempealeau	56	Florence
57	Douglas	57	Kenosha
58	Price	58	Oconto
59	Racine	59	Burnett
60	Rock	60	Clark
61	Kenosha	61	Manitowoc
62	Sawyer	62	Juneau
63	Marinette	63	Marinette
64	Washburn	64	Waushara
65	Ashland	65	Racine
66	Forest	66	Rock
67	Langlade	67	Marquette
68	Jackson	68	Sawyer
69	Milwaukee	69	Forest
70	Marquette	70	Milwaukee
71	Adams	71	Adams
72	Menominee	72	Menominee

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	Ozaukee	Vernon
2	Pierce	Grant
3	Waukesha	Taylor
4	St. Croix	St. Croix
5	Washington	Lafayette
6	Dane	Iowa
7	Calumet	Kewaunee
8	Dunn	Washington
9	Buffalo	Ozaukee
10	Outagamie	Sheboygan
11	Taylor	Sawyer
12	Door	Green
13	La Crosse	Waukesha
14	Eau Claire	Portage
15	Brown	Iron
16	Marathon	Dunn
17	Portage	Calumet
18	Kewaunee	Pierce
19	Iowa	Columbia
20	Wood	Door
21	Sheboygan	Sauk
22	Winnebago	Eau Claire
23	Jefferson	Rusk
24	Oconto	Polk
25	Columbia	Richland
26	Shawano	Buffalo
27	Grant	Outagamie
28	Fond du Lac	Chippewa
29	Manitowoc	Pepin
30	Green	Vilas
31	Barron	Clark
32	Sauk	Marathon
33	Chippewa	Bayfield
34	Burnett	Wood
35	Green Lake	Dane
36	Dodge	Dodge
37	Lincoln	Jefferson
38	Walworth	La Crosse
39	Florence	Monroe
40	Pepin	Florence

Rank	Mortality	Morbidity
41	Polk	Oconto
42	Waupaca	Waushara
43	Clark	Shawano
44	Richland	Crawford
45	Bayfield	Manitowoc
46	Vernon	Burnett
47	Racine	Juneau
48	Rock	Trempealeau
49	Washburn	Barron
50	Waushara	Winnebago
51	Langlade	Oneida
52	Oneida	Ashland
53	Juneau	Price
54	Iron	Lincoln
55	Douglas	Green Lake
56	Kenosha	Brown
57	Crawford	Fond du Lac
58	Monroe	Douglas
59	Rusk	Waupaca
60	Lafayette	Forest
61	Price	Walworth
62	Trempealeau	Marinette
63	Marinette	Racine
64	Vilas	Kenosha
65	Ashland	Rock
66	Adams	Jackson
67	Milwaukee	Washburn
68	Forest	Marquette
69	Jackson	Menominee
70	Sawyer	Langlade
71	Marquette	Milwaukee
72	Menominee	Adams

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	Ozaukee	La Crosse	Ozaukee	Burnett
2	Dane	Waukesha	Waukesha	Oneida
3	Iron	Wood	St. Croix	Vilas
4	Waukesha	Ozaukee	Calumet	Washington
5	Taylor	Eau Claire	Pierce	Marquette
6	Washington	Outagamie	Dane	Eau Claire
7	Green	Dane	Washington	Langlade
8	La Crosse	Oneida	Eau Claire	Dane
9	Ashland	Winnebago	Portage	Iron
10	Pierce	Waupaca	Iowa	Ozaukee
11	Polk	Green Lake	La Crosse	Green Lake
12	Rusk	Rock	Outagamie	Washburn
13	Door	Rusk	Wood	Chippewa
14	Eau Claire	Washington	Kewaunee	Barron
15	Winnebago	Ashland	Dunn	Jefferson
16	Bayfield	Jackson	Buffalo	Juneau
17	St. Croix	Sauk	Lafayette	Green
18	Wood	Chippewa	Brown	Polk
19	Crawford	Brown	Trempealeau	Pierce
20	Vilas	Fond du Lac	Columbia	Rock
21	Dunn	Lincoln	Winnebago	La Crosse
22	Marathon	Dodge	Green	Waukesha
23	Lafayette	Manitowoc	Sheboygan	Lincoln
24	Walworth	Marathon	Door	Bayfield
25	Outagamie	Columbia	Grant	Ashland
26	Portage	Washburn	Marathon	Pepin
27	Pepin	Shawano	Chippewa	Marathon
28	Columbia	Sheboygan	Jefferson	Sauk
29	Burnett	Marinette	Pepin	Richland
30	Calumet	Portage	Sauk	Walworth
31	Richland	Monroe	Fond du Lac	Buffalo
32	Vernon	Barron	Polk	Monroe
33	Shawano	Calumet	Walworth	Price
34	Brown	Richland	Dodge	Winnebago
35	Grant	Milwaukee	Barron	Waushara
36	Chippewa	Douglas	Monroe	Douglas
37	Price	Polk	Oneida	Forest
38	Washburn	Trempealeau	Douglas	Racine
39	Florence	Taylor	Waupaca	St. Croix
40	Sauk	Green	Vernon	Sawyer

Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
41	Waushara	Door	Crawford	Wood
42	Green Lake	Dunn	Manitowoc	Dunn
43	Oneida	Racine	Richland	Clark
44	Sheboygan	Jefferson	Green Lake	Jackson
45	Clark	Kewaunee	Lincoln	Taylor
46	Oconto	Crawford	Washburn	Outagamie
47	Kewaunee	Langlade	Shawano	Columbia
48	Monroe	Menominee	Vilas	Kenosha
49	Iowa	St. Croix	Clark	Portage
50	Jefferson	Juneau	Langlade	Waupaca
51	Fond du Lac	Kenosha	Kenosha	Lafayette
52	Kenosha	Pierce	Jackson	Trempealeau
53	Jackson	Florence	Florence	Dodge
54	Forest	Price	Bayfield	Marinette
55	Barron	Iron	Oconto	Crawford
56	Waupaca	Oconto	Taylor	Calumet
57	Buffalo	Grant	Price	Milwaukee
58	Langlade	Iowa	Marinette	Rusk
59	Dodge	Vilas	Juneau	Oconto
60	Juneau	Buffalo	Racine	Brown
61	Sawyer	Sawyer	Marquette	Vernon
62	Manitowoc	Adams	Ashland	Florence
63	Trempealeau	Marquette	Waushara	Grant
64	Milwaukee	Walworth	Burnett	Iowa
65	Douglas	Vernon	Iron	Fond du Lac
66	Lincoln	Clark	Sawyer	Door
67	Marinette	Forest	Adams	Shawano
68	Marquette	Burnett	Rock	Adams
69	Racine	Waushara	Rusk	Kewaunee
70	Rock	Bayfield	Forest	Manitowoc
71	Adams	Pepin	Milwaukee	Sheboygan
72	Menominee	Lafayette	Menominee	Menominee

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 Quality³	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

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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