



# County Health Rankings

Mobilizing Action Toward Community Health

2011

**West Virginia**



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

**Population Health Institute**

*Translating Research into Policy and Practice*



## Introduction

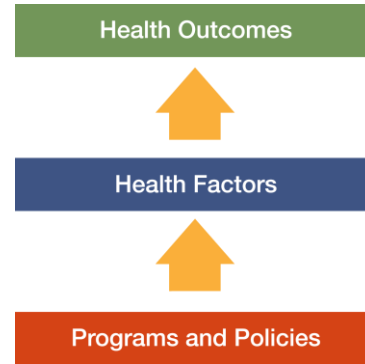
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities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

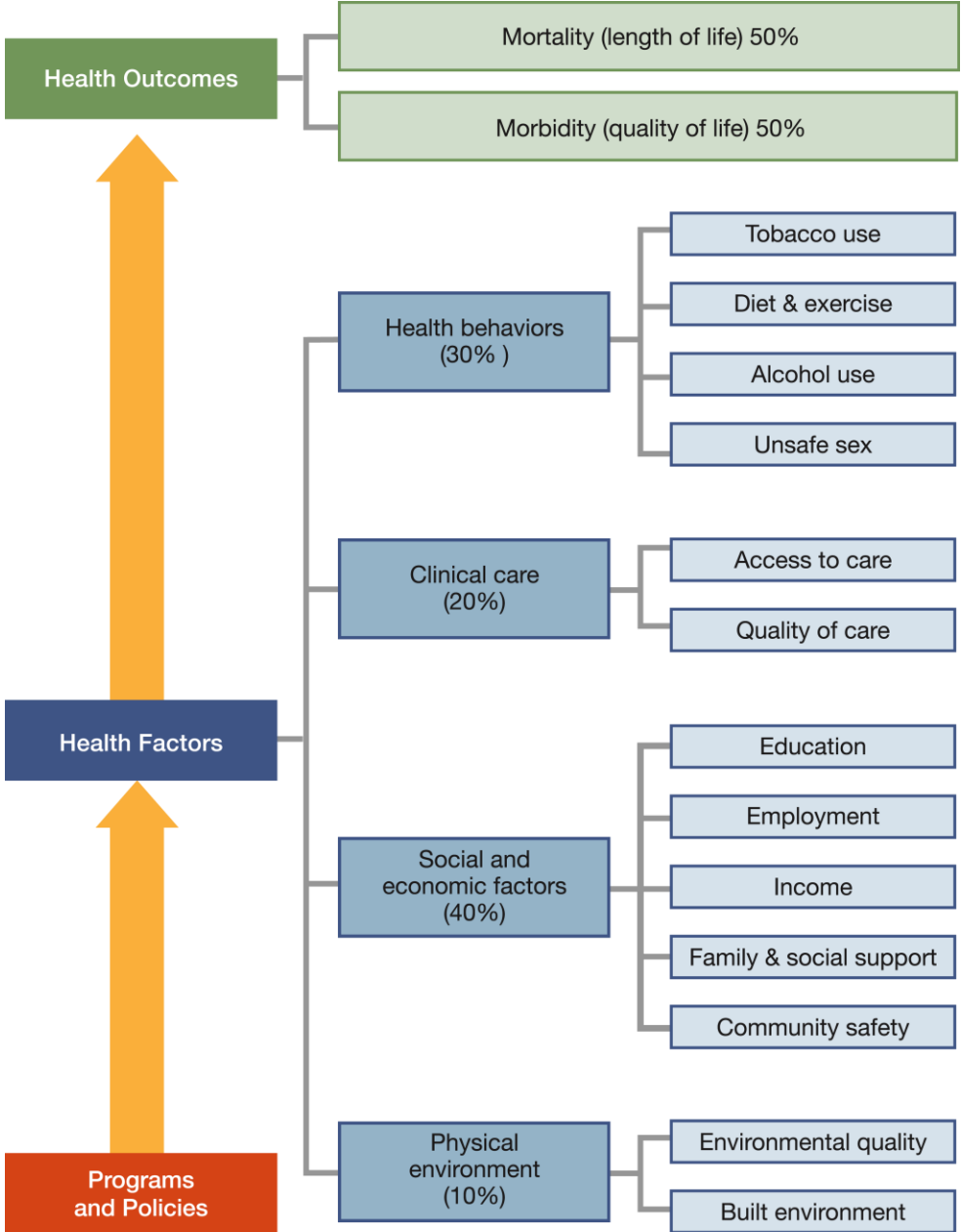
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



# The Rankings

This report ranks West Virginia 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.

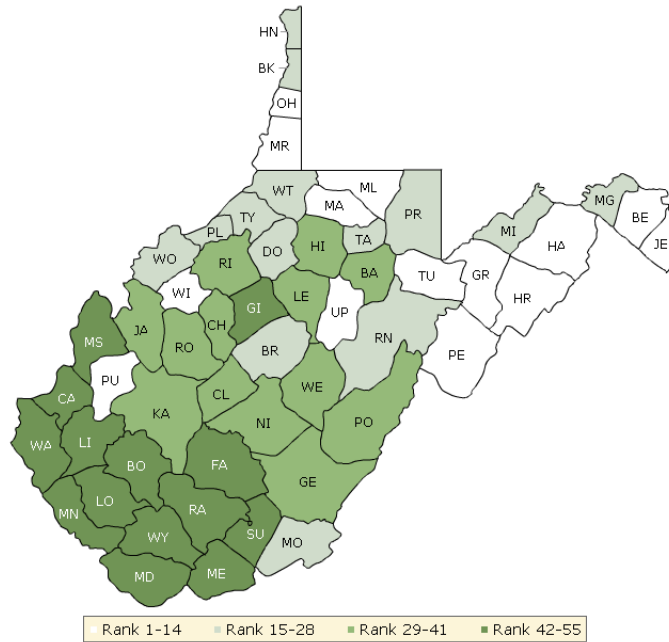


County Health Rankings model ©2010 UWPHI

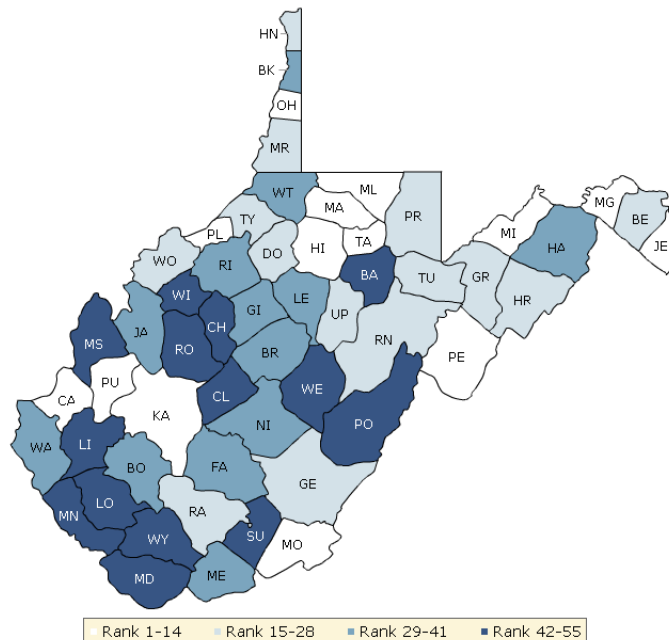
The maps on this page display West Virginia's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health 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	Pendleton	1	Monongalia
2	Tucker	2	Putnam
3	Monongalia	3	Jefferson
4	Grant	4	Pendleton
5	Wirt	5	Ohio
6	Jefferson	6	Monroe
7	Putnam	7	Morgan
8	Hampshire	8	Mineral
9	Marshall	9	Cabell
10	Berkeley	10	Taylor
11	Hardy	11	Harrison
12	Upshur	12	Pleasants
13	Ohio	13	Marion
14	Marion	14	Kanawha
15	Braxton	15	Upshur
16	Morgan	16	Greenbrier
17	Preston	17	Wood
18	Wood	18	Raleigh
19	Tyler	19	Preston
20	Hancock	20	Randolph
21	Taylor	21	Tucker
22	Wetzel	22	Grant
23	Randolph	23	Tyler
24	Doddridge	24	Marshall
25	Brooke	25	Berkeley
26	Pleasants	26	Doddridge
27	Mineral	27	Hancock
28	Monroe	28	Hardy
29	Harrison	29	Wayne
30	Jackson	30	Wetzel
31	Ritchie	31	Lewis
32	Calhoun	32	Gilmer
33	Webster	33	Mercer
34	Pocahontas	34	Braxton
35	Lewis	35	Fayette
36	Greenbrier	36	Jackson
37	Kanawha	37	Hampshire
38	Roane	38	Brooke
39	Nicholas	39	Nicholas
40	Barbour	40	Ritchie

Rank	Health Outcomes	Rank	Health Factors
41	Clay	41	Boone
42	Raleigh	42	Pocahontas
43	Fayette	43	Webster
44	Mason	44	Mason
45	Cabell	45	Wirt
46	Summers	46	Summers
47	Gilmer	47	Barbour
48	Wayne	48	Roane
49	Mercer	49	Logan
50	Lincoln	50	Calhoun
51	Boone	51	Clay
52	Logan	52	Wyoming
53	Wyoming	53	Mingo
54	Mingo	54	Lincoln
55	McDowell	55	McDowell

## 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	Pendleton	Pendleton
2	Wirt	Tucker
3	Monongalia	Jefferson
4	Grant	Hampshire
5	Putnam	Grant
6	Tucker	Monongalia
7	Doddridge	Hancock
8	Marshall	Berkeley
9	Jefferson	Putnam
10	Wood	Marshall
11	Marion	Braxton
12	Ohio	Wirt
13	Randolph	Hardy
14	Taylor	Tyler
15	Upshur	Upshur
16	Hampshire	Calhoun
17	Wetzel	Morgan
18	Hardy	Roane
19	Preston	Ohio
20	Morgan	Ritchie
21	Berkeley	Marion
22	Mineral	Pocahontas
23	Braxton	Preston
24	Pleasants	Brooke
25	Monroe	Pleasants
26	Brooke	Mineral
27	Tyler	Harrison
28	Jackson	Wetzel
29	Harrison	Jackson
30	Webster	Taylor
31	Hancock	Greenbrier
32	Ritchie	Wood
33	Lewis	Randolph
34	Wayne	Lewis
35	Calhoun	Monroe
36	Pocahontas	Webster
37	Nicholas	Kanawha
38	Kanawha	Barbour
39	Greenbrier	Gilmer
40	Raleigh	Doddridge



Rank	Mortality	Morbidity
41	Fayette	Clay
42	Clay	Mason
43	Barbour	Nicholas
44	Summers	Cabell
45	Mason	Fayette
46	Roane	Raleigh
47	Mercer	Summers
48	Cabell	Boone
49	Lincoln	Lincoln
50	Gilmer	Mercer
51	Boone	Wayne
52	Wyoming	Logan
53	Logan	McDowell
54	Mingo	Wyoming
55	McDowell	Mingo

## 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	Monongalia	1	Cabell	1	Putnam	1	Tucker
2	Pendleton	2	Kanawha	2	Monongalia	2	Morgan
3	Upshur	3	Ohio	3	Jefferson	3	Tyler
4	Monroe	4	Putnam	4	Gilmer	4	Wetzel
5	Putnam	5	Harrison	5	Pendleton	5	Pleasants
6	Taylor	6	Monongalia	6	Ohio	6	Harrison
7	Grant	7	Roane	7	Marion	7	Doddridge
8	Lewis	8	Berkeley	8	Mineral	8	Pocahontas
9	Tucker	9	Wayne	9	Morgan	9	Webster
10	Greenbrier	10	Jefferson	10	Pleasants	10	Jefferson
11	Randolph	11	Wood	11	Berkeley	11	Barbour
12	Marion	12	Greenbrier	12	Monroe	12	Fayette
13	Ohio	13	Boone	13	Marshall	13	Braxton
14	Morgan	14	Mercer	14	Cabell	14	Jackson
15	Raleigh	15	Doddridge	15	Taylor	15	Ritchie
16	Wood	16	Randolph	16	Wood	16	Putnam
17	Marshall	17	Tyler	17	Preston	17	Logan
18	Harrison	18	Mineral	18	Harrison	18	Mineral
19	Pleasants	19	Raleigh	19	Brooke	18	Roane
20	Kanawha	20	Nicholas	20	Kanawha	20	Marion
21	Preston	21	Taylor	21	Hancock	21	Taylor
22	Mineral	22	Hancock	22	Upshur	22	Greenbrier
23	Doddridge	23	Preston	23	Wayne	23	Mercer
24	Hardy	24	Summers	24	Raleigh	24	Randolph
25	Braxton	25	Pleasants	25	Tyler	25	Summers
26	Pocahontas	26	Tucker	26	Jackson	26	Mingo
27	Hancock	27	Hardy	27	Hampshire	27	Lincoln
28	Jefferson	28	Wetzel	28	Wetzel	28	Nicholas
29	Cabell	29	Monroe	29	Greenbrier	29	Ohio
30	Mercer	30	Clay	30	Nicholas	30	Lewis
31	Webster	31	Webster	31	Hardy	31	Wyoming
32	Tyler	32	Morgan	32	Ritchie	32	Monroe
33	Fayette	33	Mason	33	Grant	33	Wayne
34	Brooke	34	Fayette	34	Fayette	34	Raleigh
35	Wirt	35	Lincoln	35	Randolph	35	Boone
36	Hampshire	36	Calhoun	36	Braxton	36	Mason
37	Wetzel	37	Upshur	37	Doddridge	37	Pendleton
38	Calhoun	38	Wirt	38	Boone	38	Hardy
39	Ritchie	39	Jackson	39	Lewis	38	Upshur
40	Summers	40	Hampshire	40	Mercer	38	Wirt

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
41	Jackson	41	Grant	41	Logan	41	Monongalia
42	Mason	42	Brooke	42	Tucker	42	Cabell
43	Wayne	43	Marion	43	Mason	43	Calhoun
44	Berkeley	44	Pendleton	44	Pocahontas	44	Grant
45	Roane	45	Barbour	45	Barbour	45	Clay
46	Gilmer	46	Wyoming	46	Wirt	45	McDowell
47	Nicholas	47	McDowell	47	Webster	47	Wood
48	Barbour	48	Braxton	48	Mingo	48	Gilmer
49	Boone	49	Ritchie	49	Summers	49	Preston
50	Mingo	50	Marshall	50	Wyoming	50	Kanawha
51	Clay	51	Logan	51	Clay	51	Hampshire
52	McDowell	52	Lewis	52	Lincoln	52	Marshall
53	Logan	53	Pocahontas	53	Roane	53	Berkeley
54	Wyoming	54	Gilmer	54	Calhoun	54	Hancock
55	Lincoln	55	Mingo	55	McDowell	55	Brooke

## 2011 County Health Rankings: Measures, Data Sources, and Years of Data

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

<sup>1</sup> State data sources for KY, NH, NC, PA, SC, and UT (2008-2009).

<sup>2</sup> 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.

<sup>3</sup> Not available for AK and HI.

## CREDITS

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