



County Health Rankings

Mobilizing Action Toward Community Health

2010

Virginia



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

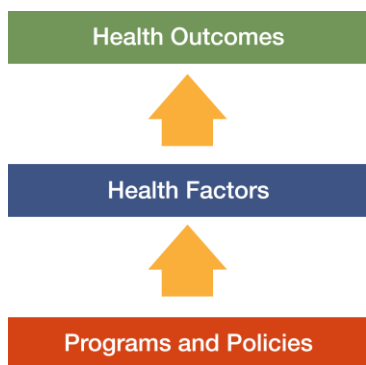
Introduction

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.

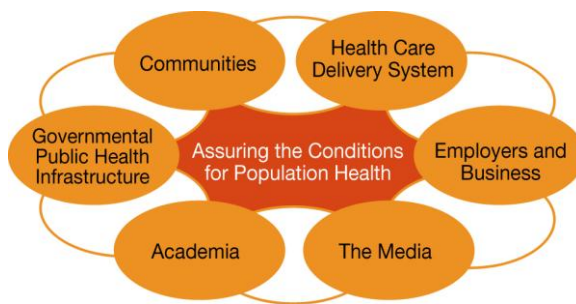
The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute are pleased to present the 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.



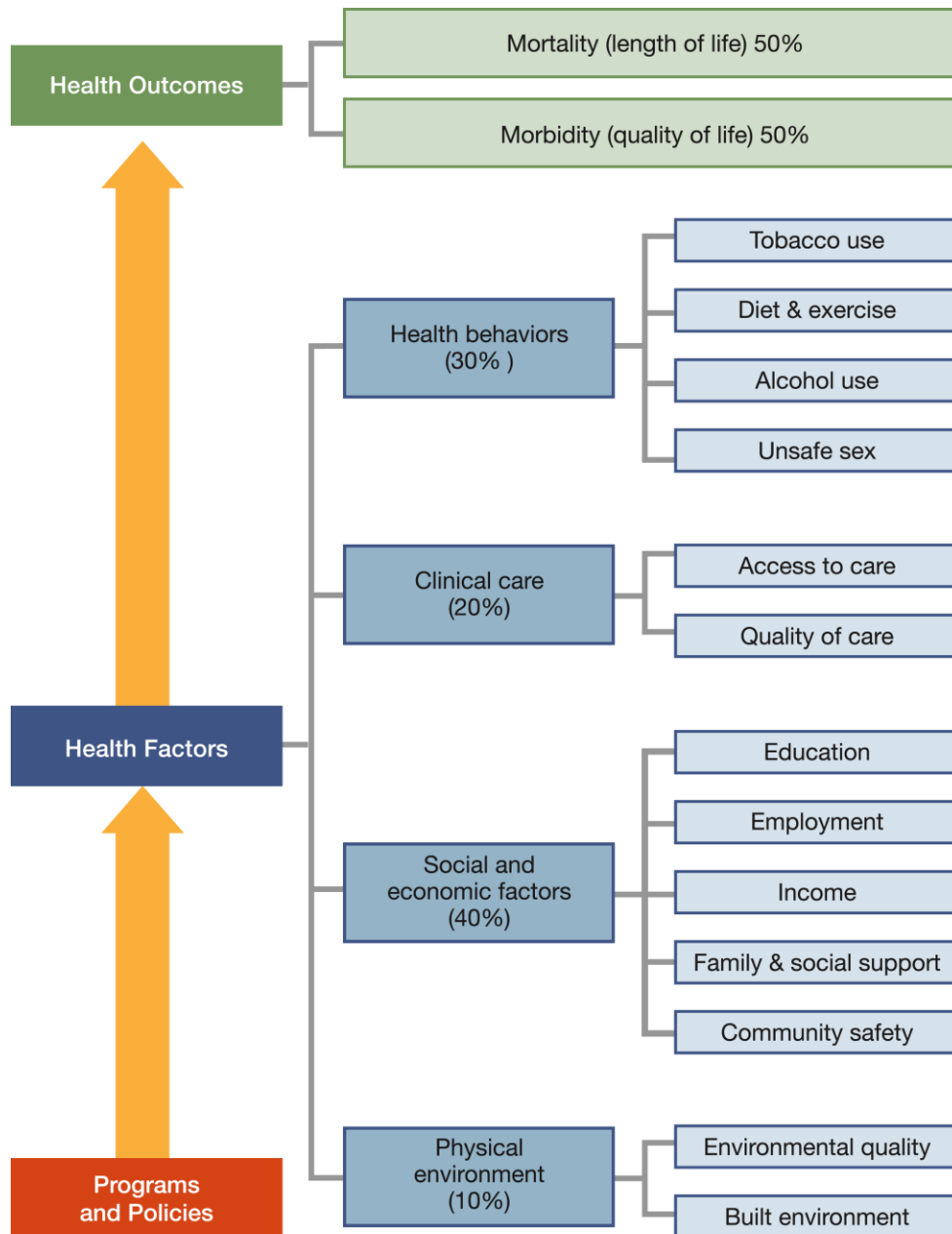
Institute of Medicine, 2002

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 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

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	Fairfax	1	Loudoun
2	Arlington	2	James City
3	Loudoun	3	York
4	Albemarle	4	Albemarle
5	York	5	Roanoke
6	Powhatan	6	Arlington
7	Alexandria	7	Fairfax
8	Manassas Park	8	Poquoson
9	Manassas	9	Falls Church
10	Prince William	10	Fairfax City
11	James City	11	Hanover
12	Stafford	12	Fluvanna
13	Poquoson	13	Botetourt
14	Hanover	14	Chesterfield
15	Spotsylvania	15	Fauquier
16	Fluvanna	16	Clarke
17	Chesterfield	17	Alexandria
18	Rockingham	18	Rockingham
19	New Kent	19	Augusta
20	Craig	20	Stafford
21	Fauquier	21	New Kent
22	Goochland	22	Powhatan
23	Prince George	23	Henrico
24	Shenandoah	24	Chesapeake
25	Frederick	25	Goochland
26	Virginia Beach	26	Bedford
27	Floyd	27	Montgomery
28	Clarke	28	Virginia Beach
29	Roanoke	29	Rockbridge
30	Mathews	30	Prince William
31	King George	31	King William
32	Greene	32	Frederick
33	Harrisonburg	33	Spotsylvania
34	Fairfax City	34	Rappahannock
35	Chesapeake	35	Colonial Heights
36	King William	36	Craig
37	Augusta	37	Salem
38	Madison	38	Charlottesville
39	Montgomery	39	Nelson
40	Bedford	40	Orange

Rank	Health Outcomes	Rank	Health Factors
41	Botetourt	41	Greene
42	Campbell	42	Shenandoah
43	Henrico	43	Mathews
44	Salem	44	Isle of Wight
45	Isle of Wight	45	Amherst
46	Rappahannock	46	King George
47	Staunton	47	Madison
48	Page	48	Staunton
49	Appomattox	49	Harrisonburg
50	Buena Vista	50	Giles
51	Charlottesville	51	Buena Vista
52	Orange	52	Gloucester
53	Middlesex	53	Winchester
54	Warren	54	Radford
55	Caroline	55	Floyd
56	Culpeper	56	Culpeper
57	Falls Church	57	Manassas
58	Gloucester	58	Campbell
59	Nelson	59	Washington
60	Bedford City	60	Middlesex
61	Franklin	61	Waynesboro
62	Winchester	62	Franklin
63	Hampton	63	Manassas Park
64	Colonial Heights	64	Alleghany
65	Lynchburg	65	Louisa
66	Surry	66	Prince George
67	Amherst	67	Bland
68	Covington	68	Norton
69	Galax	69	Suffolk
70	Patrick	70	Richmond
71	Rockbridge	71	Bath
72	Suffolk	72	Lancaster
73	Cumberland	73	Wythe
74	Bath	74	Caroline
75	Alleghany	75	Grayson
76	Louisa	76	Galax
77	Pittsylvania	77	Surry
78	Bland	78	Warren
79	Washington	79	Bristol
80	Newport News	80	Williamsburg
81	Greensville	81	Amelia
82	Bristol	82	Cumberland
83	Scott	83	Greensville
84	Carroll	84	Bedford City
85	Waynesboro	85	Patrick
86	Dinwiddie	86	Smyth
87	Grayson	87	Essex
88	Radford	88	Appomattox
89	Charles City	89	King and Queen
90	Southampton	90	Fredericksburg

Rank	Health Outcomes	Rank	Health Factors
91	Giles	91	Russell
92	Lunenburg	92	Covington
93	King and Queen	93	Northumberland
94	Lancaster	94	Lynchburg
95	Amelia	95	Charlotte
96	Northumberland	96	Southampton
97	Charlotte	97	Pulaski
98	Nottoway	98	Charles City
99	Brunswick	99	Nottoway
100	Accomack	100	Tazewell
101	Northampton	101	Dinwiddie
102	Buckingham	102	Newport News
103	Wythe	103	Scott
104	Westmoreland	104	Hampton
105	Norfolk	105	Page
106	Prince Edward	106	Buckingham
107	Sussex	107	Dickenson
108	Mecklenburg	108	Prince Edward
109	Fredericksburg	109	Northampton
110	Martinsville	110	Pittsylvania
111	Norton	111	Sussex
112	Smyth	112	Lunenburg
113	Essex	113	Portsmouth
114	Pulaski	114	Franklin City
115	Henry	115	Westmoreland
116	Roanoke City	116	Accomack
117	Hopewell	117	Halifax
118	Portsmouth	118	Carroll
119	Halifax	119	Wise
120	Danville	120	Mecklenburg
121	Williamsburg	121	Norfolk
122	Wise	122	Martinsville
123	Franklin City	123	Brunswick
124	Richmond City	124	Emporia
125	Dickenson	125	Henry
126	Richmond	126	Lee
127	Lee	127	Roanoke City
128	Russell	128	Hopewell
129	Tazewell	129	Richmond City
130	Petersburg	130	Buchanan
131	Emporia	131	Danville
132	Buchanan	132	Petersburg

Not Ranked: Highland, Lexington

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	Fairfax	Fairfax City
2	Arlington	Fairfax
3	Loudoun	Arlington
4	York	Albemarle
5	Albemarle	Loudoun
6	Manassas Park	Harrisonburg
7	Powhatan	Manassas
8	Stafford	Mathews
9	Prince William	Goochland
10	Alexandria	York
11	James City	Alexandria
12	Roanoke	Frederick
13	Hanover	Poquoson
14	Chesterfield	Powhatan
15	Rockingham	Spotsylvania
16	Manassas	Buena Vista
17	Virginia Beach	Fluvanna
18	Poquoson	Shenandoah
19	Clarke	New Kent
20	Prince George	Manassas Park
21	Craig	James City
22	Fauquier	Staunton
23	Spotsylvania	Augusta
24	Surry	Floyd
25	Fluvanna	Hanover
26	Page	Appomattox
27	New Kent	King George
28	Bedford	Nelson
29	Floyd	Craig
30	Shenandoah	King William
31	Henrico	Isle of Wight
32	Cumberland	Fauquier
33	Madison	Rappahannock
34	Campbell	Greene
35	Chesapeake	Prince William
36	Frederick	Rockingham
37	King George	Botetourt
38	Greene	Prince George
39	Montgomery	Chesterfield
40	Goochland	Bedford City

Rank	Mortality	Morbidity
41	Salem	Caroline
42	Colonial Heights	Stafford
43	Charlottesville	Chesapeake
44	King William	Montgomery
45	Botetourt	Virginia Beach
46	Orange	Falls Church
47	Greensville	Bristol
48	Augusta	Salem
49	Mathews	Clarke
50	Isle of Wight	Madison
51	Franklin	Galax
52	Rappahannock	Middlesex
53	Amherst	Warren
54	Culpeper	Covington
55	Appomattox	Gloucester
56	Winchester	Campbell
57	Patrick	Charlottesville
58	Middlesex	Culpeper
59	Staunton	Henrico
60	Harrisonburg	Lynchburg
61	Warren	Orange
62	Rockbridge	Hampton
63	Hampton	Roanoke
64	Gloucester	Bedford
65	Falls Church	Winchester
66	Buena Vista	Grayson
67	Lynchburg	Bland
68	Pittsylvania	Williamsburg
69	Caroline	Suffolk
70	Nottoway	Alleghany
71	Carroll	Bath
72	Suffolk	Franklin
73	Radford	Page
74	Bedford City	Rockbridge
75	Bath	Amherst
76	Northumberland	Louisa
77	Newport News	Waynesboro
78	King and Queen	Patrick
79	Covington	Martinsville
80	Washington	Norton
81	Louisa	Giles
82	Nelson	Southampton
83	Dinwiddie	Northampton
84	Charles City	Washington
85	Galax	Norfolk
86	Brunswick	Charlotte
87	Scott	Pittsylvania
88	Alleghany	Scott
89	Lunenburg	Roanoke City
90	Fairfax City	Newport News

Rank	Mortality	Morbidity
91	Buckingham	Colonial Heights
92	Wythe	Amelia
93	Bland	Essex
94	Prince Edward	Accomack
95	Lancaster	Westmoreland
96	Southampton	Lancaster
97	Waynesboro	Dinwiddie
98	Sussex	Carroll
99	Giles	Charles City
100	Amelia	Franklin City
101	Accomack	Portsmouth
102	Pulaski	Lunenburg
103	Charlotte	Danville
104	Henry	Fredericksburg
105	Westmoreland	Mecklenburg
106	Mecklenburg	Radford
107	Grayson	Richmond City
108	Northampton	Smyth
109	Fredericksburg	King and Queen
110	Bristol	Surry
111	Smyth	Cumberland
112	Wise	Hopewell
113	Norfolk	Brunswick
114	Halifax	Wythe
115	Hopewell	Buckingham
116	Dickenson	Prince Edward
117	Essex	Northumberland
118	Portsmouth	Petersburg
119	Martinsville	Sussex
120	Norton	Greensville
121	Russell	Nottoway
122	Lee	Halifax
123	Richmond	Pulaski
124	Danville	Henry
125	Roanoke City	Wise
126	Tazewell	Emporia
127	Franklin City	Tazewell
128	Richmond City	Richmond
129	Williamsburg	Lee
130	Buchanan	Russell
131	Emporia	Dickenson
132	Petersburg	Buchanan

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	Arlington	1	Falls Church	1	Loudoun	1	Craig
2	Fairfax	2	Winchester	2	Fairfax	1	Cumberland
3	Loudoun	3	Loudoun	3	York	3	Waynesboro
4	Fairfax City	4	Albemarle	4	Poquoson	4	Chesapeake
5	Albemarle	5	Charlottesville	5	Fairfax City	5	Poquoson
6	Alexandria	6	James City	6	Arlington	6	Smyth
7	Roanoke	7	Chesterfield	7	James City	7	Newport News
8	James City	8	Roanoke	8	Stafford	8	Louisa
9	York	9	Salem	9	Hanover	9	Henry
10	Montgomery	10	Bedford City	10	Powhatan	10	Franklin City
11	Charlottesville	11	Hanover	11	Roanoke	11	Colonial Heights
12	Botetourt	12	Henrico	12	Albemarle	12	Galax
13	Rockingham	13	Staunton	13	Falls Church	13	Buena Vista
14	Fauquier	14	Galax	14	Fauquier	14	Covington
15	Radford	15	Fairfax	15	Clarke	15	Surry
16	Harrisonburg	16	Fluvanna	16	Fluvanna	16	Hopewell
17	Giles	17	Norton	17	Botetourt	17	Wise
18	Bristol	18	Lynchburg	18	Chesterfield	18	King and Queen
19	Henrico	19	Bristol	19	Spotsylvania	19	Prince George
20	Augusta	20	Martinsville	20	Rappahannock	20	Rockingham
21	Virginia Beach	21	Richmond City	21	New Kent	21	New Kent
22	Goochland	22	Northampton	22	Prince William	22	York
23	Hanover	23	York	23	Alexandria	23	James City
24	Poquoson	24	Orange	24	Rockingham	24	Russell
25	Rockbridge	25	Fredericksburg	25	Mathews	25	Rockbridge
26	Fluvanna	26	Portsmouth	26	Bedford	26	Fluvanna
27	Chesapeake	27	Augusta	27	Greene	27	Danville
28	Chesterfield	28	Buena Vista	28	King William	28	Augusta
29	Rappahannock	29	Goochland	29	Montgomery	29	Giles
30	Buena Vista	30	Poquoson	30	Augusta	30	Montgomery
31	Manassas	31	Franklin City	31	Goochland	31	Bland
32	Grayson	32	Waynesboro	32	Madison	31	Greensville
33	Colonial Heights	33	Newport News	33	Craig	33	Sussex
34	Williamsburg	34	New Kent	34	Isle of Wight	34	Powhatan
35	Clarke	35	King William	35	King George	35	Roanoke
36	Falls Church	36	Rockbridge	36	Henrico	36	Carroll
37	Richmond	37	Roanoke City	37	Frederick	37	Dickenson
38	Bedford	38	Frederick	38	Virginia Beach	38	Portsmouth
39	Alleghany	39	Clarke	39	Salem	39	Warren
40	Nelson	40	Danville	40	Chesapeake	40	Pulaski

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
41	Stafford	41	Spotsylvania	41	Nelson	41	Isle of Wight
42	Gloucester	42	Chesapeake	42	Prince George	42	Tazewell
43	Middlesex	43	Botetourt	43	Amherst	43	Buchanan
44	Staunton	44	Fauquier	44	Orange	44	Radford
45	Powhatan	45	Warren	45	Rockbridge	45	Harrisonburg
46	Frederick	46	Hopewell	46	Bath	46	Norfolk
47	Shenandoah	47	Nottoway	47	Louisa	47	Norton
48	Floyd	48	Manassas	48	Shenandoah	48	Campbell
49	Washington	49	Emporia	49	Culpeper	49	Greene
50	Craig	50	Nelson	50	Warren	50	Botetourt
51	Amherst	51	Virginia Beach	51	Floyd	51	Bedford
52	Fredericksburg	52	Colonial Heights	52	Colonial Heights	52	Frederick
53	Galax	53	Smyth	53	Manassas Park	53	Amelia
54	Russell	54	Suffolk	54	Gloucester	54	Southampton
55	King William	55	Surry	55	Amelia	55	Shenandoah
56	Orange	56	Amelia	56	Harrisonburg	56	Northumberland
57	Patrick	57	Bedford	57	Caroline	57	Appomattox
58	New Kent	58	Petersburg	58	Campbell	58	Lee
59	Prince William	59	Stafford	59	Franklin	59	Alleghany
60	Norton	60	Halifax	60	Dinwiddie	60	Pittsylvania
61	Mathews	61	Charles City	61	Bland	61	Virginia Beach
62	Manassas Park	62	Madison	62	Middlesex	62	Wythe
63	Salem	63	Williamsburg	63	Alleghany	63	Charlotte
64	Covington	64	Prince William	64	Washington	64	Accomack
65	Waynesboro	65	Arlington	65	Suffolk	65	Middlesex
66	Culpeper	66	Wythe	66	Giles	66	Patrick
67	Greene	67	Hampton	67	Essex	67	Lancaster
68	Bland	68	Shenandoah	68	Radford	68	King William
69	Dickenson	69	Caroline	69	Manassas	69	Washington
70	Campbell	70	Norfolk	70	Charles City	70	Albemarle
71	Madison	71	Fairfax City	71	Staunton	71	Martinsville
72	Isle of Wight	72	Lancaster	72	Winchester	72	Grayson
73	Bath	73	Alexandria	73	Appomattox	73	Amherst
74	King George	74	Essex	74	Surry	74	Prince Edward
75	Greensville	75	Franklin	75	Charlottesville	75	Floyd
76	Franklin	76	Culpeper	76	Wythe	76	Buckingham
77	Winchester	77	Campbell	77	Richmond	77	Franklin
78	Lancaster	78	Mecklenburg	78	Lancaster	78	Dinwiddie
79	Spotsylvania	79	Dinwiddie	79	Cumberland	79	Brunswick
80	Page	80	King and Queen	80	Southampton	80	Lunenburg
81	Charlotte	81	King George	81	Hampton	81	King George
82	Suffolk	82	Greensville	82	Northumberland	82	Gloucester
83	Lynchburg	83	Sussex	83	Buena Vista	83	Clarke
84	Tazewell	84	Washington	84	Prince Edward	84	Halifax
85	Wythe	85	Carroll	85	King and Queen	85	Chesterfield
86	Bedford City	86	Rockingham	86	Waynesboro	86	Essex
87	Prince George	87	Pulaski	87	Buckingham	87	Emporia
88	Nottoway	88	Greene	88	Westmoreland	88	Prince William
89	Northumberland	89	Louisa	89	Greensville	89	Mecklenburg

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
90	Scott	90	Scott	90	Carroll	90	Page
91	Pulaski	91	Amherst	91	Tazewell	91	Staunton
92	Smyth	92	Grayson	92	Wise	92	Westmoreland
93	Appomattox	93	Lunenburg	93	Russell	93	Goochland
94	Cumberland	94	Gloucester	94	Charlotte	94	Nottoway
95	Buckingham	95	Powhatan	95	Scott	95	Spotsylvania
96	Henry	96	Giles	96	Patrick	96	Charles City
97	King and Queen	97	Prince Edward	97	Bedford City	97	Rappahannock
98	Martinsville	98	Covington	98	Pittsylvania	98	Winchester
99	Brunswick	99	Cumberland	99	Pulaski	99	Bristol
100	Southampton	100	Pittsylvania	100	Smyth	100	Hanover
101	Caroline	101	Isle of Wight	101	Grayson	101	Richmond
102	Danville	102	Middlesex	102	Williamsburg	102	Nelson
103	Northampton	103	Patrick	103	Page	103	Orange
104	Surry	104	Manassas Park	104	Norton	104	Lynchburg
105	Lunenburg	105	Charlotte	105	Dickenson	105	Bedford City
106	Norfolk	106	Southampton	106	Accomack	106	Mathews
107	Essex	107	Accomack	107	Newport News	107	Northampton
108	Pittsylvania	108	Northumberland	108	Fredericksburg	108	Culpeper
109	Emporia	109	Radford	109	Sussex	109	Petersburg
110	Louisa	110	Floyd	110	Buchanan	110	Fauquier
111	Mecklenburg	111	Craig	111	Nottoway	111	Williamsburg
112	Richmond City	112	Appomattox	112	Lunenburg	112	Hampton
113	Portsmouth	113	Buckingham	113	Covington	113	Suffolk
114	Westmoreland	114	Mathews	114	Lynchburg	114	Manassas Park
115	Accomack	115	Page	115	Lee	115	Charlottesville
116	Sussex	116	Richmond	116	Halifax	116	Salem
117	Halifax	117	Bland	117	Northampton	117	Caroline
118	Hampton	118	Rappahannock	118	Galax	118	Manassas
119	Franklin City	119	Westmoreland	119	Mecklenburg	119	Scott
120	Lee	120	Harrisonburg	120	Portsmouth	120	Henrico
121	Prince Edward	121	Prince George	121	Bristol	121	Bath
122	Amelia	122	Brunswick	122	Brunswick	122	Roanoke City
123	Newport News	123	Wise	123	Franklin City	123	Richmond City
124	Charles City	124	Tazewell	124	Hopewell	124	Madison
125	Roanoke City	125	Alleghany	125	Norfolk	125	Stafford
126	Wise	126	Henry	126	Roanoke City	126	Falls Church
127	Warren	127	Montgomery	127	Henry	127	Alexandria
128	Buchanan	128	Bath	128	Emporia	128	Loudoun
129	Dinwiddie	129	Russell	129	Martinsville	129	Fredericksburg
130	Carroll	130	Dickenson	130	Richmond City	130	Arlington
131	Hopewell	131	Lee	131	Petersburg	131	Fairfax City
132	Petersburg	132	Buchanan	132	Danville	132	Fairfax

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	2007
	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 Quality⁴	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

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.

CREDITS

Report Editors

University of Wisconsin-Madison
School of Medicine and Public Health
Population Health Institute
Bridget Booske, PhD, MHSA
Jessica Athens, MS
Patrick Remington, MD, MPH

This publication would not have been possible without the following contributions:

Conceptual Development

David Kindig, MD, PhD
Paul Peppard, PhD
Patrick Remington, MD, MPH

Technical Advisors

Amy Bernstein, ScD, Centers for Disease Control and Prevention
Michele Bohm, MPH, Centers for Disease Control and Prevention
Vickie Boothe, MPH, Centers for Disease Control and Prevention
Ethan Burke, MD, MPH, Dartmouth Institute for Health Policy and Clinical Practice

Research Assistance

Clare O'Connor
Karen Odegaard
Hyojun Park
Matthew Rodock

Production and Editing

Chuck Alexander
Alex Field
Joan Fischer
Irene Golembiewski
Jennifer Robinson

Design

Forum One, Alexandria, VA
Media Solutions, UW School of Medicine and Public Health

Metrics Advisory Group

Yukiko Asada, PhD, Associate Professor, Community Health and Epidemiology, Dalhousie University, Halifax, Nova Scotia
Tom Eckstein, MBA, Principal, Arundel Street Consulting Inc, St. Paul, MN
Elliott Fisher, MD, MPH, Director, Center for Population Health, Dartmouth Institute for Health Policy and Clinical Practice, and
Professor of Medicine and Community and Family Medicine, Dartmouth Medical School, Lebanon, NH
Howard Frumkin, MD, MPH, Dr. PH, Director of the National Center for Environmental Health, ATSDR, CDC, Atlanta, GA
Thomas Kottke, MD, MSPH, Medical Director for Evidence-Based Health, HealthPartners, Minneapolis, MN
Ali Mokdad, PhD, Professor of Global Health, Institute for Health Metrics and Evaluation, University of Washington, Seattle, WA
Roy Gibson Parrish, MD, Consultant in Population Health Information Systems, Peacham, VT
Robert M. (Bobby) Pestronk, MPH, Executive Director, National Association of County and City Health Officials (NACCHO),
Washington, DC
Tom Ricketts, PhD, Professor of Health Policy and Administration, University of North Carolina
Steven Teutsch, MD, MPH, Chief Science Officer, Los Angeles County Public Health, Los Angeles, CA
Julie Willems Van Dijk, PhD, RN, former Marathon County, WI Health Officer

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



County Health Rankings

Mobilizing Action Toward Community Health

countyhealthrankings.org

