



County Health Rankings

Mobilizing Action Toward Community Health

2011

Colorado



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

Introduction

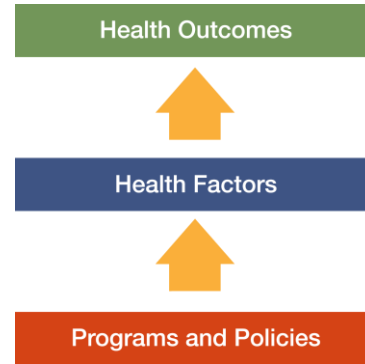
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities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

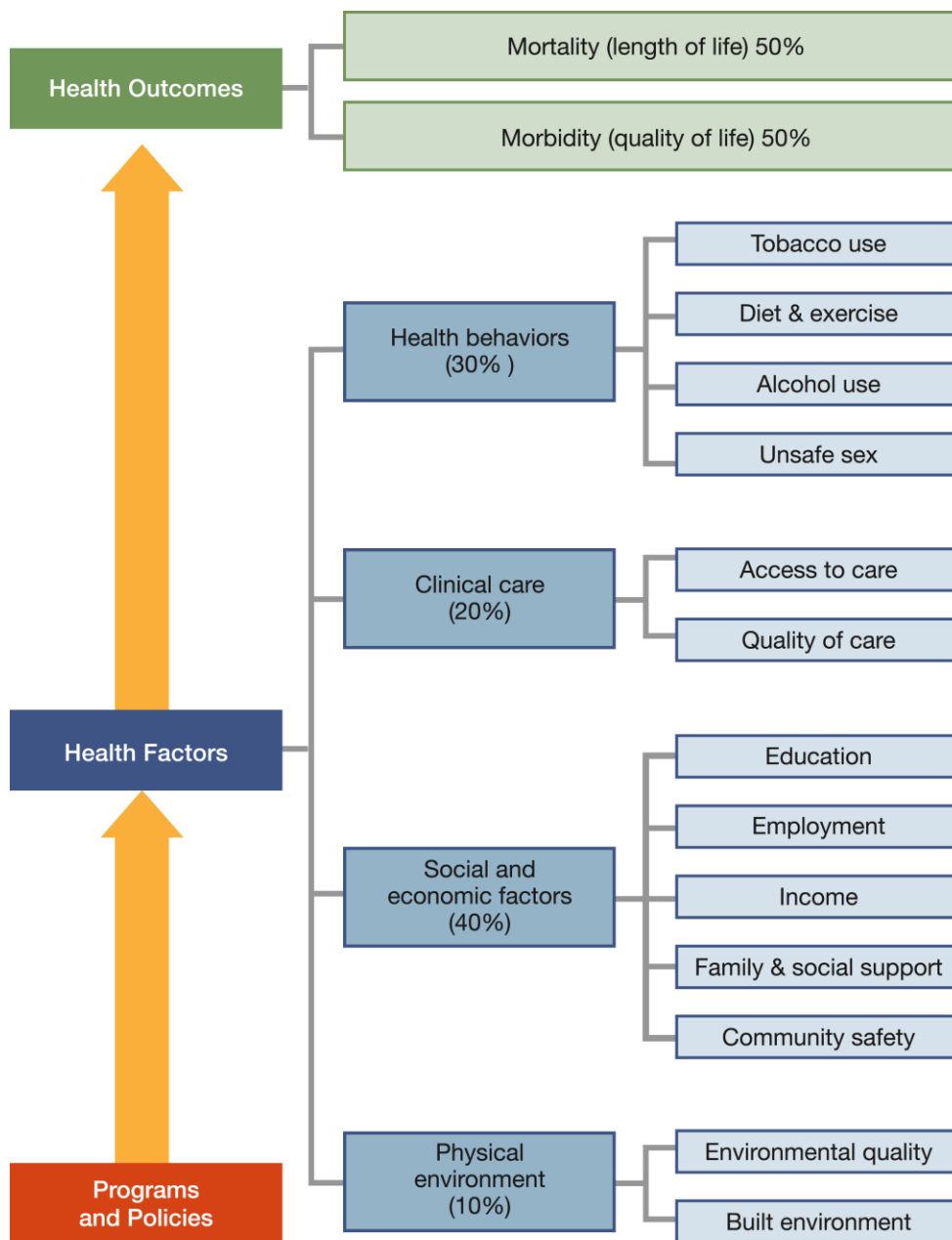
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see www.countyhealthrankings.org



The Rankings

This report ranks Colorado 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.

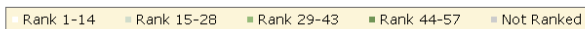
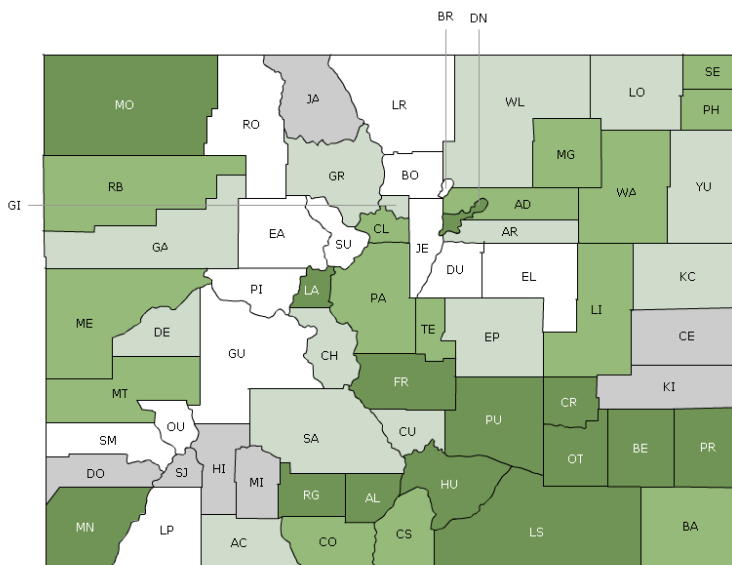


County Health Rankings model ©2010 UWPHI

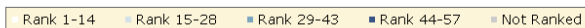
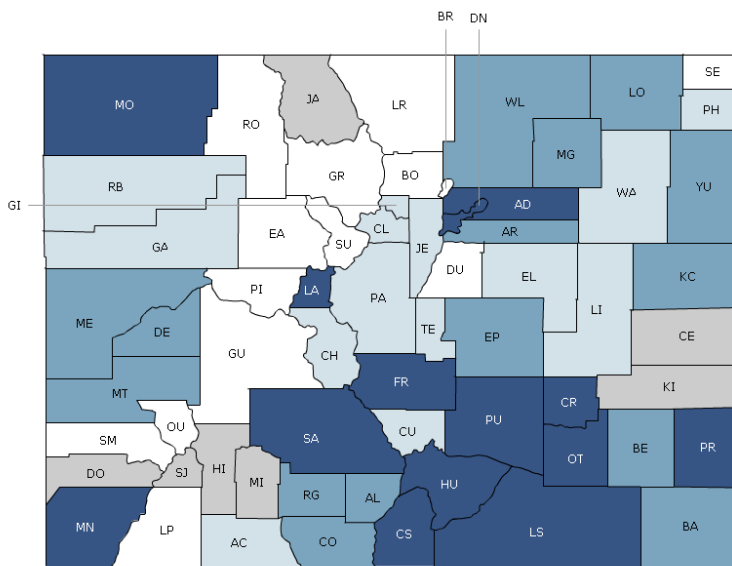
The maps on this page display Colorado's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

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	Douglas	1	Pitkin
2	Eagle	2	Douglas
3	Pitkin	3	Ouray
4	Boulder	4	Routt
5	Summit	5	Boulder
6	Elbert	6	Summit
7	Broomfield	7	Larimer
8	Larimer	8	San Miguel
9	Routt	9	Broomfield
10	Gunnison	10	Gunnison
11	Jefferson	11	La Plata
12	Ouray	12	Eagle
13	La Plata	13	Sedgwick
14	San Miguel	14	Grand
15	Arapahoe	15	Gilpin
16	Weld	16	Chaffee
17	Garfield	17	Jefferson
18	Yuma	18	Elbert
19	Logan	19	Teller
20	Kit Carson	20	Archuleta
21	Gilpin	21	Washington
22	Archuleta	22	Rio Blanco
23	Custer	23	Garfield
24	Grand	24	Lincoln
25	Chaffee	25	Clear Creek
26	Delta	26	Phillips
27	Saguache	27	Custer
28	El Paso	28	Park
29	Phillips	29	Montrose
30	Mesa	30	Yuma
31	Park	31	Arapahoe
32	Washington	32	Mesa
33	Rio Blanco	33	Delta
34	Adams	34	El Paso
35	Montrose	35	Rio Grande
36	Conejos	36	Kit Carson
37	Sedgwick	37	Baca
38	Baca	38	Logan
39	Lincoln	39	Alamosa
40	Morgan	40	Weld

Rank	Health Outcomes	Rank	Health Factors
41	Clear Creek	41	Conejos
42	Teller	42	Morgan
43	Costilla	43	Bent
44	Moffat	44	Fremont
45	Denver	45	Moffat
46	Lake	46	Pueblo
47	Rio Grande	47	Prowers
48	Alamosa	48	Lake
49	Pueblo	49	Otero
50	Bent	50	Saguache
51	Prowers	51	Costilla
52	Otero	52	Adams
53	Las Animas	53	Huerfano
54	Montezuma	54	Crowley
55	Fremont	55	Montezuma
56	Crowley	56	Las Animas
57	Huerfano	57	Denver

Not Ranked: Cheyenne, Dolores, Hinsdale, Jackson, Kiowa, Mineral, San Juan

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	Rank	Morbidity
1	Douglas	1	Ouray
2	Summit	2	Boulder
3	Eagle	3	San Miguel
4	Pitkin	4	Routt
5	Elbert	5	Kit Carson
6	Broomfield	6	Douglas
7	Boulder	7	Yuma
8	Larimer	8	Gunnison
9	Routt	9	Logan
10	Conejos	10	Elbert
11	Arapahoe	11	Larimer
12	Jefferson	12	Gilpin
13	Gunnison	13	Eagle
14	Archuleta	14	Pitkin
15	Lake	15	Custer
16	Weld	16	La Plata
17	La Plata	17	Broomfield
18	Park	18	Garfield
19	Garfield	19	Jefferson
20	Saguache	20	Mesa
21	Grand	21	Lincoln
22	Chaffee	22	Weld
23	El Paso	23	Chaffee
24	Logan	24	Summit
25	Baca	25	Delta
25	Costilla	26	Grand
25	Custer	27	Montrose
25	Gilpin	28	Arapahoe
25	Ouray	29	Archuleta
25	Phillips	30	Rio Blanco
25	San Miguel	31	Montezuma
25	Sedgwick	32	Phillips
25	Washington	33	El Paso
34	Yuma	34	Clear Creek
35	Adams	35	Saguache
36	Delta	36	Washington
37	Kit Carson	37	Adams
38	Morgan	38	Denver
39	Rio Blanco	39	Morgan
40	Mesa	40	Teller

Rank	Mortality	Rank	Morbidity
41	Montrose	41	Sedgwick
42	Bent	42	Fremont
43	Moffat	43	Baca
44	Teller	44	Pueblo
45	Crowley	45	Park
46	Clear Creek	46	Alamosa
47	Prowers	47	Moffat
48	Rio Grande	48	Rio Grande
49	Denver	49	Otero
50	Lincoln	50	Las Animas
51	Las Animas	51	Costilla
52	Alamosa	52	Prowers
53	Pueblo	53	Conejos
54	Otero	54	Bent
55	Fremont	55	Huerfano
56	Montezuma	56	Crowley
57	Huerfano	57	Lake

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	Douglas	1	Ouray	1	Douglas	1	Clear Creek
2	Pitkin	2	Mesa	2	Pitkin	1	Ouray
3	Boulder	3	Pueblo	3	Ouray	1	Summit
4	Summit	4	Douglas	4	Routt	4	Rio Grande
5	Routt	5	Pitkin	5	San Miguel	5	Archuleta
6	Ouray	6	Larimer	6	Boulder	6	Chaffee
7	Eagle	7	Boulder	7	Yuma	7	Pitkin
8	Sedgwick	8	Jefferson	8	Larimer	8	Routt
9	Chaffee	9	Routt	9	Washington	9	La Plata
10	Park	10	Denver	10	Gunnison	10	Garfield
11	Gunnison	11	Broomfield	11	Broomfield	11	Phillips
12	Larimer	12	Chaffee	12	Gilpin	12	Pueblo
13	La Plata	13	Summit	13	Summit	13	Gunnison
14	San Miguel	14	Arapahoe	14	Elbert	14	Custer
15	Broomfield	15	Archuleta	15	Baca	15	Otero
16	Garfield	16	Teller	16	La Plata	16	Teller
17	Grand	17	Costilla	17	Lincoln	17	Prowers
18	Gilpin	18	La Plata	18	Grand	18	Grand
19	Teller	19	Fremont	19	Rio Blanco	19	Eagle
20	Jefferson	20	Lincoln	20	Sedgwick	20	Fremont
21	Montrose	21	Eagle	21	Clear Creek	21	Alamosa
22	Custer	22	Grand	22	Kit Carson	22	Broomfield
23	Washington	23	Elbert	23	Phillips	23	San Miguel
24	Elbert	24	Gilpin	24	Jefferson	24	Kit Carson
25	Rio Blanco	25	San Miguel	25	Eagle	25	Montrose
26	Arapahoe	26	Crowley	26	Teller	26	Mesa
27	Archuleta	27	Montrose	27	Archuleta	27	Bent
28	Saguache	28	Logan	28	Logan	27	Costilla
29	Alamosa	29	Otero	29	Park	27	Huerfano
30	Conejos	30	Gunnison	30	Chaffee	30	Las Animas
31	Delta	31	Sedgwick	31	Moffat	31	Morgan
32	Costilla	32	El Paso	32	Garfield	32	Delta
33	El Paso	33	Garfield	33	Custer	33	Boulder
34	Huerfano	34	Alamosa	34	El Paso	34	Lake
35	Rio Grande	35	Weld	35	Delta	34	Park
36	Phillips	36	Delta	36	Arapahoe	34	Rio Blanco
37	Lake	37	Adams	37	Morgan	37	Montezuma
38	Crowley	38	Montezuma	38	Rio Grande	38	Logan
39	Lincoln	39	Custer	39	Mesa	39	Yuma
40	Bent	40	Bent	40	Montrose	40	El Paso

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
41	Prowers	41	Huerfano	41	Weld	41	Moffat
42	Clear Creek	42	Las Animas	42	Prowers	42	Baca
43	Mesa	43	Rio Blanco	43	Conejos	42	Lincoln
44	Denver	44	Phillips	44	Lake	44	Adams
45	Fremont	45	Clear Creek	45	Bent	45	Elbert
46	Weld	46	Morgan	46	Adams	46	Conejos
47	Kit Carson	47	Rio Grande	47	Alamosa	46	Crowley
48	Yuma	48	Conejos	48	Las Animas	46	Saguache
49	Montezuma	49	Saguache	49	Otero	46	Sedgwick
50	Baca	50	Park	50	Fremont	50	Larimer
51	Otero	51	Yuma	51	Pueblo	51	Gilpin
52	Morgan	52	Washington	52	Montezuma	52	Washington
53	Adams	53	Baca	53	Saguache	53	Jefferson
54	Pueblo	54	Kit Carson	54	Huerfano	54	Douglas
55	Moffat	55	Moffat	55	Denver	55	Arapahoe
56	Logan	56	Lake	56	Crowley	56	Weld
57	Las Animas	57	Prowers	57	Costilla	57	Denver

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

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.

CREDITS

Report Authors

University of Wisconsin-Madison
School of Medicine and Public Health
Department of Population Health Sciences
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:

Technical Advisors

Amy Bernstein, ScD, Centers for Disease Control and Prevention
Michele Bohm, MPH, Centers for Disease Control and Prevention

Research Assistance

Jennifer Buechner
Hyojun Park, MA
Seth Prins, MPH
Jennifer Robinson
Matthew Rodock
Anne Roubal

Communications and Outreach

Burness Communications
Ivan Cherniack
Nathan Jones, PhD
Kate Konkle, MPH
Angela Russell
Julie Willems Van Dijk, PhD, RN

Design

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

Robert Wood Johnson Foundation

Brenda L. Henry, PhD, MPH – Program Officer
Michelle Larkin, JD, MS, RN – Team Director and Senior Program Officer
James S. Marks, MD, MPH – Senior Vice President and Group Director, Health Group
Joe Marx – Senior Communications Officer

Suggested citation: University of Wisconsin Population Health Institute. *County Health Rankings 2011*.



County Health Rankings

Mobilizing Action Toward Community Health

countyhealthrankings.org



University of Wisconsin Population Health Institute
610 Walnut St, #524, Madison, WI 53726
(608) 265-6370 / info@countyhealthrankings.org