County Health Rankings

Mobilizing Action Toward Community Health

2010
Colorado
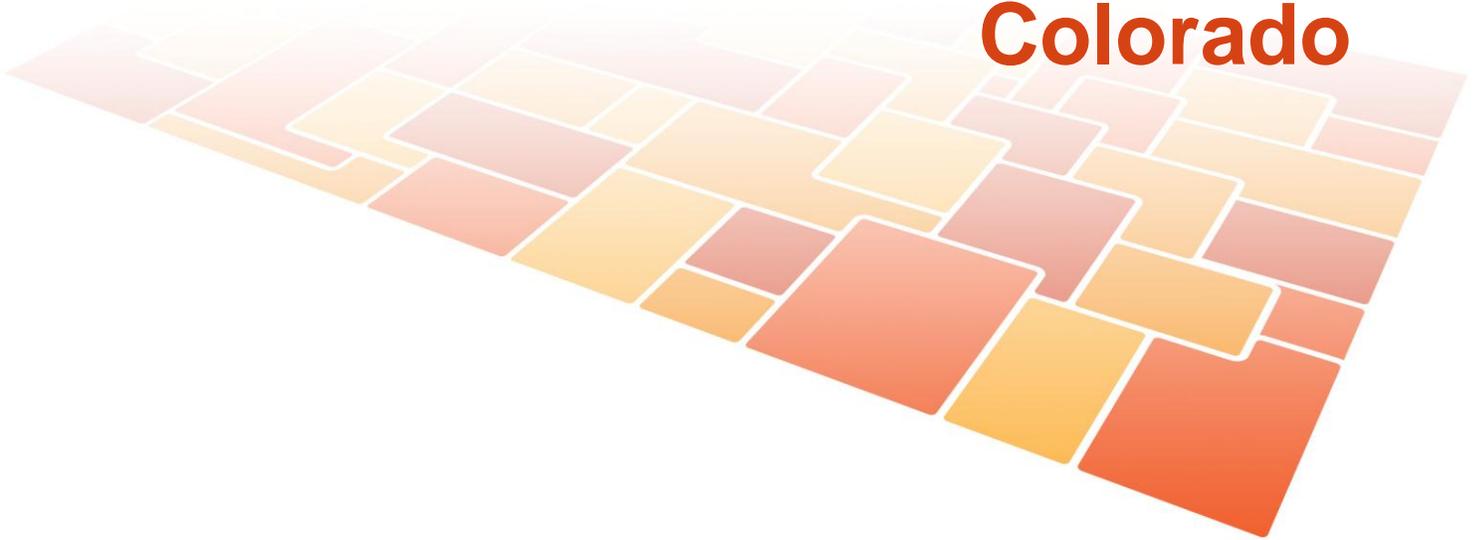
Robert Wood Johnson Foundation

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 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:
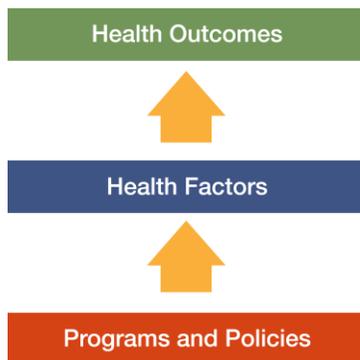
In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. These health factors and their outcomes may also be affected by community-based programs and policies designed to alter their distribution 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 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.

| Health Outcomes | Mortality (length of life) 50% |
| | Morbidity (quality of life) 50% |

Health behaviors (30%)
- Tobacco use
- Diet & exercise
- Alcohol use
- Unsafe sex

Clinical care (20%)
- Access to care
- Quality of care

Health Factors

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 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
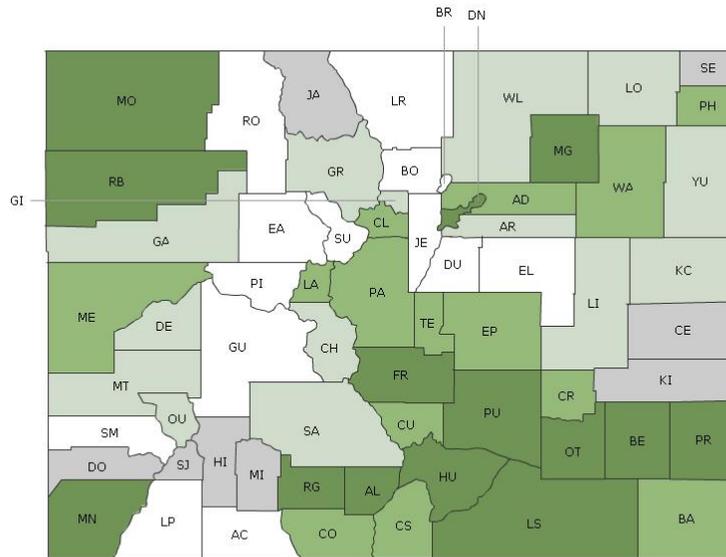
Rank 1-14   Rank 15-28   Rank 29-42   Rank 43-56   Not Ranked

HEALTH FACTORS
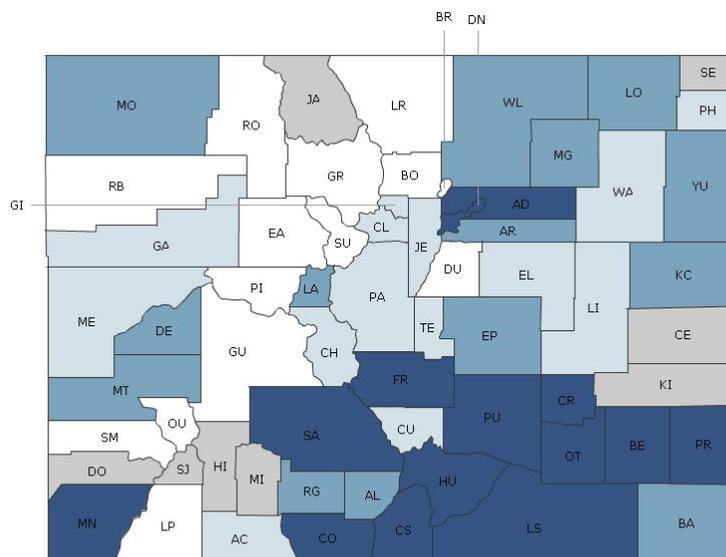
Rank 1-14   Rank 15-28   Rank 29-42   Rank 43-56   Not Ranked

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

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

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

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

Rank	Mortality	Rank	Morbidity
41	Morgan	41	Rio Grande
42	Kit Carson	42	Pueblo
43	Prowers	43	Fremont
44	Mesa	44	Conejos
45	Bent	45	Morgan
46	Rio Blanco	46	Alamosa
47	Crowley	47	Baca
48	Rio Grande	48	Park
49	Alamosa	49	Costilla
50	Las Animas	50	Otero
51	Denver	51	Moffat
52	Pueblo	52	Prowers
53	Otero	53	Las Animas
54	Huerfano	54	Bent
55	Fremont	55	Huerfano
56	Montezuma	56	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	Clinical Care	Social & Economic Factors	Physical Environment
1	Pitkin	Mesa	Douglas	Rio Grande
2	Douglas	Boulder	Pitkin	Huerfano
3	Boulder	Jefferson	Routt	Phillips
4	Routt	Denver	Gunnison	Rio Blanco
5	Summit	Teller	San Miguel	Summit
6	Eagle	Douglas	Summit	Garfield
7	Gunnison	Larimer	Ouray	La Plata
8	Larimer	Arapahoe	Boulder	Baca
9	Broomfield	Pitkin	Eagle	Pueblo
10	San Miguel	Routt	Larimer	Conejos
11	Park	Summit	Grand	Morgan
12	Chaffee	Broomfield	Elbert	Kit Carson
13	Custer	Pueblo	Clear Creek	Adams
14	Washington	San Miguel	Rio Blanco	Saguache
15	Grand	La Plata	Yuma	Crowley
16	La Plata	Ouray	La Plata	Broomfield
17	Rio Blanco	Archuleta	Lincoln	Fremont
18	Gilpin	Fremont	Broomfield	Otero
19	Elbert	Montrose	Jefferson	Lincoln
20	Ouray	Grand	Baca	Logan
21	Teller	Clear Creek	Kit Carson	Mesa
22	Jefferson	Alamosa	Garfield	Costilla
23	Montrose	El Paso	Phillips	Bent
24	Garfield	Lincoln	Washington	Lake
25	Rio Grande	Eagle	Moffat	Montrose
26	Conejos	Adams	Gilpin	Delta
27	Clear Creek	Chaffee	Custer	Elbert
28	Alamosa	Gilpin	Teller	Custer
29	Archuleta	Weld	Chaffee	Gilpin
30	Arapahoe	Montezuma	Mesa	Alamosa
31	Huerfano	Garfield	Park	Teller
32	Phillips	Otero	Archuleta	Las Animas
33	Lake	Crowley	Delta	Washington
34	Costilla	Gunnison	Logan	Chaffee
35	Saguache	Park	Arapahoe	Routt
36	El Paso	Rio Grande	Weld	Eagle
37	Delta	Logan	El Paso	Yuma
38	Crowley	Morgan	Lake	Boulder
39	Yuma	Huerfano	Morgan	Clear Creek
40	Prowers	Delta	Montrose	Park

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

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 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.

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

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