



# County Health Rankings

Mobilizing Action Toward Community Health

2011  
**Utah**



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

**Population Health Institute**

*Translating Research into Policy and Practice*



## Introduction

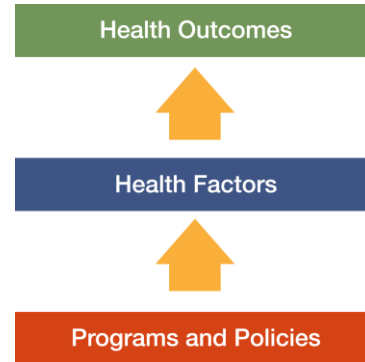
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities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

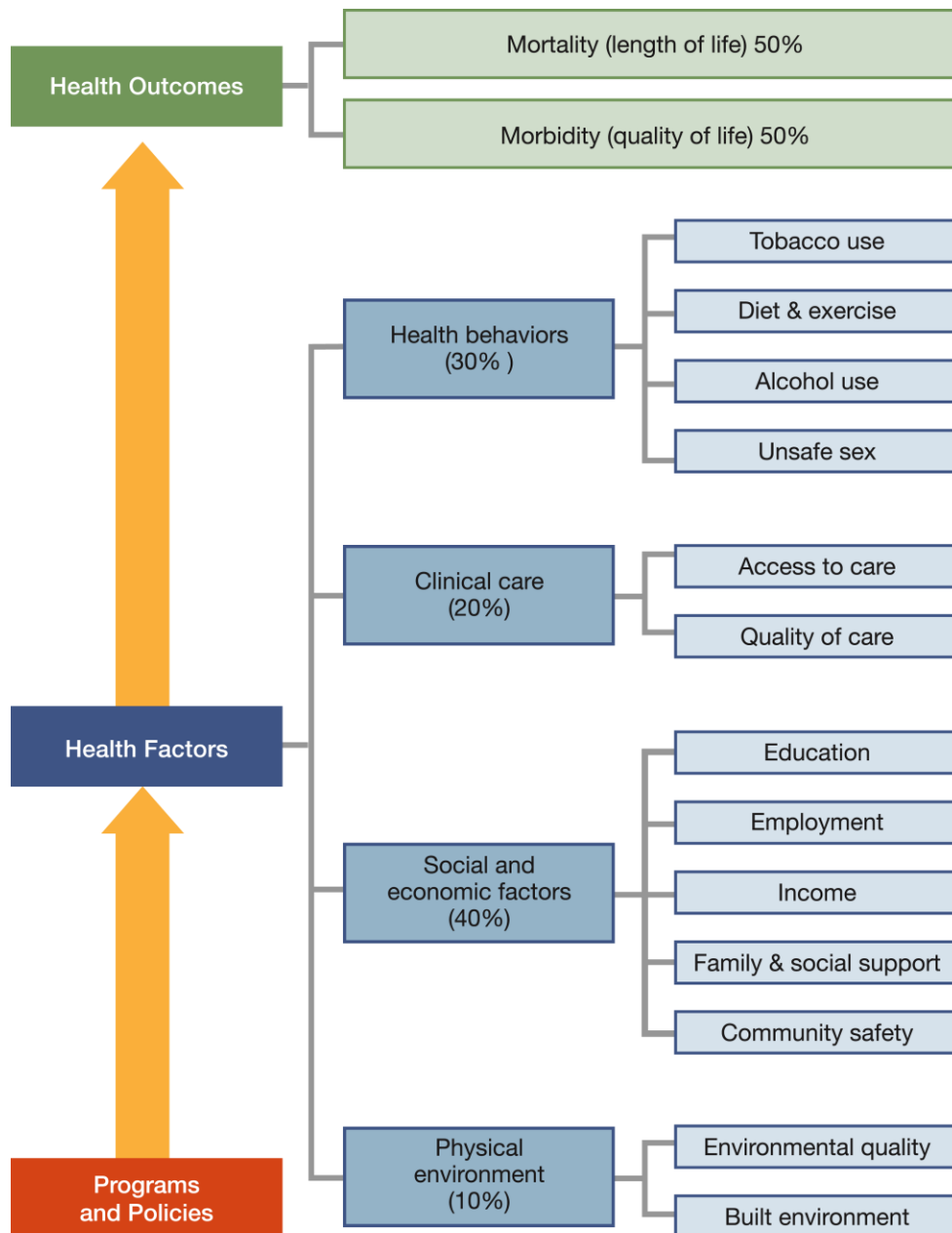
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



## The Rankings

This report ranks Utah 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.

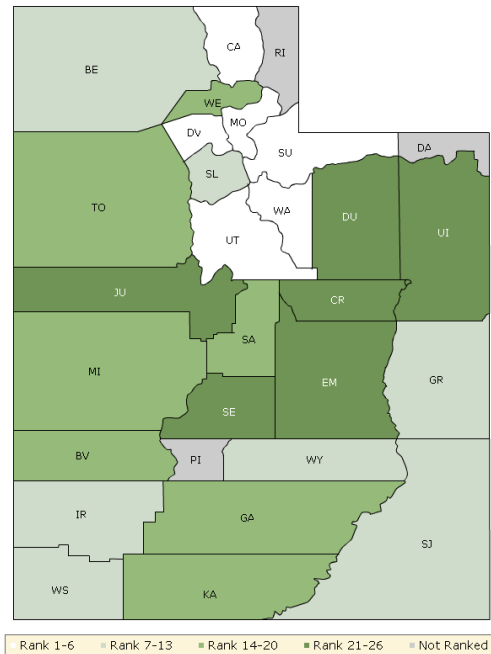


County Health Rankings model ©2010 UWPHI

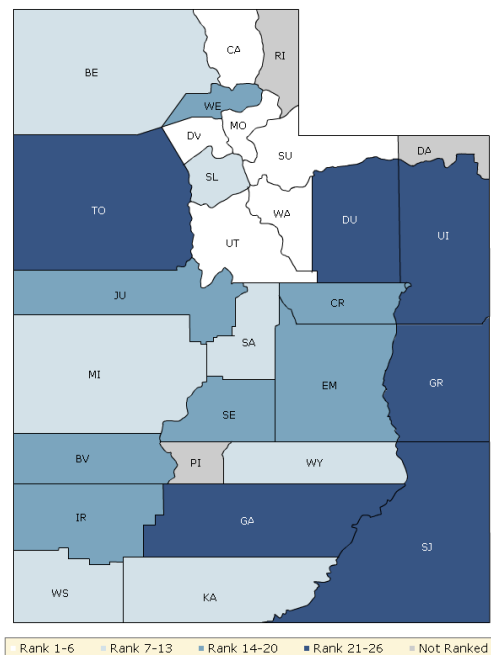
The maps on this page display Utah's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

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	Morgan	1	Summit
2	Cache	2	Morgan
3	Utah	3	Cache
4	Summit	4	Davis
5	Davis	5	Utah
6	Wasatch	6	Wasatch
7	Grand	7	Kane
8	Washington	8	Box Elder
9	Box Elder	9	Washington
10	Wayne	10	Wayne
11	Salt Lake	11	Salt Lake
12	Iron	12	Millard
13	San Juan	13	Sanpete
14	Millard	14	Beaver
15	Weber	15	Juab
16	Sanpete	16	Emery
17	Tooele	17	Carbon
18	Beaver	18	Sevier
19	Kane	19	Iron
20	Garfield	20	Weber
21	Juab	21	Tooele
22	Emery	22	Garfield
23	Uintah	23	Grand
24	Sevier	24	Duchesne
25	Duchesne	25	Uintah
26	Carbon	26	San Juan

**Not Ranked:** Daggett, Piute, Rich

## 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	Morgan	1	Morgan
2	Cache	2	Cache
3	Summit	3	Grand
4	Utah	4	Wasatch
5	Davis	5	Wayne
6	Salt Lake	6	Beaver
7	Washington	7	Utah
8	Box Elder	8	Washington
9	Wasatch	9	San Juan
10	Grand	10	Box Elder
11	Weber	11	Davis
12	Sanpete	12	Summit
13	Garfield	13	Iron
13	Wayne	14	Millard
15	Tooele	15	Juab
16	Kane	16	Salt Lake
17	Millard	17	Tooele
18	Iron	18	Kane
19	San Juan	19	Weber
20	Emery	20	Sanpete
21	Sevier	21	Uintah
22	Uintah	22	Duchesne
23	Juab	23	Emery
24	Beaver	24	Garfield
25	Carbon	25	Sevier
26	Duchesne	26	Carbon

## 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	Summit	1	Summit	1	Morgan	1	Kane
2	Morgan	2	Davis	2	Cache	2	Wayne
3	Cache	3	Salt Lake	3	Davis	3	Summit
4	Utah	4	Carbon	4	Utah	4	Wasatch
5	Davis	5	Morgan	5	Summit	5	Juab
6	Wasatch	6	Weber	6	Beaver	6	Duchesne
7	Washington	7	Box Elder	7	Wasatch	7	Emery
8	Millard	8	Wasatch	8	Box Elder	8	Morgan
9	Sanpete	9	Washington	9	Kane	9	Sevier
10	Garfield	10	Grand	10	Emery	10	Millard
11	Kane	11	Utah	11	Salt Lake	11	San Juan
12	San Juan	12	Tooele	12	Juab	12	Sanpete
13	Iron	13	Cache	13	Carbon	13	Carbon
14	Wayne	14	Sevier	14	Tooele	14	Garfield
15	Salt Lake	15	Wayne	15	Sanpete	14	Grand
16	Box Elder	16	Millard	16	Wayne	16	Iron
17	Sevier	17	Emery	17	Washington	17	Washington
18	Juab	18	Uintah	18	Iron	18	Weber
19	Beaver	19	Duchesne	19	Millard	19	Uintah
20	Weber	20	Juab	20	Weber	20	Beaver
21	Emery	21	Iron	21	Sevier	21	Tooele
22	Carbon	22	Sanpete	22	Uintah	22	Cache
23	Grand	23	Kane	23	Duchesne	23	Davis
24	Tooele	24	Garfield	24	Grand	24	Box Elder
25	Duchesne	25	Beaver	25	Garfield	25	Utah
26	Uintah	26	San Juan	26	San Juan	26	Salt Lake



## 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<sup>3</sup></b>	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

### **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](http://countyhealthrankings.org)



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