





### 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.

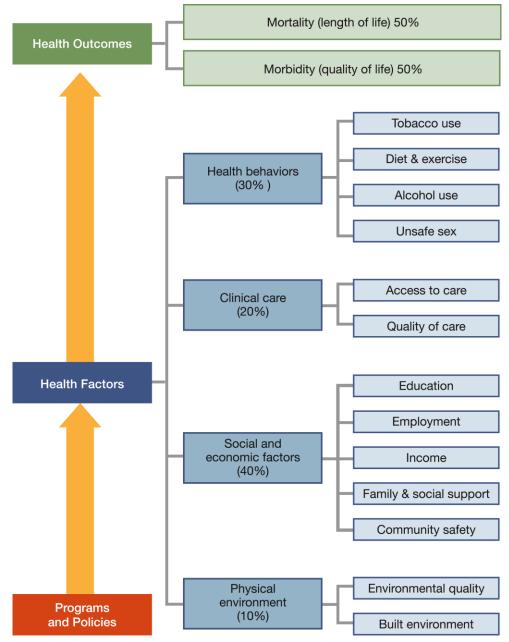


Institute of Medicine, 2002

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**

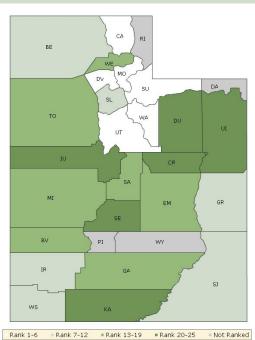
This report ranks Utah counties according to their summary measures of **health outcomes** and **health factors**, as well as the components used to create each summary measure. The figure below depicts the structure of the *Rankings* model. Counties receive a rank for each population health component; 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** 

### CA RI BE мо DA su UT JU CR SA MI EM SE BV PI WY IF WS KA Rank 1-6 Rank 7-12 Rank 13-19 Rank 20-25 Not Ranked

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

Not Ranked: Daggett, Piute, Rich, Wayne

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

## 2010 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
HEALTH OUTCOMES	3		
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	Chlamydia rate	National Center for Health Statistics	2007
Behavior	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 FAC	TORS		
Education	High school graduation	National Center for Education Statistics <sup>1</sup>	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 <sup>2</sup>	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 <sup>3</sup>	Uniform Crime Reporting, Federal Bureau of Investigation	2005-2007
PHYSICAL ENVIRONM	ENT		
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

 <sup>&</sup>lt;sup>1</sup> State data sources for KY, NH, NC, PA, SC, and UT (2007-2008).
<sup>2</sup> Income inequality estimates for 2000 were calculated by Mark L. Burkey, North Carolina Agricultural & Technical State University, www.ncat.edu/~burkeym/Gini.htm.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> Not available for AK and HI.

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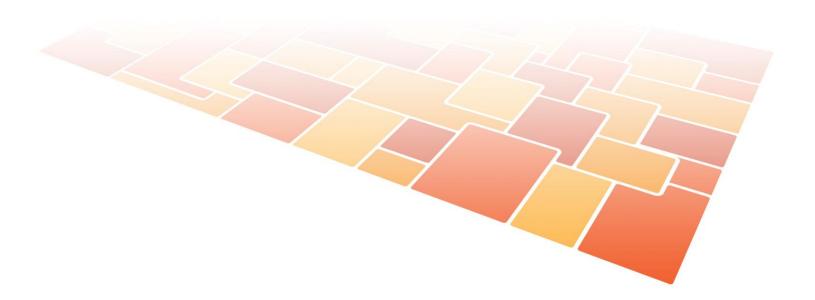
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