



County Health Rankings

Mobilizing Action Toward Community Health

2010

California



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

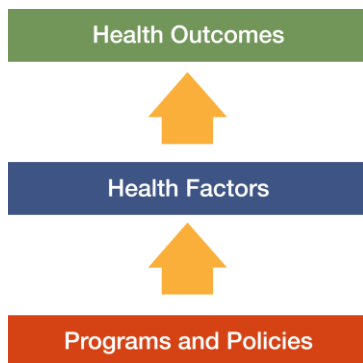
Introduction

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.

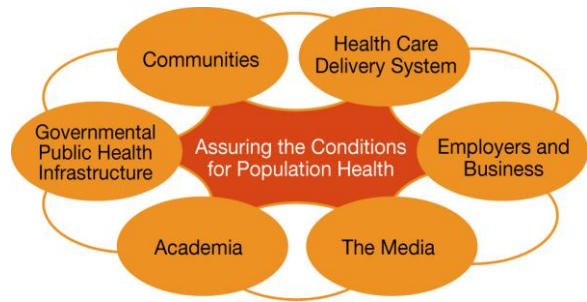
The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

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.



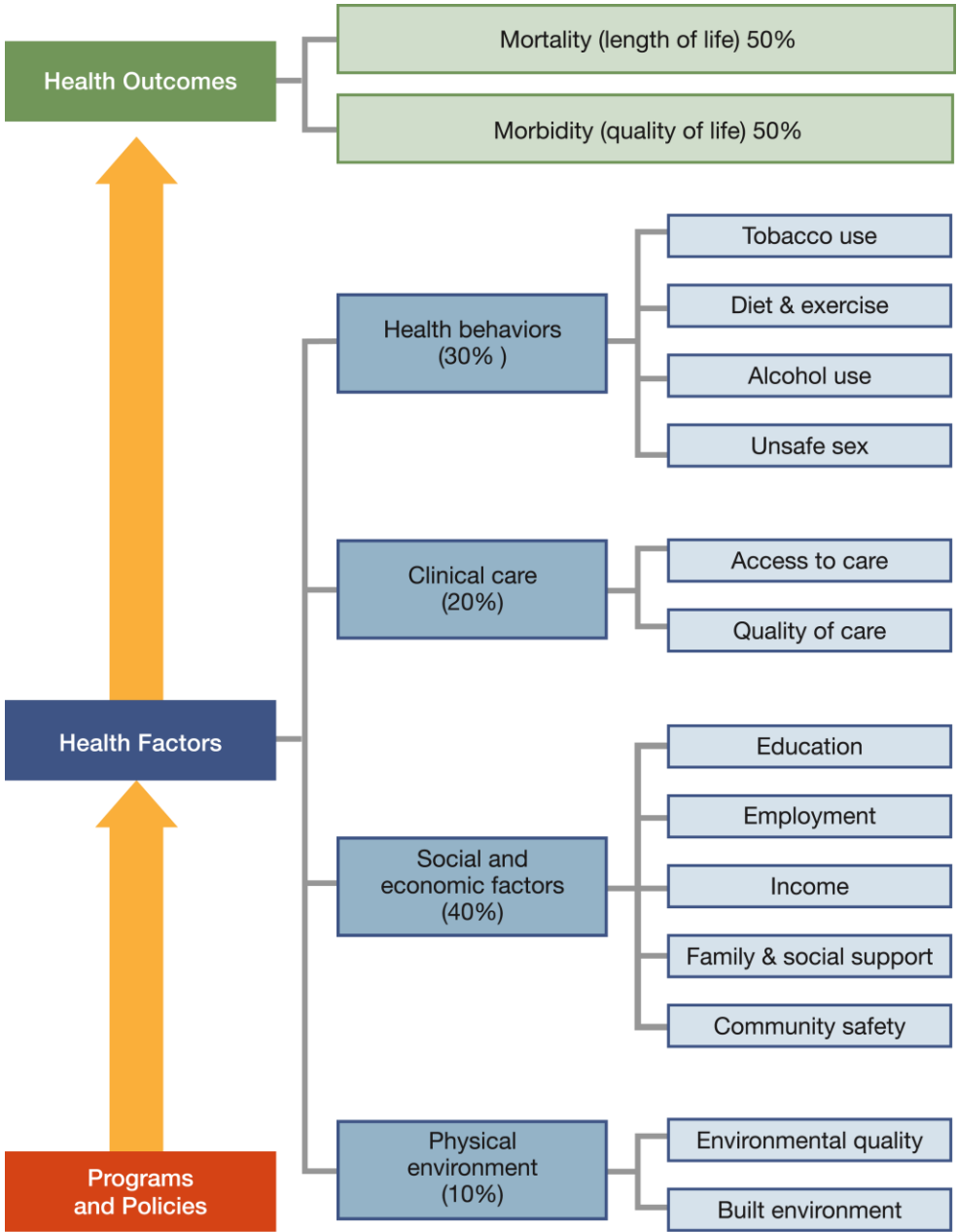
Institute of Medicine, 2002

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 California 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.

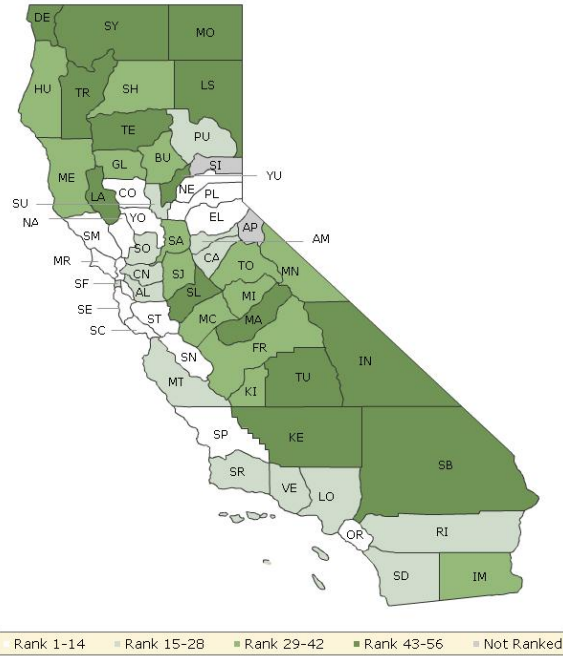


County Health Rankings model ©2010 UWPHI

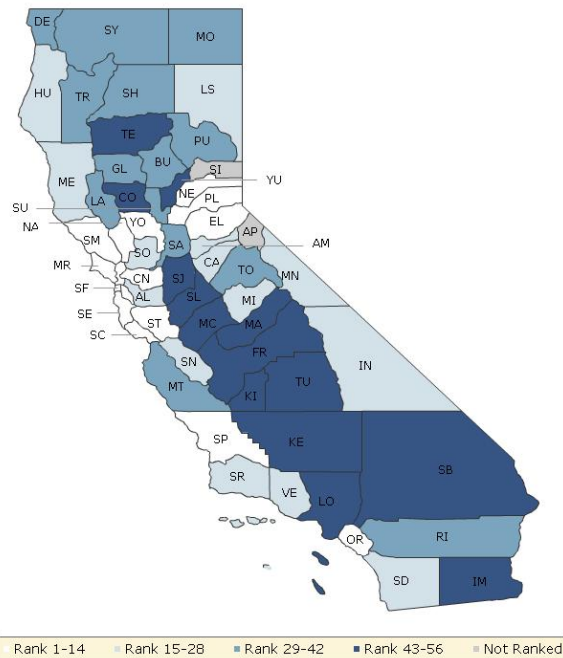
The maps on this page display California's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health 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	Marin	1	Marin
2	San Benito	2	Placer
3	Colusa	3	Santa Clara
4	Santa Clara	4	San Mateo
5	San Mateo	5	Nevada
6	Placer	6	El Dorado
7	Orange	7	San Luis Obispo
8	Santa Cruz	8	Santa Cruz
9	Sonoma	9	Orange
10	El Dorado	10	Napa
11	San Luis Obispo	11	Sonoma
12	Yolo	12	San Francisco
13	Napa	13	Contra Costa
14	Nevada	14	Yolo
15	San Diego	15	Alameda
16	Monterey	16	Ventura
17	Ventura	17	Santa Barbara
18	Amador	18	Mono
19	Contra Costa	19	San Diego
20	Santa Barbara	20	Inyo
21	Sutter	21	San Benito
22	Calaveras	22	Amador
23	Alameda	23	Calaveras
24	San Francisco	24	Mariposa
25	Plumas	25	Mendocino
26	Los Angeles	26	Humboldt
27	Riverside	27	Lassen
28	Solano	28	Solano
29	Tuolumne	29	Monterey
30	Glenn	30	Siskiyou
31	Kings	31	Plumas
32	Sacramento	32	Tuolumne
33	Mendocino	33	Butte
34	Mariposa	34	Sacramento
35	Butte	35	Sutter
36	Mono	36	Modoc
37	Shasta	37	Shasta
38	San Joaquin	38	Del Norte
39	Imperial	39	Trinity
40	Merced	40	Riverside

Rank	Health Outcomes	Rank	Health Factors
41	Fresno	41	Glenn
42	Humboldt	42	Lake
43	Stanislaus	43	Stanislaus
44	Lassen	44	Los Angeles
45	San Bernardino	45	Kings
46	Tehama	46	Colusa
47	Modoc	47	Madera
48	Madera	48	Tehama
49	Tulare	49	Merced
50	Inyo	50	San Bernardino
51	Kern	51	San Joaquin
52	Yuba	52	Yuba
53	Trinity	53	Fresno
54	Lake	54	Imperial
55	Siskiyou	55	Kern
56	Del Norte	56	Tulare

Not Ranked: Alpine, Sierra

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	Marin	Colusa
2	Santa Clara	San Benito
3	San Mateo	Marin
4	Orange	Amador
5	San Benito	Placer
6	Santa Cruz	El Dorado
7	Placer	Santa Cruz
8	Sonoma	Glenn
9	Ventura	Nevada
10	Colusa	Mendocino
11	Monterey	Orange
12	Contra Costa	Yolo
13	Santa Barbara	Tuolumne
14	San Luis Obispo	Calaveras
15	San Diego	San Mateo
16	Napa	San Luis Obispo
17	Yolo	Plumas
18	Alameda	Napa
19	El Dorado	Santa Clara
20	Los Angeles	Butte
21	San Francisco	Modoc
22	Nevada	Sutter
23	Mono	Sonoma
24	Sutter	Shasta
25	Calaveras	Trinity
26	Solano	San Diego
27	Plumas	Mariposa
28	Imperial	Monterey
29	Amador	Humboldt
30	Riverside	Ventura
31	Madera	San Francisco
32	Sacramento	Riverside
33	Kings	Kings
34	San Joaquin	Contra Costa
35	Merced	Santa Barbara
36	Fresno	Alameda
37	San Bernardino	Sacramento
38	Stanislaus	Solano
39	Mariposa	Lassen
40	Lassen	Inyo

Rank	Mortality	Morbidity
41	Tehama	Fresno
42	Tuolumne	Tehama
43	Tulare	Merced
44	Butte	San Joaquin
45	Humboldt	Lake
46	Glenn	Stanislaus
47	Shasta	Tulare
48	Kern	San Bernardino
49	Mendocino	Los Angeles
50	Inyo	Yuba
51	Modoc	Del Norte
52	Siskiyou	Imperial
53	Yuba	Kern
54	Del Norte	Mono
55	Lake	Siskiyou
56	Trinity	Madera

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	Santa Clara	Marin	Marin	Contra Costa
2	Santa Cruz	Inyo	Placer	Lake
3	Marin	Yolo	Santa Clara	Mono
4	Placer	Placer	Nevada	Plumas
5	San Benito	San Francisco	San Mateo	San Benito
6	Napa	Sonoma	El Dorado	Lassen
7	San Mateo	San Luis Obispo	San Luis Obispo	San Mateo
8	Nevada	Siskiyou	Orange	Imperial
9	Orange	San Mateo	Ventura	Solano
10	San Francisco	Santa Clara	Napa	Siskiyou
11	San Luis Obispo	El Dorado	Sonoma	Placer
12	Alameda	Amador	Contra Costa	Alameda
13	El Dorado	Humboldt	Calaveras	Sutter
14	Sonoma	Contra Costa	Santa Cruz	Mendocino
15	Monterey	Nevada	San Diego	Monterey
16	Santa Barbara	Tuolumne	Mono	Shasta
17	Mendocino	Ventura	Mariposa	Madera
18	Yolo	Shasta	Santa Barbara	Stanislaus
19	Contra Costa	Santa Cruz	San Francisco	Tuolumne
20	Los Angeles	San Diego	Yolo	San Joaquin
21	Mono	Mendocino	Solano	Colusa
22	Calaveras	Lassen	Amador	Trinity
23	San Diego	Napa	Alameda	Yuba
24	Mariposa	Alameda	Humboldt	Glenn
25	Modoc	Del Norte	Plumas	Humboldt
26	Inyo	Sacramento	Inyo	Orange
27	Ventura	Orange	Tuolumne	Kings
28	Lassen	Santa Barbara	Lassen	Sonoma
29	Trinity	Butte	Butte	Marin
30	Imperial	Solano	Sacramento	Tehama
31	Colusa	Lake	Riverside	Amador
32	Tehama	Mariposa	Siskiyou	Yolo
33	Plumas	Monterey	San Benito	Nevada
34	Sutter	Merced	Shasta	Santa Clara
35	Humboldt	Sutter	Mendocino	Santa Barbara
36	Riverside	Mono	Glenn	Merced
37	Kings	Modoc	San Bernardino	Santa Cruz
38	Glenn	Fresno	Monterey	Inyo
39	Amador	San Joaquin	Sutter	Calaveras
40	Madera	Calaveras	Stanislaus	San Diego

Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
41	Sacramento	Stanislaus	Del Norte	San Francisco
42	Solano	Kern	Modoc	Butte
43	Del Norte	Tehama	Trinity	San Luis Obispo
44	Butte	Trinity	Colusa	El Dorado
45	Siskiyou	San Benito	Los Angeles	Modoc
46	Lake	Plumas	Kings	Del Norte
47	Yuba	Tulare	Lake	Ventura
48	San Bernardino	Madera	Kern	Mariposa
49	Fresno	Yuba	Madera	Sacramento
50	Merced	Riverside	San Joaquin	Napa
51	Tuolumne	Kings	Yuba	Tulare
52	Stanislaus	Los Angeles	Merced	Riverside
53	San Joaquin	Imperial	Fresno	Los Angeles
54	Shasta	San Bernardino	Tehama	San Bernardino
55	Tulare	Glenn	Tulare	Fresno
56	Kern	Colusa	Imperial	Kern

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.

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