







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.

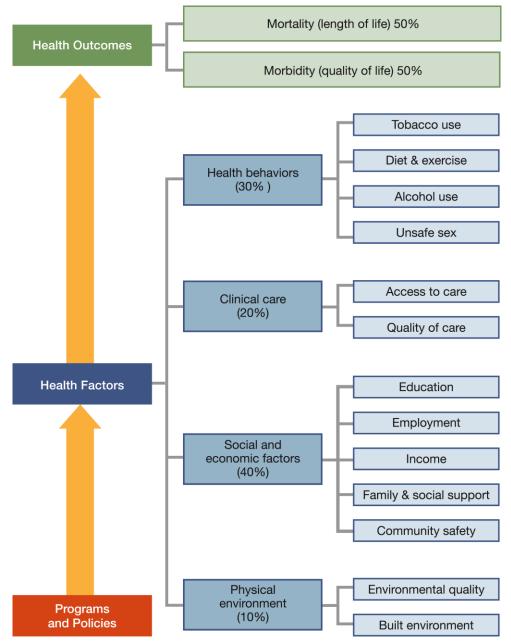
To compile the *Rankings*, we built on our prior work in Wisconsin, obtained input from a team of expert advisors, and worked closely with staff from the National Center for Health Statistics. Together we selected a number of population health measures based on scientific relevance, importance, and availability 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

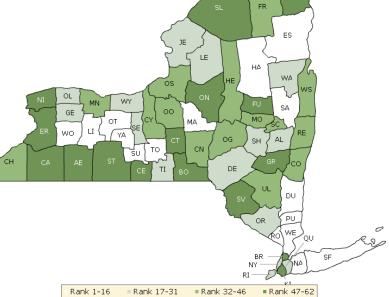
This report ranks New York counties according to their summary measures of **health outcomes** and **health factors**, as well as the components used to create each summary measure. The figure below depicts the structure of the *Rankings* model. Counties receive a rank for each population health component;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

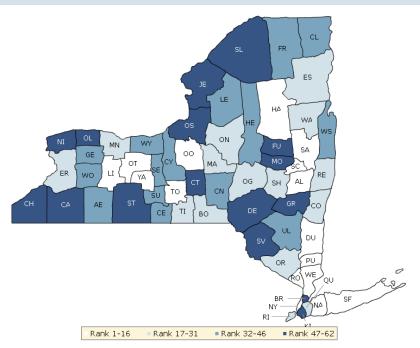


County Health Rankings model ©2010 UWPHI

The maps on this page display New York'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 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	Putnam	1	Nassau
2	Saratoga	2	Westchester
3	Schuyler	3	Saratoga
4	Tompkins	4	Tompkins
5	Rockland	5	Putnam
6	Nassau	6	Rockland
7	Ontario	7	Suffolk
8	Livingston	8	Ontario
9	Westchester	9	New York
10	Yates	10	Albany
11	Hamilton	11	Dutchess
12	Wyoming	12	Livingston
13	Dutchess	13	Yates
14	Essex	14	Onondaga
15	Suffolk	15	Hamilton
16	Madison	16	Schenectady
17	Schoharie	17	Tioga
18	Warren	18	Richmond
19	Orange	19	Warren
20	Queens	20	Madison
21	Genesee	21	Columbia
22	Tioga	22	Monroe
23	Lewis	23	Broome
24	Orleans	24	Orange
25	New York	25	Erie
26	Seneca	26	Otsego
27	Albany	27	Rensselaer
28	Richmond	28	Oneida
29	Jefferson	29	Essex
30	Wayne	30	Queens
31	Delaware	31	Schoharie
32	Otsego	32	Lewis
33	Monroe	33	Genesee
34	Schenectady	34	Ulster
35	Ulster	35	Schuyler
36	Chenango	36	Washington
37	Montgomery	37	Wyoming
38	Cayuga	38	Wayne
39	Rensselaer	39	Chenango
40	Onondaga	40	Cayuga

Rank	Health Outcomes	Rank	Health Factors
41	Oswego	41	Herkimer
42	Franklin	42	Clinton
43	Columbia	43	Allegany
44	Herkimer	44	Franklin
45	Washington	45	Chemung
46	Chautauqua	46	Seneca
47	Clinton	47	Cortland
48	Broome	48	Greene
49	Allegany	49	Niagara
50	Fulton	50	Delaware
51	Cortland	51	Chautauqua
52	Steuben	52	Steuben
53	Oneida	53	Kings
54	Cattaraugus	54	Montgomery
55	St. Lawrence	55	Orleans
56	Erie	56	Cattaraugus
57	Niagara	57	Fulton
58	Kings	58	Jefferson
59	Chemung	59	Sullivan
60	Greene	60	St. Lawrence
61	Sullivan	61	Oswego
62	Bronx	62	Bronx

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	Mortolity	Morbidity	
1	Mortality Nassau	Livingston	
2	Tompkins	Ontario	
3	Rockland	Wyoming	
4	Westchester	Saratoga	
5	Putnam	Yates	
6	Hamilton	Schuyler	
7	Saratoga	Essex	
8	Schuyler	Warren	
9	Queens	Putnam	
10	New York	Lewis	
11	Suffolk	Dutchess	
12	Madison	Tompkins	
13	Dutchess	Schoharie	
14	Orleans	Jefferson	
15	Ontario	Delaware	
16	Livingston	Genesee	
17	Yates	Rockland	
18	Tioga	Albany	
19	Richmond	Orange	
20	Orange	Westchester	
21	Wyoming	Nassau	
22	Otsego	Montgomery	
23	Schoharie	Schenectady	
24	Monroe	Columbia	
25	Essex	Suffolk	
26	Seneca	Madison	
27	Genesee	Chenango	
28	Rensselaer	Seneca	
29	Wayne	Ulster	
30	Franklin	Hamilton	
31	Onondaga	Wayne	
32	Albany	Allegany	
33	Cayuga	Tioga	
34	Ulster	Cattaraugus	
35	Chautauqua	Herkimer	
36	Clinton	Broome	
37	Jefferson	Oswego	
38	Chenango	Cayuga	
39	Schenectady	Monroe	
40	Oswego	St. Lawrence	

Rank	Mortality	Morbidity
41	Lewis	Washington
42	Washington	Richmond
43	Chemung	Otsego
44	Delaware	Orleans
45	Montgomery	Onondaga
46	Warren	Greene
47	Kings	Rensselaer
48	Herkimer	Erie
49	Fulton	Clinton
50	Cortland	Sullivan
51	Oneida	Steuben
52	Columbia	Chautauqua
53	Steuben	Franklin
54	Broome	Cortland
55	Niagara	Queens
56	Allegany	Fulton
57	Erie	Niagara
58	St. Lawrence	Oneida
59	Cattaraugus	New York
60	Greene	Kings
61	Bronx	Chemung
62	Sullivan	Bronx

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	Westchester	1	Monroe	1	Putnam	1	Warren
2	New York	2	Onondaga	2	Saratoga	2	Tompkins
3	Nassau	3	New York	3	Nassau	3	Onondaga
4	Tompkins	4	Schenectady	4	Tompkins	4	Putnam
5	Rockland	5	Albany	5	Suffolk	5	Dutchess
6	Queens	6	Broome	6	Ontario	6	Saratoga
7	Kings	7	Saratoga	7	Rockland	7	Schenectady
8	Putnam	8	Warren	8	Hamilton	8	Rockland
9	Yates	9	Westchester	9	Westchester	9	Westchester
10	Suffolk	10	Ontario	10	Livingston	10	Columbia
11	Saratoga	11	Nassau	11	Dutchess	11	Broome
12	Richmond	12	Erie	12	Tioga	12	Greene
13	Essex	13	Rockland	13	Albany	13	Nassau
14	Dutchess	14	Tioga	14	Genesee	14	Livingston
15	Columbia	15	Richmond	15	Madison	15	Monroe
16	Albany	16	Montgomery	16	Rensselaer	16	Albany
17	Hamilton	17	Oneida	17	Orange	17	Chemung
18	Schoharie	18	Chemung	18	Yates	17	Ontario
19	Erie	19	Madison	19	Ulster	19	Fulton
20	Livingston	20	Chautauqua	20	Warren	20	Oneida
21	Wyoming	21	Otsego	21	Richmond	21	Ulster
22	Ontario	22	Seneca	22	Wayne	22	Essex
23	Lewis	23	Yates	23	Columbia	23	Herkimer
24	Schenectady	24	Suffolk	24	Onondaga	24	Washington
25	Orange	25	Livingston	25	Otsego	25	Tioga
26	Clinton	26	Dutchess	26	Washington	26	Cortland
27	Franklin	27	Chenango	27	Schuyler	27	Wyoming
28	Schuyler	28	Rensselaer	28	Seneca	28	Madison
29	Chenango	29	Fulton	29	Schoharie	29	Wayne
30	Oneida	30	Tompkins	30	Broome	30	Otsego
31	Delaware	31	Clinton	31	Schenectady	31	Allegany
32	Otsego	32	Steuben	32	Monroe	32	Cattaraugus
33	Chemung	33	Putnam	33	Wyoming	33	Orange
34	Cayuga	34	Franklin	34	Lewis	34	Franklin
35	Madison	35	Ulster	35	Essex	35	Seneca
36	Onondaga	36	Lewis	36	Oneida	36	Delaware
37	Allegany	37	Cayuga	37	Herkimer	37	Rensselaer
38	Tioga	38	Wayne	38	New York	38	Yates
39	Broome	39	Washington	39	Queens	39	Erie
40	Monroe	40	Columbia	40	Allegany	40	Sullivan

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
41	Rensselaer	41	Sullivan	41	Cayuga	41	Suffolk
42	Cortland	42	Cortland	42	Erie	42	Oswego
43	Niagara	43	Allegany	43	Niagara	43	Chenango
44	Herkimer	44	Greene	44	Jefferson	44	Niagara
45	Greene	45	Hamilton	45	Steuben	45	Genesee
46	Genesee	46	Herkimer	46	Orleans	46	Cayuga
47	Washington	47	Orange	47	Clinton	47	Steuben
48	Warren	48	Niagara	48	Cortland	48	New York
49	Bronx	49	Schoharie	49	Greene	49	Montgomery
50	Montgomery	50	Schuyler	50	Chenango	50	St. Lawrence
51	Ulster	51	Jefferson	51	Chautauqua	51	Lewis
52	Cattaraugus	52	Genesee	52	Delaware	52	Schuyler
53	Wayne	53	Oswego	53	Oswego	53	Schoharie
54	Chautauqua	54	Kings	54	Cattaraugus	54	Hamilton
55	St. Lawrence	55	Essex	55	Franklin	55	Jefferson
56	Sullivan	56	Queens	56	Chemung	56	Orleans
57	Orleans	57	Delaware	57	St. Lawrence	57	Clinton
58	Fulton	58	Bronx	58	Sullivan	58	Chautauqua
59	Steuben	59	St. Lawrence	59	Fulton	59	Kings
60	Seneca	60	Orleans	60	Montgomery	60	Queens
61	Jefferson	61	Wyoming	61	Kings	61	Bronx
62	Oswego	62	Cattaraugus	62	Bronx	62	Richmond

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	200
	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 FACT	TORS		
Education	High school graduation	National Center for Education Statistics ¹	2006-200
	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 ENVIRONME	NT		
Air Quality ³	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	200
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2000
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.



countyhealthrankings.org

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