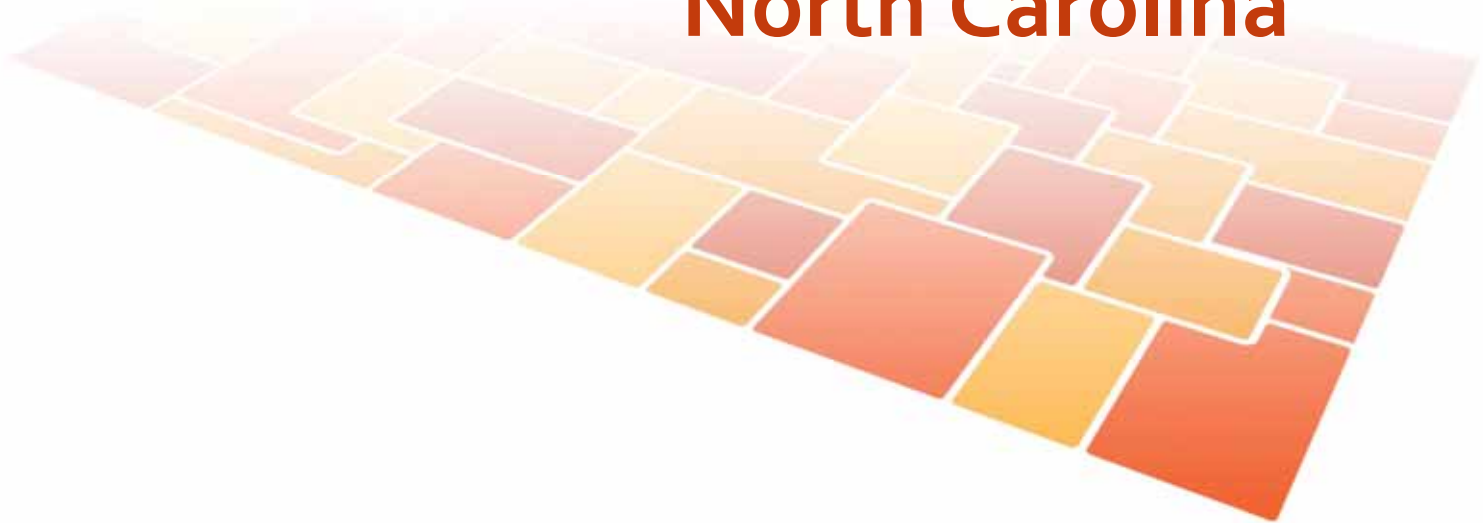


**County Health
Rankings & Roadmaps**

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

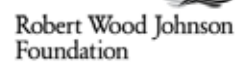
2017 County Health Rankings
North Carolina



A collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.



Support provided by

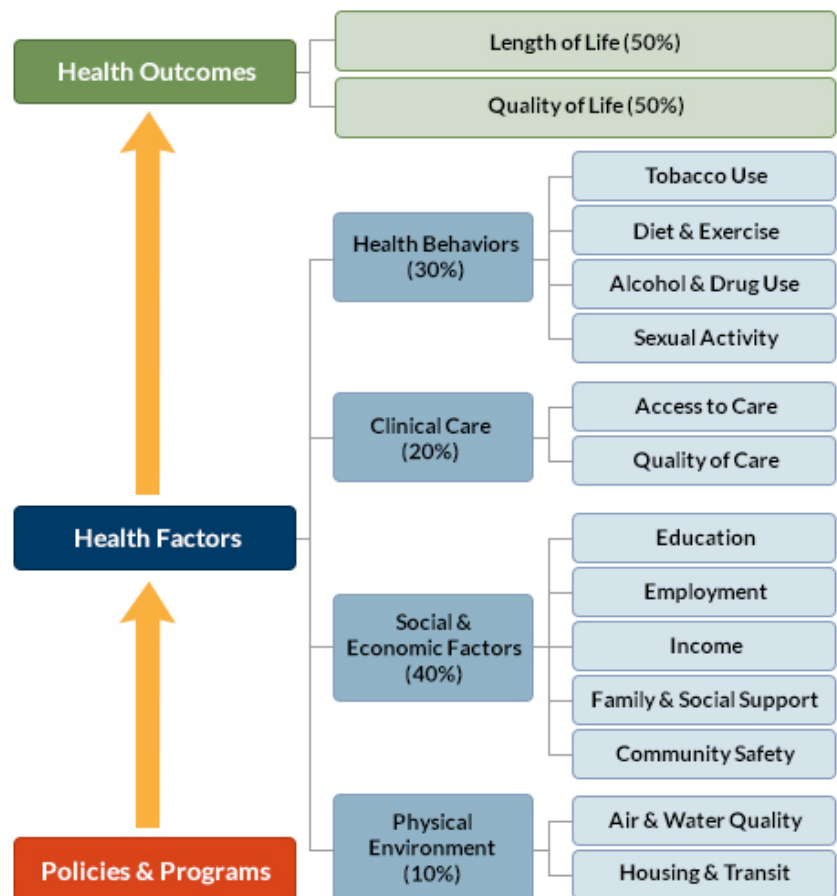


INTRODUCTION

The *County Health Rankings & Roadmaps* program brings actionable data and strategies to communities to make it easier for people to be healthy in their homes, schools, workplaces, and neighborhoods. Ranking the health of nearly every county in the nation, the *County Health Rankings* illustrate what we know when it comes to what is making people sick or healthy. The *Roadmaps* show what we can do to create healthier places to live, learn, work, and play. The Robert Wood Johnson Foundation (RWJF) collaborates with the University of Wisconsin Population Health Institute (UWPHI) to bring this program to cities, counties, and states across the nation.

WHAT ARE THE COUNTY HEALTH RANKINGS?

Published online at countyhealthrankings.org, the *Rankings* help counties understand what influences how healthy residents are and how long they will live. The *Rankings* are unique in their ability to measure the current overall health of nearly every county in all 50 states. They also look at a variety of measures that affect the future health of communities, such as high school graduation rates, access to healthy foods, rates of smoking, obesity, and teen births. Communities use the *Rankings* to help identify issues and opportunities for local health improvement, as well as to garner support for initiatives among government agencies, healthcare providers, community organizations, business leaders, policy makers, and the public.



DIGGING DEEPER INTO HEALTH DATA

Although we know that a range of factors are important for good health, every state has communities that lack both opportunities to shape good health and strong policies to promote health for everyone. Some counties lag far behind others in how well and how long people live – which we refer to as a “health gap.” Find out what’s driving health differences across your state and what can be done to close those gaps. Visit countyhealthrankings.org/reports.

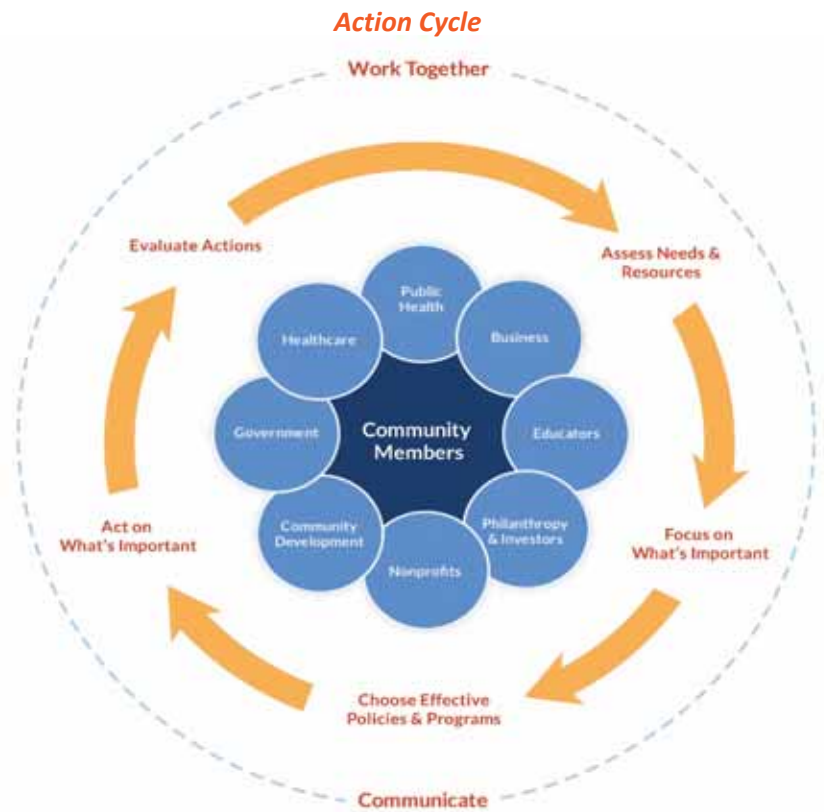
To further explore health gaps and other data sources in your community, check out the feature to [find more data](#) for your state and [dig deeper](#) on differences in health factors by geography or by population sub-groups. Visit countyhealthrankings.org/using-the-rankings-data.

MOVING FROM DATA TO ACTION

Roadmaps to Health help communities bring people together to look at the many factors that influence health and opportunities to reduce health gaps, select strategies that can improve health for all, and make changes that will have a lasting impact. The *Roadmaps* focus on helping communities move from *awareness* about their county's ranking to *actions* designed to improve everyone's health. The *Roadmaps to Health* Action Center is a one-stop shop of information to help any community member or leader who wants to improve their community's health by addressing factors that we know influence health, such as education, income, and community safety.

Within the Action Center you will find:

- Online step-by-step guidance and tools to move through the Action Cycle
- [What Works for Health](#) – a searchable database of evidence-informed policies and programs that can improve health
- Webinars featuring local community members who share their tips on how to build a healthier community
- Community coaches, located across the nation, who provide customized consultation to local leaders who request guidance in how to accelerate their efforts to improve health. You can contact a coach by activating the Get Help button at countyhealthrankings.org



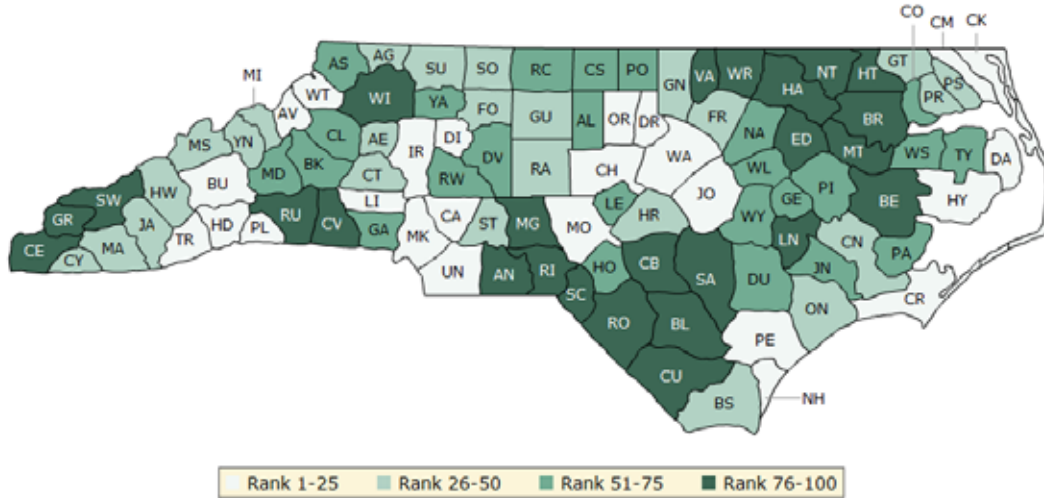
HOW CAN YOU GET INVOLVED?

You might want to contact your local affiliate of United Way Worldwide, the National Association of Counties, Local Initiatives Support Corporation (LISC), or Neighborworks— their national parent organizations have partnered with us to raise awareness and stimulate action to improve health in their local members' communities. By connecting with other leaders interested in improving health, you can make a difference in your community. In communities large and small, people from all walks of life are taking ownership and action to improve health. Visit countyhealthrankings.org to get ideas and guidance on how you can take action in your community. Working with others, you can improve the health of your community.

HOW DO COUNTIES RANK FOR HEALTH OUTCOMES?

The green map below shows the distribution of North Carolina's **health outcomes**, based on an equal weighting of length and quality of life.

Lighter shades indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available at countyhealthrankings.org.

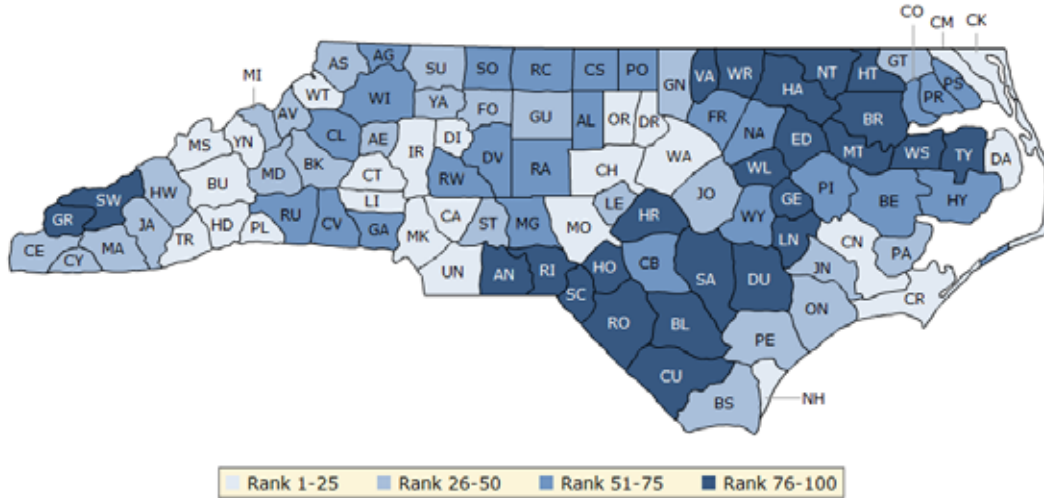


County	Rank	County	Rank	County	Rank	County	Rank
Alamance	51	Cumberland	79	Johnston	21	Randolph	39
Alexander	30	Currituck	10	Jones	68	Richmond	87
Alleghany	33	Dare	6	Lee	55	Robeson	100
Anson	89	Davidson	61	Lenoir	88	Rockingham	75
Ashe	53	Davie	12	Lincoln	18	Rowan	73
Avery	22	Duplin	52	Macon	38	Rutherford	77
Beaufort	78	Durham	15	Madison	37	Sampson	80
Bertie	86	Edgecombe	98	Martin	85	Scotland	99
Bladen	91	Forsyth	36	McDowell	62	Stanly	40
Brunswick	44	Franklin	46	Mecklenburg	8	Stokes	31
Buncombe	25	Gaston	71	Mitchell	42	Surry	50
Burke	56	Gates	27	Montgomery	76	Swain	92
Cabarrus	14	Graham	90	Moore	19	Transylvania	17
Caldwell	67	Granville	34	Nash	66	Tyrrell	74
Camden	4	Greene	63	New Hanover	11	Union	3
Carteret	23	Guilford	29	Northampton	94	Vance	95
Caswell	54	Halifax	96	Onslow	26	Wake	1
Catawba	41	Harnett	49	Orange	2	Warren	84
Chatham	9	Haywood	48	Pamlico	70	Washington	58
Cherokee	83	Henderson	13	Pasquotank	45	Watauga	5
Chowan	57	Hertford	93	Pender	20	Wayne	69
Clay	32	Hoke	60	Perquimans	47	Wilkes	81
Cleveland	82	Hyde	7	Person	64	Wilson	72
Columbus	97	Iredell	24	Pitt	59	Yadkin	65
Craven	35	Jackson	28	Polk	16	Yancey	43

HOW DO COUNTIES RANK FOR HEALTH FACTORS?

The blue map displays North Carolina’s summary ranks for **health factors**, based on weighted scores for health behaviors, clinical care, social and economic factors, and the physical environment.

Lighter shades indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available at countyhealthrankings.org



County	Rank	County	Rank	County	Rank	County	Rank
Alamance	57	Cumberland	67	Johnston	34	Randolph	52
Alexander	37	Currituck	19	Jones	38	Richmond	96
Alleghany	54	Dare	9	Lee	49	Robeson	100
Anson	87	Davidson	53	Lenoir	81	Rockingham	74
Ashe	50	Davie	15	Lincoln	24	Rowan	64
Avery	39	Duplin	83	Macon	28	Rutherford	69
Beaufort	63	Durham	20	Madison	25	Sampson	84
Bertie	77	Edgecombe	98	Martin	85	Scotland	99
Bladen	93	Forsyth	43	McDowell	46	Stanly	36
Brunswick	30	Franklin	66	Mecklenburg	10	Stokes	55
Buncombe	5	Gaston	61	Mitchell	41	Surry	47
Burke	33	Gates	44	Montgomery	72	Swain	88
Cabarrus	11	Graham	80	Moore	14	Transylvania	12
Caldwell	59	Granville	45	Nash	68	Tyrrell	86
Camden	4	Greene	82	New Hanover	13	Union	3
Carteret	16	Guilford	27	Northampton	92	Vance	97
Caswell	75	Halifax	94	Onslow	35	Wake	2
Catawba	22	Harnett	76	Orange	1	Warren	95
Chatham	8	Haywood	26	Pamlico	40	Washington	78
Cherokee	32	Henderson	7	Pasquotank	60	Watauga	17
Chowan	73	Hertford	79	Pender	31	Wayne	70
Clay	29	Hoke	91	Perquimans	51	Wilkes	58
Cleveland	65	Hyde	56	Person	62	Wilson	90
Columbus	89	Iredell	18	Pitt	71	Yadkin	42
Craven	23	Jackson	48	Polk	6	Yancey	21

2017 COUNTY HEALTH RANKINGS: MEASURES AND NATIONAL/STATE RESULTS

Measure	Description	US Median	State Overall	State Minimum	State Maximum
HEALTH OUTCOMES					
Premature death	Years of potential life lost before age 75 per 100,000 population	7,700	7,200	4,300	12,100
Poor or fair health	% of adults reporting fair or poor health	16%	18%	13%	30%
Poor physical health days	Average # of physically unhealthy days reported in past 30 days	3.8	4.0	3.2	5.6
Poor mental health days	Average # of mentally unhealthy days reported in past 30 days	3.8	3.7	3.1	4.9
Low birthweight	% of live births with low birthweight (< 2500 grams)	8%	9%	6%	14%
HEALTH FACTORS					
HEALTH BEHAVIORS					
Adult smoking	% of adults who are current smokers	17%	19%	14%	27%
Adult obesity	% of adults that report a BMI \geq 30	31%	30%	23%	41%
Food environment index	Index of factors that contribute to a healthy food environment, (0-10)	7.3	6.8	4.2	8.4
Physical inactivity	% of adults aged 20 and over reporting no leisure-time physical activity	26%	24%	17%	34%
Access to exercise opportunities	% of population with adequate access to locations for physical activity	62%	75%	6%	100%
Excessive drinking	% of adults reporting binge or heavy drinking	17%	15%	11%	21%
Alcohol-impaired driving deaths	% of driving deaths with alcohol involvement	30%	32%	0%	56%
Sexually transmitted infections	# of newly diagnosed chlamydia cases per 100,000 population	294.8	478.7	39.5	1,292.2
Teen births	# of births per 1,000 female population ages 15-19	38	36	8	67
CLINICAL CARE					
Uninsured	% of population under age 65 without health insurance	14%	15%	11%	23%
Primary care physicians	Ratio of population to primary care physicians	2,030:1	1,410:1	10,320:1	530:1
Dentists	Ratio of population to dentists	2,570:1	1,890:1	13,170:1	510:1
Mental health providers	Ratio of population to mental health providers	1,105:1	490:1	11,430:1	170:1
Preventable hospital stays	# of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	56	49	28	94
Diabetes monitoring	% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	86%	89%	45%	93%
Mammography screening	% of female Medicare enrollees ages 67-69 that receive mammography screening	61%	68%	53%	81%
SOCIAL AND ECONOMIC FACTORS					
High school graduation	% of ninth-grade cohort that graduates in four years	88%	86%	73%	94%
Some college	% of adults ages 25-44 with some post-secondary education	57%	65%	27%	82%
Unemployment	% of population aged 16 and older unemployed but seeking work	5.3%	5.7%	4.3%	12.1%
Children in poverty	% of children under age 18 in poverty	22%	23%	13%	45%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.4	4.8	3.0	7.8
Children in single-parent households	% of children that live in a household headed by a single parent	32%	36%	22%	75%
Social associations	# of membership associations per 10,000 population	12.6	11.5	6.9	27.9
Violent crime	# of reported violent crime offenses per 100,000 population	198	342	62	707
Injury deaths	# of deaths due to injury per 100,000 population	77	65	38	126
PHYSICAL ENVIRONMENT					
Air pollution – particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	9.2	9.1	7.2	10.7
Drinking water violations	Indicator of the presence of health-related drinking water violations. Yes - indicates the presence of a violation, No - indicates no violation.	NA	NA	No	Yes
Severe housing problems	% of households with overcrowding, high housing costs, or lack of kitchen or plumbing facilities	14%	17%	11%	28%
Driving alone to work	% of workforce that drives alone to work	81%	81%	67%	93%
Long commute – driving alone	Among workers who commute in their car alone, % commuting > 30 minutes	30%	31%	17%	61%

2017 COUNTY HEALTH RANKINGS: DATA SOURCES AND YEARS OF DATA

	Measure	Data Source	Years of Data
HEALTH OUTCOMES			
Length of Life	Premature death	National Center for Health Statistics – Mortality files	2012-2014
Quality of Life	Poor or fair health	Behavioral Risk Factor Surveillance System	2015
	Poor physical health days	Behavioral Risk Factor Surveillance System	2015
	Poor mental health days	Behavioral Risk Factor Surveillance System	2015
	Low birthweight	National Center for Health Statistics – Natality files	2008-2014
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco Use	Adult smoking	Behavioral Risk Factor Surveillance System	2015
Diet and Exercise	Adult obesity	CDC Diabetes Interactive Atlas	2013
	Food environment index	USDA Food Environment Atlas, Map the Meal Gap	2010 & 2014
	Physical inactivity	CDC Diabetes Interactive Atlas	2013
	Access to exercise opportunities	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	2010 & 2014
Alcohol and Drug Use	Excessive drinking	Behavioral Risk Factor Surveillance System	2015
	Alcohol-impaired driving deaths	Fatality Analysis Reporting System	2011-2015
Sexual Activity	Sexually transmitted infections	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2014
	Teen births	National Center for Health Statistics - Natality files	2008-2014
CLINICAL CARE			
Access to Care	Uninsured	Small Area Health Insurance Estimates	2014
	Primary care physicians	Area Health Resource File/American Medical Association	2014
	Dentists	Area Health Resource File/National Provider Identification file	2015
	Mental health providers	CMS, National Provider Identification file	2016
Quality of Care	Preventable hospital stays	Dartmouth Atlas of Health Care	2014
	Diabetes monitoring	Dartmouth Atlas of Health Care	2014
	Mammography screening	Dartmouth Atlas of Health Care	2014
SOCIAL AND ECONOMIC FACTORS			
Education	High school graduation	EDFacts ¹	2014-2015
	Some college	American Community Survey	2011-2015
Employment	Unemployment	Bureau of Labor Statistics	2015
Income	Children in poverty	Small Area Income and Poverty Estimates	2015
	Income inequality	American Community Survey	2011-2015
Family and Social Support	Children in single-parent households	American Community Survey	2011-2015
	Social associations	County Business Patterns	2014
Community Safety	Violent crime	Uniform Crime Reporting – FBI	2012-2014
	Injury deaths	CDC WONDER mortality data	2011-2015
PHYSICAL ENVIRONMENT			
Air and Water Quality	Air pollution - particulate matter ²	CDC National Environmental Public Health Tracking Network	2012
	Drinking water violations	Safe Drinking Water Information System	FY2013-14
Housing and Transit	Severe housing problems	Comprehensive Housing Affordability Strategy (CHAS) data	2009-2013
	Driving alone to work	American Community Survey	2011-2015
	Long commute – driving alone	American Community Survey	2011-2015

¹ State sources used for California and Texas.

² 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

Marjory Givens, PhD, MSPH
Amanda Jovaag, MS
Julie Willems Van Dijk, PhD, RN

Suggested citation: University of Wisconsin Population Health Institute. *County Health Rankings 2017*.

This publication would not have been possible without the following contributions:

Data

Centers for Disease Control and Prevention: National Center for Health Statistics and National Center for Chronic Disease and Health Promotion
Dartmouth Institute for Health Policy & Clinical Practice
Measure of America

Research Assistance

Paige Andrews
Keith Gennuso, PhD
Kathryn Hatchell
Melissa Marver
Elizabeth Pollock
Jennifer Robinson
Matthew Rodock, MPH
Anne Roubal, MS, PhD

Design and Communications

Forum One, Alexandria, VA
Burness
Kim Linsenmayer, MPA
Matthew Call

Communications and Outreach

Kate Kingery, MPA
Kitty Jerome, MA
Kate Konkle, MPH
Mary Bennett, MFA
Raquel Bournhonesque, MPH
Ericka Burroughs-Girardi, MA, MPH
Aliana Havrilla, MPA
Antonia Lewis, MPH, HO
Karen Odegaard, MPH
Jan O'Neill, MPA
Justin Rivas, MPH, MIPA
Attica Scott, MS
Jerry Spegman, JD
Janna West Kowalski, MS

Robert Wood Johnson Foundation

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

countyhealthrankings.org



University of Wisconsin Population Health Institute
610 Walnut St, #527, Madison, WI 53726
(608) 265-8240 / info@countyhealthrankings.org