

# County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

## 2017 County Health Rankings

# Virginia



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



Support provided by

Robert Wood Johnson Foundation

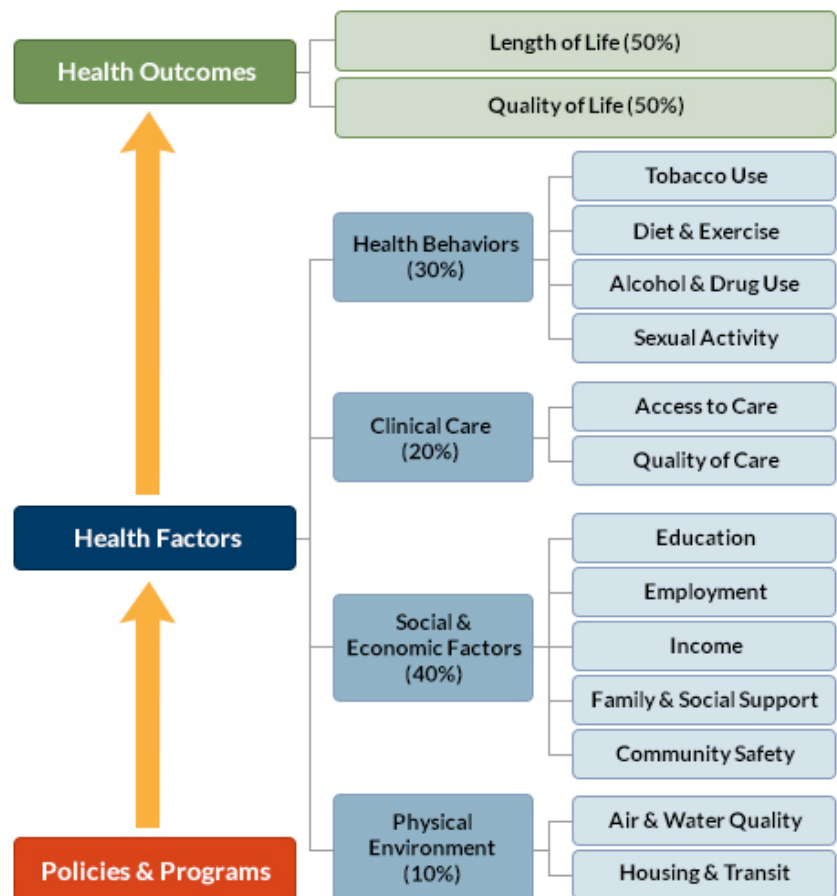


## INTRODUCTION

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](http://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](http://countyhealthrankings.org/reports).

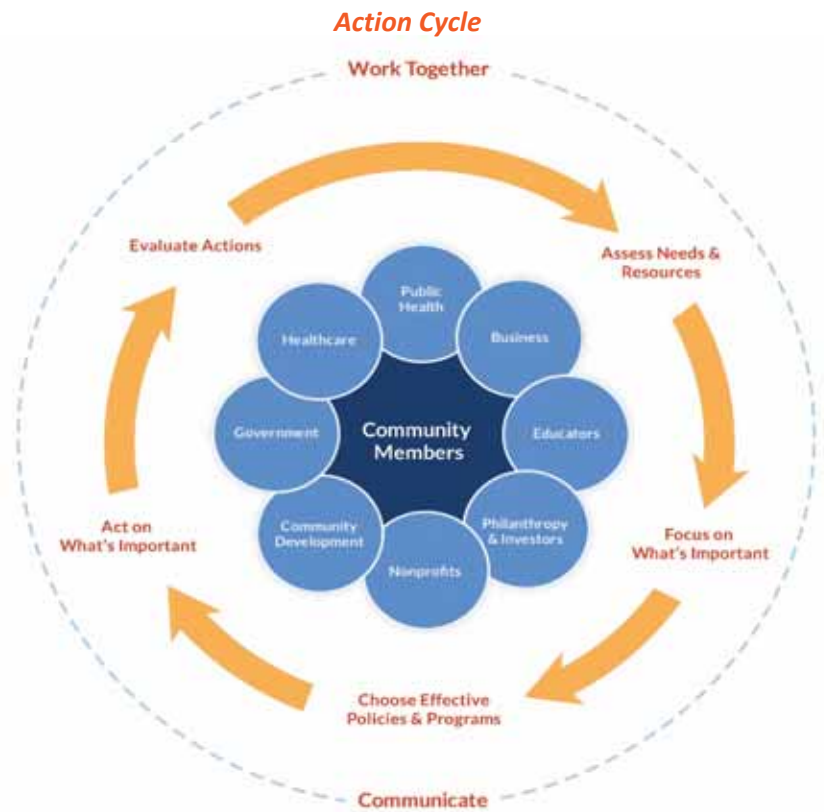
To further explore health gaps and other data sources in your community, check out the feature to [find more data](#) for your state and [dig deeper](#) on differences in health factors by geography or by population sub-groups. Visit [countyhealthrankings.org/using-the-rankings-data](http://countyhealthrankings.org/using-the-rankings-data).

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



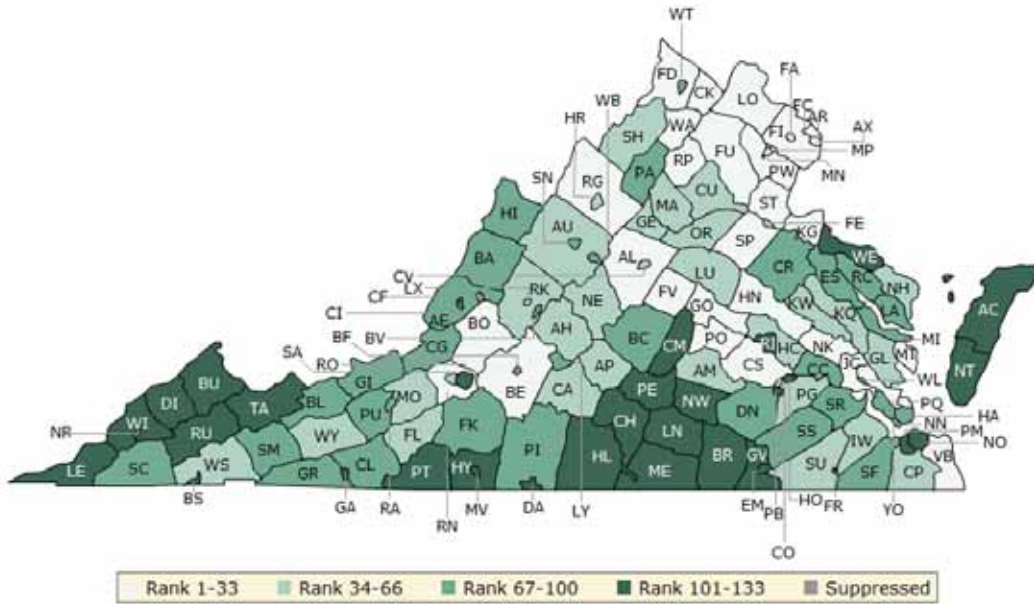
## HOW CAN YOU GET INVOLVED?

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](http://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 Virginia'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](http://countyhealthrankings.org).



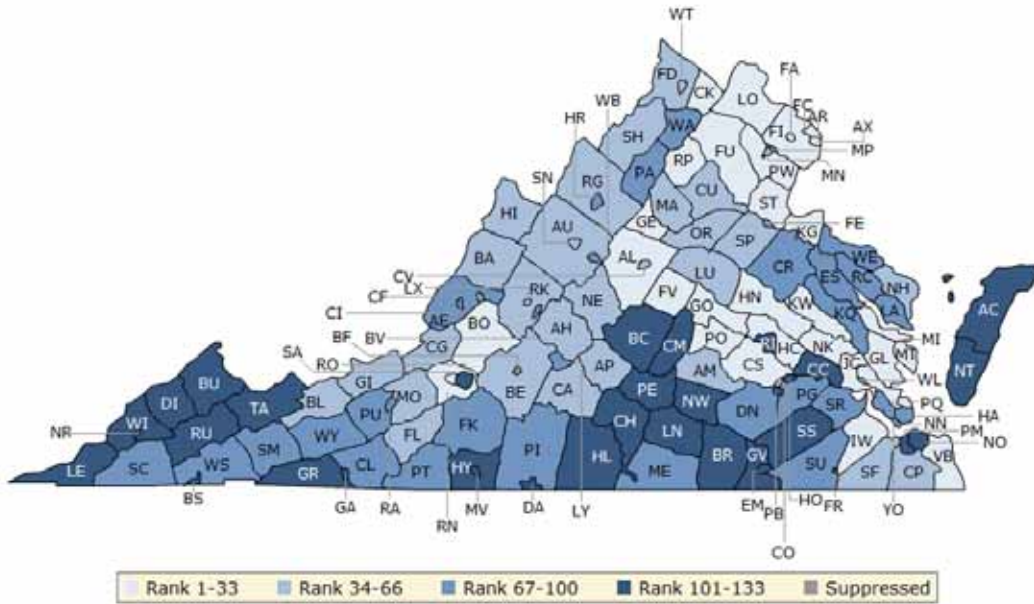
County	Rank	County	Rank	County	Rank	County	Rank
Accomack	105	Dinwiddie	85	Lee	117	Radford City	92
Albemarle	4	Emporia City	133	Lexington City	37	Rappahannock	18
Alexandria City	9	Essex	97	Loudoun	1	Richmond	87
Alleghany	95	Fairfax	2	Louisa	48	Richmond City	109
Amelia	60	Fairfax City	13	Lunenburg	113	Roanoke	30
Amherst	59	Falls Church City	6	Lynchburg City	82	Roanoke City	102
Appomattox	54	Fauquier	16	Madison	50	Rockbridge	36
Arlington	3	Floyd	39	Manassas City	28	Rockingham	23
Augusta	38	Fluvanna	17	Manassas Park City	12	Russell	114
Bath	79	Franklin	69	Martinsville City	131	Salem City	58
Bedford	31	Franklin City	124	Mathews	33	Scott	100
Bland	88	Frederick	20	Mecklenburg	111	Shenandoah	42
Botetourt	24	Fredericksburg City	49	Middlesex	74	Smyth	94
Bristol City	130	Galax City	115	Montgomery	35	Southampton	61
Brunswick	106	Giles	90	Nelson	66	Spotsylvania	29
Buchanan	128	Gloucester	45	New Kent	26	Stafford	8
Buckingham	72	Goochland	14	Newport News City	84	Staunton City	70
Buena Vista City	77	Grayson	76	Norfolk City	104	Suffolk City	68
Campbell	47	Greene	41	Northampton	120	Surry	86
Caroline	73	Greensville	116	Northumberland	52	Sussex	99
Carroll	78	Halifax	107	Norton City	63	Tazewell	119
Charles City	96	Hampton City	93	Nottoway	118	Virginia Beach City	22
Charlotte	110	Hanover	19	Orange	53	Warren	32
Charlottesville City	55	Harrisonburg City	46	Page	71	Washington	62
Chesapeake City	44	Henrico	34	Patrick	112	Waynesboro City	81
Chesterfield	25	Henry	122	Petersburg City	132	Westmoreland	101
Clarke	21	Highland	67	Pittsylvania	75	Williamsburg City	83

County	Rank	County	Rank	County	Rank	County	Rank
Colonial Heights City	64	Hopewell City	123	Poquoson City	5	Winchester City	80
Covington City	129	Isle of Wight	40	Portsmouth City	108	Wise	126
Craig	98	James City	10	Powhatan	15	Wythe	56
Culpeper	51	King and Queen	65	Prince Edward	103	York	7
Cumberland	121	King George	27	Prince George	43		
Danville City	127	King William	57	Prince William	11		
Dickenson	125	Lancaster	89	Pulaski	91		

## HOW DO COUNTIES RANK FOR HEALTH FACTORS?

The blue map displays Virginia’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](http://countyhealthrankings.org)



County	Rank	County	Rank	County	Rank	County	Rank
Accomack	108	Dinwiddie	90	Lee	128	Radford City	95
Albemarle	10	Emporia City	127	Lexington City	53	Rappahannock	30
Alexandria City	20	Essex	91	Loudoun	4	Richmond	70
Alleghany	88	Fairfax	3	Louisa	65	Richmond City	123
Amelia	60	Fairfax City	5	Lunenburg	103	Roanoke	12
Amherst	61	Falls Church City	1	Lynchburg City	89	Roanoke City	115
Appomattox	62	Fauquier	24	Madison	56	Rockbridge	47
Arlington	2	Floyd	34	Manassas City	59	Rockingham	35
Augusta	54	Fluvanna	19	Manassas Park City	67	Russell	116
Bath	40	Franklin	69	Martinsville City	130	Salem City	15
Bedford	41	Franklin City	124	Mathews	14	Scott	93
Bland	57	Frederick	39	Mecklenburg	94	Shenandoah	52
Botetourt	13	Fredericksburg City	81	Middlesex	27	Smyth	99
Bristol City	117	Galax City	107	Montgomery	37	Southampton	78
Brunswick	121	Giles	51	Nelson	63	Spotsylvania	48
Buchanan	132	Gloucester	31	New Kent	22	Stafford	21
Buckingham	110	Goochland	11	Newport News City	100	Staunton City	43
Buena Vista City	96	Grayson	101	Norfolk City	113	Suffolk City	58
Campbell	66	Greene	32	Northampton	111	Surry	77
Caroline	82	Greensville	120	Northumberland	44	Sussex	126
Carroll	79	Halifax	102	Norton City	86	Tazewell	114
Charles City	104	Hampton City	97	Nottoway	112	Virginia Beach City	28
Charlotte	109	Hanover	7	Orange	45	Warren	68
Charlottesville City	36	Harrisonburg City	74	Page	98	Washington	72
Chesapeake City	38	Henrico	23	Patrick	87	Waynesboro City	76
Chesterfield	18	Henry	118	Petersburg City	133	Westmoreland	92
Clarke	25	Highland	49	Pittsylvania	80	Williamsburg City	42

County	Rank	County	Rank	County	Rank	County	Rank
Colonial Heights City	46	Hopewell City	129	Poquoson City	6	Winchester City	64
Covington City	84	Isle of Wight	33	Portsmouth City	119	Wise	125
Craig	50	James City	9	Powhatan	17	Wythe	85
Culpeper	55	King and Queen	71	Prince Edward	106	York	8
Cumberland	105	King George	26	Prince George	75		
Danville City	122	King William	29	Prince William	16		
Dickenson	131	Lancaster	73	Pulaski	83		

## 2017 COUNTY HEALTH RANKINGS: MEASURES AND NATIONAL/STATE RESULTS

Measure	Description	US Median	State Overall	State Minimum	State Maximum
<b>HEALTH OUTCOMES</b>					
Premature death	Years of potential life lost before age 75 per 100,000 population	7,700	6,100	3,200	16,500
Poor or fair health	% of adults reporting fair or poor health	16%	15%	9%	28%
Poor physical health days	Average # of physically unhealthy days reported in past 30 days	3.8	3.2	2.5	4.8
Poor mental health days	Average # of mentally unhealthy days reported in past 30 days	3.8	3.3	2.6	4.2
Low birthweight	% of live births with low birthweight (< 2500 grams)	8%	8%	6%	18%
<b>HEALTH FACTORS</b>					
<b>HEALTH BEHAVIORS</b>					
Adult smoking	% of adults who are current smokers	17%	17%	11%	24%
Adult obesity	% of adults that report a BMI ≥ 30	31%	27%	16%	41%
Food environment index	Index of factors that contribute to a healthy food environment, (0-10)	7.3	8.2	3.5	10.0
Physical inactivity	% of adults aged 20 and over reporting no leisure-time physical activity	26%	21%	13%	38%
Access to exercise opportunities	% of population with adequate access to locations for physical activity	62%	81%	3%	100%
Excessive drinking	% of adults reporting binge or heavy drinking	17%	17%	11%	22%
Alcohol-impaired driving deaths	% of driving deaths with alcohol involvement	30%	31%	0%	100%
Sexually transmitted infections	# of newly diagnosed chlamydia cases per 100,000 population	294.8	436.4	46.6	1,844.0
Teen births	# of births per 1,000 female population ages 15-19	38	25	6	95
<b>CLINICAL CARE</b>					
Uninsured	% of population under age 65 without health insurance	14%	12%	5%	25%
Primary care physicians	Ratio of population to primary care physicians	2,030:1	1,320:1	20,790:1	320:1
Dentists	Ratio of population to dentists	2,570:1	1,530:1	22,350:1	350:1
Mental health providers	Ratio of population to mental health providers	1,105:1	730:1	51,880:1	90:1
Preventable hospital stays	# of hospital stays for ambulatory-care sensitive conditions per 1,000 Medicare enrollees	56	44	21	148
Diabetes monitoring	% of diabetic Medicare enrollees ages 65-75 that receive HbA1c monitoring	86%	87%	82%	96%
Mammography screening	% of female Medicare enrollees ages 67-69 that receive mammography screening	61%	64%	44%	85%
<b>SOCIAL AND ECONOMIC FACTORS</b>					
High school graduation	% of ninth-grade cohort that graduates in four years	88%	86%	60%	98%
Some college	% of adults ages 25-44 with some post-secondary education	57%	69%	23%	89%
Unemployment	% of population aged 16 and older unemployed but seeking work	5.3%	4.4%	2.8%	10.8%
Children in poverty	% of children under age 18 in poverty	22%	15%	3%	43%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.4	4.8	3.2	9.0
Children in single-parent households	% of children that live in a household headed by a single parent	32%	30%	12%	67%
Social associations	# of membership associations per 10,000 population	12.6	11.2	3.8	39.6
Violent crime	# of reported violent crime offenses per 100,000 population	198	194	29	631
Injury deaths	# of deaths due to injury per 100,000 population	77	55	24	134
<b>PHYSICAL ENVIRONMENT</b>					
Air pollution – particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	9.2	8.7	7.7	10.1
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%	15%	5%	29%
Driving alone to work	% of workforce that drives alone to work	81%	78%	49%	93%
Long commute – driving alone	Among workers who commute in their car alone, % commuting > 30 minutes	30%	38%	11%	77%



## 2017 COUNTY HEALTH RANKINGS: DATA SOURCES AND YEARS OF DATA

	Measure	Data Source	Years of Data
<b>HEALTH OUTCOMES</b>			
<b>Length of Life</b>	Premature death	National Center for Health Statistics – Mortality files	2012-2014
<b>Quality of Life</b>	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
<b>HEALTH FACTORS</b>			
<b>HEALTH BEHAVIORS</b>			
<b>Tobacco Use</b>	Adult smoking	Behavioral Risk Factor Surveillance System	2015
<b>Diet and Exercise</b>	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
<b>Alcohol and Drug Use</b>	Excessive drinking	Behavioral Risk Factor Surveillance System	2015
	Alcohol-impaired driving deaths	Fatality Analysis Reporting System	2011-2015
<b>Sexual Activity</b>	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
<b>CLINICAL CARE</b>			
<b>Access to Care</b>	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
<b>Quality of Care</b>	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
<b>SOCIAL AND ECONOMIC FACTORS</b>			
<b>Education</b>	High school graduation	EDFacts <sup>1</sup>	2014-2015
	Some college	American Community Survey	2011-2015
<b>Employment</b>	Unemployment	Bureau of Labor Statistics	2015
<b>Income</b>	Children in poverty	Small Area Income and Poverty Estimates	2015
	Income inequality	American Community Survey	2011-2015
<b>Family and Social Support</b>	Children in single-parent households	American Community Survey	2011-2015
	Social associations	County Business Patterns	2014
<b>Community Safety</b>	Violent crime	Uniform Crime Reporting – FBI	2012-2014
	Injury deaths	CDC WONDER mortality data	2011-2015
<b>PHYSICAL ENVIRONMENT</b>			
<b>Air and Water Quality</b>	Air pollution - particulate matter <sup>2</sup>	CDC National Environmental Public Health Tracking Network	2012
	Drinking water violations	Safe Drinking Water Information System	FY2013-14
<b>Housing and Transit</b>	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

<sup>1</sup> State sources used for California and Texas.

<sup>2</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

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](http://countyhealthrankings.org)



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