



# County Health Rankings & Roadmaps

A Healthier Nation, County by County

## 2013 *Rankings* North Carolina



UNIVERSITY OF WISCONSIN  
**Population Health Institute**  
*Translating Research for Policy and Practice*

## Introduction

Where we live matters to our health. The health of a community depends on many different factors, including the environment, education and jobs, access to and quality of healthcare, and individual behaviors. We can improve a community's health by implementing effective policies and programs. For example, 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. In addition, people who live in communities with safe and accessible park and recreation space are more likely to exercise, which reduces heart disease risk.

However, health varies greatly across communities, with some places being much healthier than others. And, until now, there has been no standard method to illustrate what we know about what makes people sick or healthy or a central resource to identify what we can do to create healthier places to live, learn, work and play.

We know that much of what influences our health happens outside of the doctor's office – in our schools, workplaces and neighborhoods. The *County Health Rankings & Roadmaps* program provides information on the overall health of your community and provides the tools necessary to create community-based, evidence-informed solutions. Ranking the health of nearly every county across the nation, the *County Health Rankings* illustrate **what we know** when it comes to what is making communities sick or healthy. The *County Health Roadmaps* show **what we can do** to create healthier places to live, learn, work and play. The Robert Wood Johnson Foundation collaborates with the University of Wisconsin

Population Health Institute to bring this groundbreaking program to counties and states across the nation.

The *County Health Rankings & Roadmaps* program includes the *County Health Rankings* project, launched in 2010, and the newer *Roadmaps* project that mobilizes local communities, national partners and leaders across all sectors to improve health. The program is based on 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. Counties can improve health outcomes by addressing all health factors with effective, evidence-informed policies and programs.

Everyone has a stake in community health. We all need to work together to find solutions. The *County Health Rankings & Roadmaps* serve as both a call to action and a needed tool in this effort.

## Guide to Our Web Site

To compile the *Rankings*, we selected measures that reflect important aspects of population health that can be improved and are available at the county level across the nation. Visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org) to learn more.

To get started and see data, enter your county or state name in the search box. Click on the name of a county or measure to see more details. You can: Compare Counties; Download data for your state; Print one or more county

snapshots; or Share information with others via Facebook, Twitter, or Google+. To understand our methods, click on Learn about the Data and Methods. You can also take advantage of the Using the *Rankings* Data guide to help you explore the data and figure out more about what is driving your community's health. To learn about what you can do to improve health in your community, visit the *Roadmaps to Health* Action Center. Finally, you can learn what others are doing by reading Communities Stories and visiting the Project Showcase.

## County Health Roadmaps

The *Rankings* illustrate **what we know** when it comes to making people sick or healthy. The *County Health Rankings* confirm the critical role that factors such as education, jobs, income and the environment play in how healthy people are and how long we live.

The *County Health Roadmaps* mobilizes local communities, national partners and leaders across all sectors to improve health. The *County Health 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 groundbreaking project to cities, counties and states across the nation.

The *Roadmaps* project includes grants to local coalitions and partnerships among policymakers, business, education, public health, health care, and community organizations; grants to national organizations working to improve health; recognition of communities whose promising efforts have led to better health; and customized guidance on strategies to improve health.

### Roadmaps to Health Community Grants

The *Roadmaps to Health* Community Grants provide funding for 2 years to thirty state and local efforts among policymakers, business, education, healthcare, public health and community organizations working to create positive policy or systems changes that address the social and economic factors that influence the health of people in their community.

### Roadmaps to Health Partner Grants

RWJF is awarding *Roadmaps to Health* Partner Grants to national organizations that are experienced at engaging local partners and leaders and are able to deliver high-quality training and technical assistance, and committed to making communities healthier places to live, learn, work and play. Partner grantees increase awareness about the *County Health Rankings & Roadmaps* to their members, affiliates and allies. As of February 2013, RWJF has awarded partner grants to United Way Worldwide, National Business Coalition on Health, and National Association of Counties.

### RWJF Roadmaps to Health Prize

In February 2013, RWJF awarded the first *RWJF Roadmaps to Health* Prizes of \$25,000 to six communities that are working to become healthier places to live, learn, work and play. The *RWJF Roadmaps to Health* Prize is intended not only to honor successful efforts, but also to inspire and stimulate similar activities in other U.S. communities.



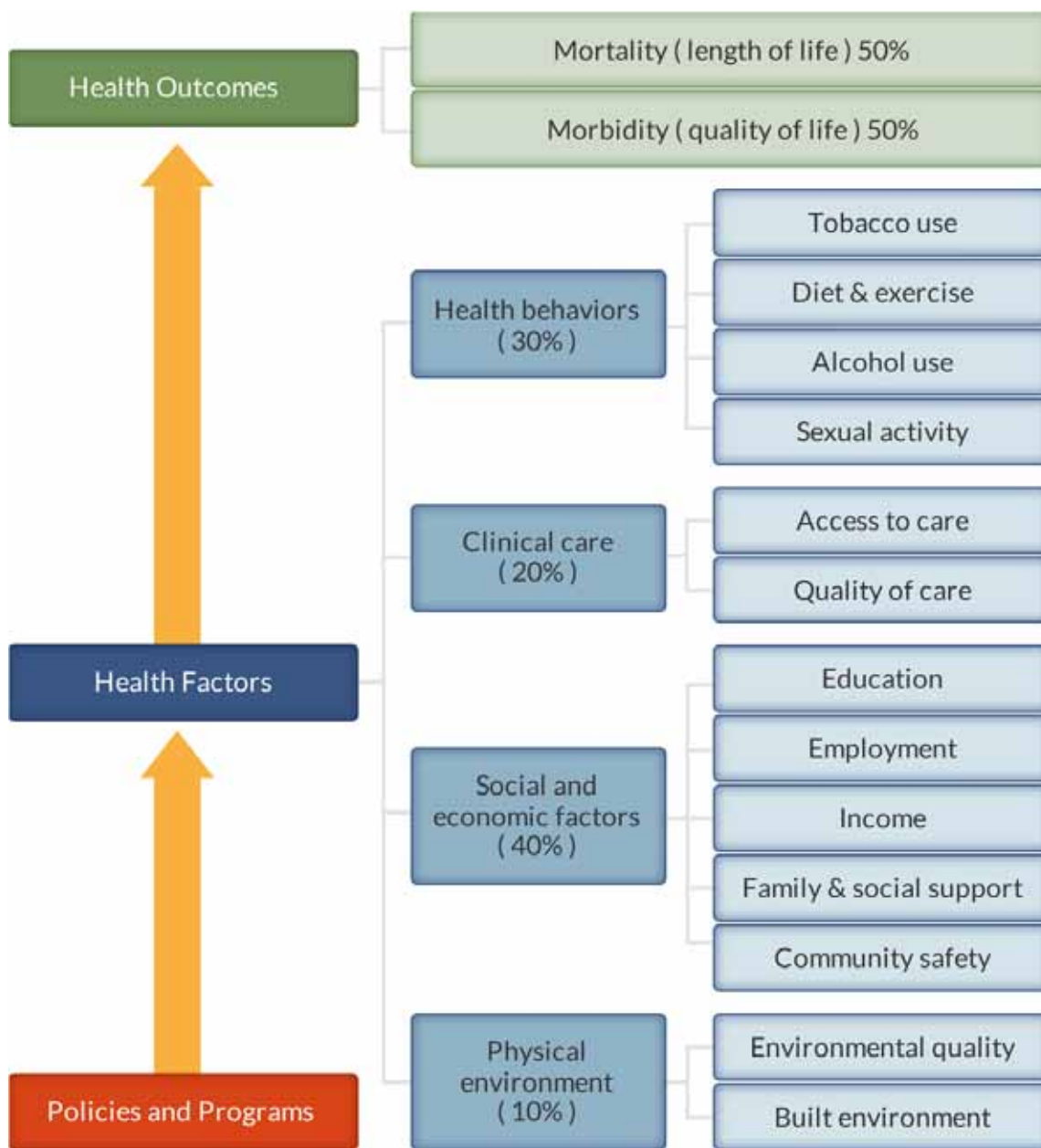
### Roadmaps to Health Action Center

The *Roadmaps to Health* Action Center, based at UWPHI, provides tools and guidance to help groups working to make their communities healthier places. The Action Center website provides guidance on developing strategies and advocacy efforts to advance pro-health policies, opportunities for ongoing learning, and a searchable database of evidence-informed policies and programs focused on health improvement: *What Works for Health*. Action Center staff provide customized consultation via email and telephone to those seeking more information about how to improve health. Coaching, including possible on-site visits, is also available for communities who have demonstrated the willingness and capacity to address factors that we know influence how healthy a person is, such as education, income and family connectedness.

## County Health Rankings

The 2013 *County Health Rankings* report ranks North Carolina counties according to their summary measures of **health outcomes** and **health factors**. Counties also receive a rank for mortality, morbidity, health behaviors, clinical care, social and economic factors, and the physical environment. The figure below depicts the structure of the *Rankings* model; 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.

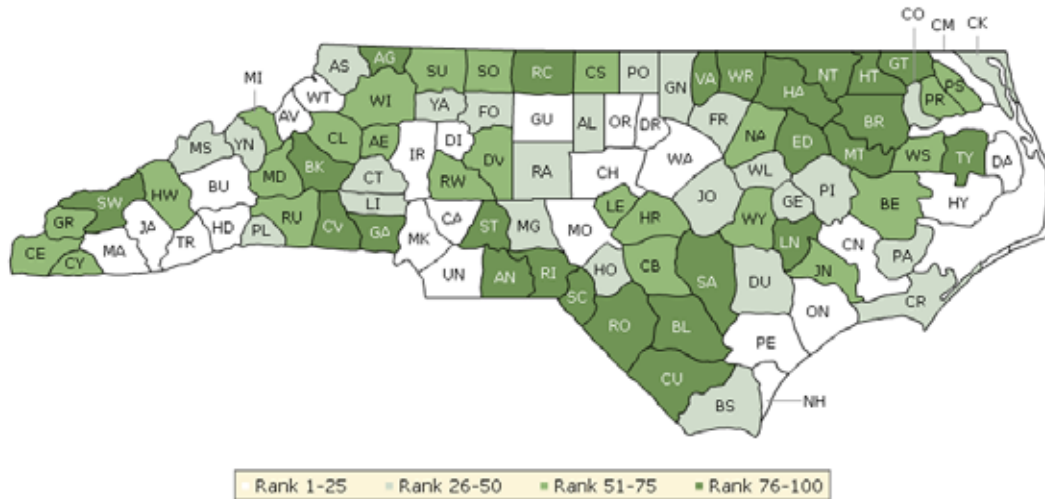


County Health Rankings model ©2012 UWPHI

The maps on this page and the next display North Carolina's counties divided into groups by health rank. Maps help locate the healthiest and least healthy counties in the state. The lighter colors indicate better performance in the respective

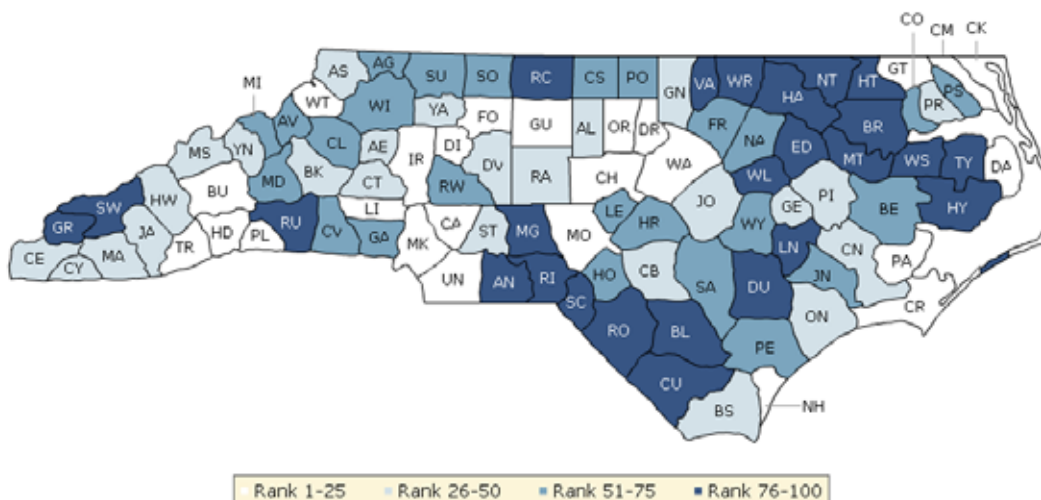
summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

### HEALTH OUTCOMES



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

**HEALTH FACTORS**



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

## 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 represent what influences the health of the county.

Rank	Health Outcomes	Rank	Health Factors
1	Wake	1	Orange
2	Orange	2	Wake
3	Watauga	3	Watauga
4	Camden	4	Union
5	Union	5	Camden
6	Mecklenburg	6	Moore
7	Dare	7	Henderson
8	Davie	8	Buncombe
9	New Hanover	9	New Hanover
10	Cabarrus	10	Chatham
11	Moore	11	Polk
12	Henderson	12	Mecklenburg
13	Guilford	13	Cabarrus
14	Transylvania	14	Currituck
15	Chatham	15	Durham
16	Macon	16	Transylvania
17	Durham	17	Dare
18	Hyde	18	Guilford
19	Buncombe	19	Iredell
20	Pender	20	Pamlico
21	Iredell	21	Gates
22	Avery	22	Carteret
23	Jackson	23	Davie
24	Craven	24	Forsyth
25	Onslow	25	Lincoln
26	Polk	26	Macon
27	Yancey	27	Madison
28	Forsyth	28	Catawba
29	Currituck	29	Craven
30	Johnston	30	Clay
31	Alamance	31	Onslow
32	Lincoln	32	Brunswick
33	Person	33	Perquimans
34	Pamlico	34	Granville
35	Franklin	35	Haywood
36	Randolph	36	Yancey
37	Brunswick	37	Stanly
38	Greene	38	Johnston
39	Hoke	39	Randolph
40	Montgomery	40	Pitt
41	Chowan	41	Yadkin
42	Ashe	42	Jackson

Rank	Health Outcomes	Rank	Health Factors
43	Carteret	43	Cherokee
44	Duplin	44	Alexander
45	Madison	45	Alamance
46	Granville	46	Greene
47	Catawba	47	Ashe
48	Pitt	48	Burke
49	Wilson	49	Davidson
50	Yadkin	50	Cumberland
51	Lee	51	Surry
52	Pasquotank	52	Avery
53	Harnett	53	Mitchell
54	Washington	54	Alleghany
55	Haywood	55	Wayne
56	Davidson	56	Pender
57	Caswell	57	Pasquotank
58	Alexander	58	Franklin
59	Mitchell	59	Caldwell
60	Nash	60	Person
61	Surry	61	Gaston
62	Jones	62	Chowan
63	Graham	63	Rowan
64	Wayne	64	Caswell
65	Stokes	65	Jones
66	McDowell	66	Cleveland
67	Clay	67	Lee
68	Rowan	68	Stokes
69	Rutherford	69	Beaufort
70	Caldwell	70	McDowell
71	Perquimans	71	Sampson
72	Cherokee	72	Nash
73	Beaufort	73	Wilkes
74	Cumberland	74	Hoke
75	Wilkes	75	Harnett
76	Burke	76	Duplin
77	Hertford	77	Lenoir
78	Rockingham	78	Wilson
79	Alleghany	79	Hertford
80	Sampson	80	Martin
81	Gaston	81	Montgomery
82	Stanly	82	Hyde
83	Cleveland	83	Rutherford
84	Gates	84	Graham
85	Warren	85	Rockingham
86	Anson	86	Tyrrell
87	Tyrrell	87	Washington
88	Edgecombe	88	Warren
89	Richmond	89	Anson
90	Northampton	90	Bertie



Rank	Health Outcomes	Rank	Health Factors
91	Martin	91	Swain
92	Bertie	92	Columbus
93	Scotland	93	Bladen
94	Lenoir	94	Northampton
95	Vance	95	Halifax
96	Swain	96	Vance
97	Robeson	97	Richmond
98	Bladen	98	Edgecombe
99	Halifax	99	Scotland
100	Columbus	100	Robeson

## 2013 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
<b>HEALTH OUTCOMES</b>			
<b>Mortality</b>	Premature death	National Center for Health Statistics	2008-2010
<b>Morbidity</b>	Poor or fair health	Behavioral Risk Factor Surveillance System	2005-2011
	Poor physical health days	Behavioral Risk Factor Surveillance System	2005-2011
	Poor mental health days	Behavioral Risk Factor Surveillance System	2005-2011
	Low birthweight	National Center for Health Statistics	2004-2010
<b>HEALTH FACTORS</b>			
<b>HEALTH BEHAVIORS</b>			
<b>Tobacco Use</b>	Adult smoking	Behavioral Risk Factor Surveillance System	2005-2011
<b>Diet and Exercise</b>	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2009
	Physical inactivity	National Center for Chronic Disease Prevention and Health Promotion	2009
<b>Alcohol Use</b>	Excessive drinking	Behavioral Risk Factor Surveillance System	2005-2011
	Motor vehicle crash death rate	National Center for Health Statistics	2004-2010
<b>Sexual Activity</b>	Sexually transmitted infections	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention	2010
	Teen birth rate	National Center for Health Statistics	2004-2010
<b>CLINICAL CARE</b>			
<b>Access to Care</b>	Uninsured	Small Area Health Insurance Estimates	2010
	Primary care physicians	HRSA Area Resource File	2011-2012
	Dentists	HRSA Area Resource File	2011-2012
<b>Quality of Care</b>	Preventable hospital stays	Medicare/Dartmouth Institute	2010
	Diabetic screening	Medicare/Dartmouth Institute	2010
	Mammography screening	Medicare/Dartmouth Institute	2010
<b>SOCIAL AND ECONOMIC FACTORS</b>			
<b>Education</b>	High school graduation	Primarily state-specific sources, supplemented with National Center for Education Statistics	State-specific
	Some college	American Community Survey	2007-2011
<b>Employment</b>	Unemployment	Bureau of Labor Statistics	2011
<b>Income</b>	Children in poverty	Small Area Income and Poverty Estimates	2011
<b>Family and Social Support</b>	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2010
	Children in single-parent households	American Community Survey	2007-2011
<b>Community Safety</b>	Violent crime rate	Federal Bureau of Investigation	2008-2010
<b>PHYSICAL ENVIRONMENT</b>			
<b>Environmental Quality</b>	Daily fine particulate matter <sup>1</sup>	CDC WONDER Environmental data	2008
	Drinking water safety	Safe Drinking Water Information System	FY 2012
<b>Built Environment</b>	Access to recreational facilities	Census County Business Patterns	2010
	Limited access to healthy foods	USDA Food Environment Atlas	2012
	Fast food restaurants	Census County Business Patterns	2010

<sup>1</sup> Not available for AK and HI.

CREDITS

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