

# 2010 Forsyth County North Carolina

\*With additional comments from the Forsyth County Department of Public Health



### 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 <u>www.countyhealthrankings.org.</u>

### **The Rankings**

This report ranks North Carolina 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 North Carolina'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.

**Forsyth County** (abbreviated as FO on the state maps below), **ranked among the 25 best counties in North Carolina** with regard to health outcomes and health factors.

### **HEALTH OUTCOMES**



### **HEALTH FACTORS**



### **Associations between Rankings**

Below are two scatter-plots of the 100 North Carolina counties examining the relationship between health outcome ranks and social & economic factors (SEF) ranks and health outcome ranks and Clinical care ranks. Each county is represented by a two letter code. There was a strong correlation between the outcomes and SEF ranks (R-squared value=0.727). As the value of the SEF rank increased (meaning as the rank became worse), the value of the outcome rank increased also (meaning that the outcome rank became worse). There was no correlation between the outcomes and clinical care ranks (R-squared value=0.059); which indicates that the presence of quality care services in the community does not necessarily result in better health for the whole community. However, the strongest predictors of better or poorer health status are better or poorer socioeconomic conditions respectively. Socioeconomic factors included in this study were education, unemployment rate, children in poverty, income inequality, inadequate social support etc.



### NC County Health Outcomes vs Social & Economic Factors Rankings

### NC County Health Outcomes Rankings vs Clinical Care Rankings



# **Snapshot 2010: Forsyth County Health Rankings**

Counties receive two summary ranks: Health Outcomes and Health Factors. Each of these ranks represents a weighted summary of a number of measures.

Health outcomes represent how healthy a county is. The summary health outcomes ranking is based on measures of mortality and morbidity. 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.

**Health factors** are what influences the health of the county. 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.

Below is a summary of findings comparing Forsyth County and the state of North Carolina to calculated target value for each factor. Nine (9) measures were better than state; but only four measures met the target value (poor or fair health; poor physical health days; MV death rates; primary care provider rate). Four (4) measures were worse than state (Chlamydia; Air pollution particulate days & ozone days; access to healthy foods)

For more details on these measures, please visit <u>http://www.countyhealthrankings.org</u>.

	Forsyth County	Error Margin	Target Value*	NC Value	FC Rank (of100)
Health Outcomes					20
Mortality					22
Premature Deaths (Age-adjusted years of potential life lost before age 75 per 100,000 pop.) Morbidity	7,852	7,510-8,193	≤ 7420	8,174	26
<b>Poor or Fair Health</b> (Age-adjusted percentage of adults reporting poor or fair health)	13%	12-15%	≤ 15%	19%	
Poor Physical Health Days (Age-adjusted average number of physically unhealthy days reported in last 30 days)	3.1	2.8-3.5	≤ 3.1	3.6	
<b>Poor Mental Health Days</b> (Age-adjusted average number of mentally unhealthy days reported in last 30 days)	2.9	2.5-3.3	≤ 2.7	3.2	
Low Birthweight (Percentage of live births with of infants weighing < 2500g)	10.00%	9.7-10.3%	≤ 7.7%	9.00%	
Health Factors					20
Health Behaviors					18
Adult Smoking (Percentage of adults that report smoking at least 100 cigarettes and that they currently smoke)	22%	20-24%	≤ 20%	23%	
Adult Obesity Percentage of adults that report a BMI > or = 30)	25%	22-28%	≤ 24%	29%	
Binge Drinking (Percentage of adults that report binge drinking in last 30 days)	11%	9-13%	≤ 5%	11%	
Motor Vehicle Death Crash Rate (Motor vehicle crash deaths per 100,000 pop.)	13	12.0-15.0	≤ 15	20	
Chlamydia Rate (Chlamydia rate per 100,000 pop.)	660		≤ 89	346	
Teen Birth Rate (Teen birthrate per 1,000 pop. among females ages 15-19)	51	50-53	≤ 39	51	

Clinical Care	Clinical Care 7								
Uninsured Adults									
(%of pop. under age 65 without health insurance)	17%	15-19%	≤ 14%	17%					
Primary Care Provider Rate	104		> 154	115					
(Primary care provider rate per 100,000 pop.)	194		≥ 154	115					
Preventable Hospital Stays									
(Hospitalization rate for ambulatory- care sensitive	69	67.72		72					
conditions per 1,000 Medicare enrollees) Diabetic Screening	69	67-72	≤ 55	73					
(% of diabetic Medicare enrollees that receive HbA1c									
screenings)	84%	83-86%	≥ 88%	84%					
Hospice Use (% of chronically ill Medicare enrollees in hospice care in									
last 6 months of life)	33%	30-37%	≥ 37%	28%					
Social & Economic Factors					30				
High School Graduation									
(% of 9th grade cohort that graduates in 4 years)	76%		≥ 82%	74%					
College Degrees									
(% of pop. age 25+ with 4 year college degree or higher)	30%	29-32%	≥ 31%	25%					
Unemployment									
(% of pop. age 16+ unemployed but seeking work)	6%	6-6%	≤ 5%	6%					
Children in Poverty									
(%of children under age 18 in poverty)	22%	19-24%	≤ 15%	20%					
Income Inequality (Gini coefficient of income inequality based on household									
income where 0 = no income inequality and 100 =									
complete income inequality)	47		≤ 40	46					
Inadequate Social Support									
(% of adults without social/emotional support)	19%	16-21%	≤ 16%	20%					
Single-Parent Households									
(% of all households that are single-parent households)	11%	10-12%	≤ 6%	10%					
Homicide Rate	-			-					
(Age-adjusted deaths due to homicide per 100,000 pop.) Physical Environment	7	6.0-9.0	≤ 4	7	97				
					97				
Air Pollution - Particulate Matter Days									
(Annual number of unhealthy air quality days due to fine	5		= 0	1					
particulate matter)	5		U	1					
Air Pollution - Ozone Days (Annual number of unhealthy air quality days due to ozone)	10		= 0	4					
	10		- 0						
Access to Healthy Foods									
(% of Zip codes with access to healthy food outlets such as grocery stores, produce stands, and farmers markets)	40%		≥ 69%	45%					
Liquor Store Density									
(Number of liquor stores per 100,000 pop.)	0.5		≤ 0.2	0.6					
Note: * 90 <sup>th</sup> percentile, i.e., only 10% are better: Blank values reflect unreliable or mis									

Note: \* 90<sup>th</sup> percentile, i.e., only 10% are better; Blank values reflect unreliable or missing data

Darker shade indicates worse than state values

Lighter shade indicates better than state values.

# Forsyth County Rankings among Top Five (5) & Ten (10) NC Counties

NC County Rankings: Health Outcomes					
Top 5 Large Counties		Top 10 Largest Counties			
Wake	1 <sup>st</sup>	Wake	1 <sup>st</sup>		
		Union	3 <sup>rd</sup>		
Mecklenburg	5 <sup>th</sup>	Mecklenburg	5 <sup>th</sup>		
0		New Hanover	6 <sup>th</sup>		
Guilford	10 <sup>th</sup>	Guilford	10 <sup>th</sup>		
		Durham	11 <sup>th</sup>		
Durham	11 <sup>th</sup>	Forsyth	<b>20</b> <sup>th</sup>		
		Buncombe	25 <sup>th</sup>		
Forsyth	<b>20</b> <sup>th</sup>	Cumberland	54 <sup>th</sup>		
		Gaston	70 <sup>th</sup>		

NC County Rankings: Health Behaviors					
Top 5 Larg Counties		Top 10 Larg Countie	s		
Mecklenburg	4 <sup>th</sup>	Mecklenburg	4 <sup>th</sup>		
Ŭ		Wake	5 <sup>th</sup>		
Wake	5 <sup>th</sup>	Buncombe	6 <sup>th</sup>		
		New Hanover	7 <sup>th</sup>		
Forsyth	18 <sup>th</sup>	Union	14 <sup>th</sup>		
		Forsyth	18 <sup>th</sup>		
Durham	19 <sup>th</sup>	Durham	19 <sup>th</sup>		
		Guilford	20 <sup>th</sup>		
Guildford	20 <sup>th</sup>	Gaston	58 <sup>th</sup>		
		Cumberland	78 <sup>th</sup>		

NC County Rankings: Social & Economic Factors				
Top 5 Larg Counties	S	Top 10 Largest Counties		
Wake	2 <sup>nd</sup>	Wake	2 <sup>nd</sup>	
		Union	5 <sup>th</sup>	
Mecklenburg	21 <sup>st</sup>	Buncombe	12 <sup>th</sup>	
Ŭ		New Hanover	17 <sup>th</sup>	
Durham	24 <sup>th</sup>	Mecklenburg	21 <sup>st</sup>	
		Durham	24 <sup>th</sup>	
Guilford	27 <sup>th</sup>	Guilford	27 <sup>th</sup>	
		Forsyth	<b>30</b> <sup>th</sup>	
Forsyth	30 <sup>th</sup>	Cumberland	54 <sup>th</sup>	
		Gaston	56 <sup>th</sup>	

Note: Counties without Military bases: Durham, Forsyth, Guilford, Mecklenburg & Wake

NC County Rankings: Health Factors				
Top 5 Largest Top 10 Largest Counties Counties				
Wake	$2^{nd}$	Wake	2 <sup>nd</sup>	
		Buncombe	3 <sup>rd</sup>	
Durham	$8^{\text{th}}$	New Hanover	7 <sup>th</sup>	
		Durham	8 <sup>th</sup>	
Mecklenburg	$14^{\text{th}}$	Union	10 <sup>th</sup>	
0		Mecklenburg	14 <sup>th</sup>	
Guilford	$17^{\text{th}}$	Guilford	17 <sup>th</sup>	
		Forsyth	<b>20</b> <sup>th</sup>	
Forsyth	20 <sup>th</sup>	Gaston	49 <sup>th</sup>	
		Cumberland	54 <sup>th</sup>	

NC County Rankings: Clinical Care					
Top 5 Larg Countie	Top 10 Lar Countie	•			
Durham	2 <sup>nd</sup>	Durham	2 <sup>nd</sup>		
		Buncombe	3 <sup>rd</sup>		
Forsyth	7 <sup>th</sup>	New Hanover	5 <sup>th</sup>		
-		Forsyth	7 <sup>th</sup>		
Guilford	12 <sup>th</sup>	Guilford	12 <sup>th</sup>		
		Wake	13 <sup>th</sup>		
Wake	13 <sup>th</sup>	Mecklenburg	15 <sup>th</sup>		
		Cumberland	19 <sup>th</sup>		
Mecklenburg	15 <sup>th</sup>	Gaston	36 <sup>th</sup>		
0		Union	45 <sup>th</sup>		

NC County Rankings: Physical Environment				
Top 5 Larg Countie	S	Top 10 Lar Countie	-	
Durham	66 <sup>th</sup>	Buncombe	13 <sup>th</sup>	
		Gaston	47 <sup>th</sup>	
Guilford	78 <sup>th</sup>	Durham	66 <sup>th</sup>	
		Cumberland	67 <sup>th</sup>	
Forsyth	97 <sup>th</sup>	New Hanover	68 <sup>th</sup>	
		Union	76 <sup>th</sup>	
Wake	98 <sup>th</sup>	Guilford	78 <sup>h</sup>	
		Forsyth	<b>97</b> <sup>th</sup>	
Mecklenburg	100 <sup>th</sup>	Wake	98 <sup>th</sup>	
5		Mecklenburg	100 <sup>th</sup>	

# Summary Health Outcomes & Factors Rankings: North Carolina

The following pages show the health outcomes and health factor ranks for all 100 counties in North Carolina and show each county's rank for individual measures. Forsyth County is shown in **red**.

For explanation of these ranks and how they were calculated, please visit the County Health Rankings website at <u>http://www.countyhealthrankings.org</u>.

Rank	Health Outcomes	Rank	Health Factors	Rank	Health Outcomes	Rank	Health Factors
1	Wake	1	Orange	51	McDowell	51	Currituck
2	Orange	2	Wake	52	Avery	52	McDowell
3	Union	3	Buncombe	53	Stokes	53	Stokes
4	Chatham	4	Polk	54	Cumberland	54	Cumberland
5	Mecklenburg	5	Henderson	55	Caswell	55	Cherokee
6	New Hanover	6	Transylvania	56	Haywood	56	Burke
7	Dare	7	New Hanover	57	Hoke	57	Wayne
8	Watauga	8	Durham	58	Caldwell	58	Davidson
9	Cabarrus	9	Moore	59	Montgomery	59	Lee
10	Guilford	10	Union	60	Alexander	60	Surry
11	Durham	11	Chatham	61	Nash	61	Nash
12	Jackson	12	Catawba	62	Rowan	62	Wilkes
13	Randolph	13	Yancey	63	Wayne	63	Harnett
14	Madison	14	Mecklenburg	64	Wilkes	64	Rowan
15	Onslow	15	Macon	65	Washington	65	Cleveland
16	Yancey	16	Watauga	66	Gates	66	Pasquotank
17	Transylvania	17	Guilford	67	Sampson	67	Beaufort
18	Catawba	18	Madison	68	Stanly	68	Jones
19	Clay	19	Haywood	69	Greene	69	Chowan
20	Forsyth	20	Forsyth	70	Gaston	70	Granville
21	Iredell	21	Clay	71	Rockingham	71	Caswell
22	Lincoln	22	Cabarrus	72	Burke	72	Perquimans
23	Polk	23	Davie	73	Duplin	73	Greene
24	Craven	24	Carteret	74	Alleghany	74	Person
25	Buncombe	25	Dare	75	Perquimans	75	Hoke
26	Alamance	26	Craven	76	Graham	76	Wilson
27	Carteret	27	Mitchell	77	Tyrrell	77	Bladen
28	Pasquotank	28	Alamance	78	Swain	78	Hertford
29	Ashe	29	Iredell	79	Cleveland	79	Montgomery
30	Camden	30	Yadkin	80	Beaufort	80	Washington
31	Moore	31	Jackson	81	Wilson	81	Hyde
32	Johnston	32	Brunswick	82	Jones	82	Sampson
33	Henderson	33	Lincoln	83	Cherokee	83	Duplin
34	Hyde	34	Alexander	84	Mitchell	84	Lenoir
35	Harnett	35	Pamlico	85	Rutherford	85	Rockingham
36	Franklin	36	Stanly	86	Scotland	86	Graham
37	Davie	37	Ashe	87	Anson	87	Martin
38	Pender	38	Camden	88	Lenoir	88	Tyrrell
39	Pamlico	39	Pitt	89	Northampton	89	Bertie
40	Currituck	40	Pender	90	Richmond	90	Richmond
41	Davidson	41	Randolph	91	Vance	91	Swain
42	Yadkin	42	Rutherford	92	Warren	92	Anson
43	Brunswick	43	Onslow	93	Hertford	93	Halifax
44	Macon	44	Franklin	94	Edgecombe	94	Northampton
45	Pitt	45	Caldwell	95	Martin	95	Scotland
46	Lee	46	Avery	96	Halifax	96	Vance
47	Person	40	Gates	97	Bladen	97	Columbus
48	Surry	48	Alleghany	98	Robeson	98	Warren
49	Granville	49	Gaston	99	Bertie	99	Edgecombe
49 50	Chowan	50	Johnston	100	Columbus	100	Robeson
00	Chowall		5011131011	100	www.countyhealthra		

# Health Outcomes Rankings: North Carolina

Rank	Mortality	Morbidity
1	Wake	Wake
2	Orange	Chatham
3	Union	Polk
4	New Hanover	Orange
5	Mecklenburg	Union
6	Watauga	Jackson
7	Madison	Dare
8	Durham	Clay
9	Chatham	Mecklenburg
10	Camden	Moore
11	Guilford	Craven
12	Cabarrus	Cabarrus
13	Dare	Transylvania
14	Onslow	Guilford
15	Randolph	New Hanover
16	Davie	Lincoln
17	Pasquotank	Macon
18	Johnston	Carteret
19	Alam ance	Yancey
20	Catawba	Randolph
21	Yancey	Onslow
22	Forsyth	Pamlico
23	Currituck	Catawba
24	Iredell	Iredell
25	Buncombe	Durham
26	Ashe	Forsyth
27	Jackson	Harnett
28	Transylvania	Watauga
29	McDowell	Lee
30	Lincoln	Buncombe
31	Hyde	Person
32	Henderson	Henderson
33	Pender	Nash
34	Clay	Brunswick
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Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
1	Orange	Orange	Orange	Hoke
2	Yancey	Durham	Wake	Yadkin
3	Polk	Buncombe	Currituck	Madison
4	Mecklenburg	Transylvania	Transylvania	Clay
5	Wake	New Hanover	Union	Onslow
6	Buncombe	Pitt	Watauga	Halifax
7	New Hanover	Forsyth	Camden	Tyrrell
8	Henderson	Catawba	Chatham	Polk
9	Moore	Rutherford	Polk	Ashe
10	Clay	Henderson	Dare	Craven
11	Avery	Haywood	Henderson	Brunswick
12	Macon	Guilford	Buncombe	Moore
13	Watauga	Wake	Davie	Buncombe
14	Union	Macon	Carteret	Swain
15	Catawba	Mecklenburg	Cabarrus	Nash
16	Chatham	Moore	Haywood	Mitchell
17	Transylvania	Madison	New Hanover	Richmond
18	Forsyth	Cleveland	Madison	Jones
19	Durham	Cumberland	Jackson	Robeson
20	Guilford	Mitchell	Iredell	Rutherford
20	Mitchell	Chowan	Mecklenburg	Franklin
22	Cabarrus	Yancey	Yadkin	Montgomery
23	Gates	Bladen	Johnston	Chowan
23	Alleghany	Alamance	Durham	Dare
24	Ashe	Burke	Moore	Scotland
25	Lincoln	Nash	Onslow	
20	Alexander	Scotland	Guilford	Pasquotank Cleveland
28	Greene	Vance	Pamlico	
29	Cherokee	Cabarrus	Stokes	Duplin Bladen
30	Brunswick	Caldwell		Henderson
30	Rutherford	Pamlico	Forsyth Craven	Cherokee
32		Polk	Catawba	
32	Stanly Carteret	Hertford		Orange
			Macon	Randolph
34	Alamance	Craven	Pender	Davie
35	Haywood	Edgecombe Gaston	Lincoln	Jackson
36	Iredell		Clay	Alexander
37	Davie	Wayne	Alam ance	Surry
38	Graham	McDowell	Franklin	Vance
39	Jackson	Stanly	Stanly	Perquimans
40	Pitt	Randolph	Avery	Graham
41	Washington	Pasquotank	Brunswick	Alam ance
42	Wilkes	Rowan	Alexander	Harnett
43	Pender	Wilson	Granville	Wayne
44	Craven	Lee	Rowan	Yancey
46	Madison	Bertie	Gates	Washington
47	Randolph	Halifax	Randolph	Gaston
48	Dare	Chatham	Harnett	Rockingham
49	Surry	Beaufort	McDowell	Chatham
50	Yadkin	Caswell	Wayne	Carteret

# Health Factors Rankings: North Carolina

Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
51	Cleveland	Clay	Yancey	Macon
52	Camden	Brunswick	Davidson	Catawba
53	Lee	Lincoln	Hoke	Warren
54	McDowell	Alexander	Cumberland	Stokes
55	Davidson	Davie	Person	Hertford
56	Jones	Person	Gaston	Pamlico
57	Tyrrell	Columbus	Caldwell	Pender
58	Gaston	Surry	Alleghany	Johnston
59	Harnett	Iredell	Mitchell	Lenoir
60	Wilson	Cherokee	Burke	Anson
61	Duplin	Hoke	Beaufort	Lee
62	Franklin	Carteret	Caswell	Pitt
63	Chowan	Davidson	Wilkes	Caldwell
64	Bladen	Richmond	Perquimans	Bertie
65	Pamlico	Lenoir	Pitt	Edgecombe
66	Burke	Robeson	Lee	Durham
67	Johnston	Granville	Surry	Cumberland
68	Nash	Anson	Pasquotank	New Hanover
69	Hyde	Washington	Rockingham	Burke
	,	Franklin	8	
70	Perquimans		Duplin	Wilson
71	Rowan	Hyde	Cherokee	Alleghany
72	Montgomery	Northampton	Sampson	Haywood
73	Stokes	Ashe	Nash	Beaufort
74	Hertford	Graham	Greene	Wilkes
75	Halifax	Jones	Jones	Hyde
76	Lenoir	Wilkes	Rutherford	Union
77	Wayne	Onslow	Montgomery	Davidson
78	Cumberland	Montgomery	Martin	Guilford
79	Martin	Pender	Swain	Transylvania
80	Onslow	Stokes	Hyde	McDowell
81	Richmond	Warren	Lenoir	Camden
82	Beaufort	Alleghany	Hertford	Caswell
83	Pasquotank	Rockingham	Wilson	Northampton
84	Anson	Perquimans	Chowan	Iredell
85	Caswell	Watauga	Cleveland	Greene
86	Sampson	Jackson	Bladen	Avery
87	Person	Dare	Northampton	Stanly
88	Currituck	Tyrrell	Washington	Gates
89	Bertie	Yadkin	Bertie	Currituck
90	Granville	Gates	Anson	Watauga
91	Columbus	Sampson	Tyrrell	Person
92	Rockingham	Martin	Richmond	Lincoln
93	Warren	Swain	Warren	Martin
94	Scotland	Greene	Columbus	Columbus
95	Northampton	Harnett	Graham	Cabarrus
96	Vance	Johnston	Vance	Granville
97	Swain	Currituck	Scotland	Forsyth
98	Hoke	Camden	Halifax	Wake
99	Robeson	Avery	Edgecombe	Rowan
100	Edgecombe	Duplin	Robeson	Mecklenburg

# Health Factors Rankings: North Carolina

	Measure	Data Source	Years of Data
HEALTH OUTCOMES	3		
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	Chlamydia rate	National Center for Health Statistics	2006
Behavior	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 FAC	TORS		
Education	High school graduation	National Center for Education Statistics <sup>1</sup>	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 <sup>2</sup>	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 <sup>3</sup>	Uniform Crime Reporting, Federal Bureau of Investigation	2005-2007
PHYSICAL ENVIRONME	NT		
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

### 2010 County Health Rankings: Measures, Data Sources, and Years of Data

4 Not available for AK and HI.

<sup>1</sup> State data sources for KY, NH, NC, PA, SC, and UT (2007-2008).

<sup>2</sup> Income inequality estimates for 2000 were calculated by Mark L. Burkey, North Carolina Agricultural & Technical State University, <u>www.ncat.edu/~burkeym/Gini.htm.</u> 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.

<sup>13</sup> www.countyhealthrankings.org/north-carolina

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