

**County Health  
Rankings & Roadmaps**

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

**2014 Ranking  
Forsyth County  
North Carolina**

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

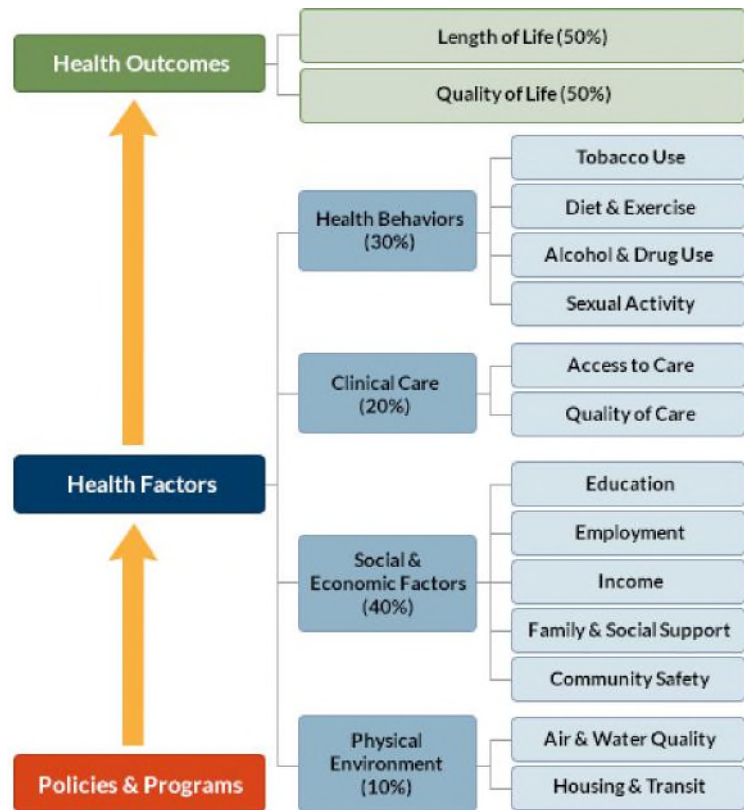


## INTRODUCTION

The *County Health Rankings & Roadmaps* program helps communities identify and implement solutions that make it easier for people to be healthy in their 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?

The *County Health Rankings* measure the health of nearly every county in the nation. 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* look at a variety of measures that affect health, such as high school graduation rates, access to healthy foods, rates of smoking, obesity, and teen births. Based on data available for each county, the *Rankings* are unique in their ability to measure the overall health of each county in all 50 states. They have been used to garner support for local health improvement initiatives among government agencies, healthcare providers, community organizations, business leaders, policy makers, and the public.



## HOW ARE PEOPLE USING THE RANKINGS?

- 👤 Highlighting community success
- 👤 Identifying root causes of poor health
- 👤 Supporting policy change
- 👤 Engaging communities in health improvement

For more information, visit [countyhealthrankings.org](http://countyhealthrankings.org)

## WHAT ARE THE ROADMAPS TO HEALTH?

The *Roadmaps to Health* help communities bring people together to look at the many factors that influence health, select strategies that work, and make changes that will have a lasting impact. The *Roadmaps* focus on helping communities determine what they can do and what they can learn from others.

### What You Can Do

The *Roadmaps to Health* Action Center provides step-by-step guides, tools, and webinars to help groups working to improve the health of their communities. Community Coaches also provide customized consultation to local communities that have demonstrated a willingness to address factors that we know influence health, such as education, income, and community safety.

The Action Center also features *What Works for Health* – a searchable database of evidence-informed policies and programs that can improve health.

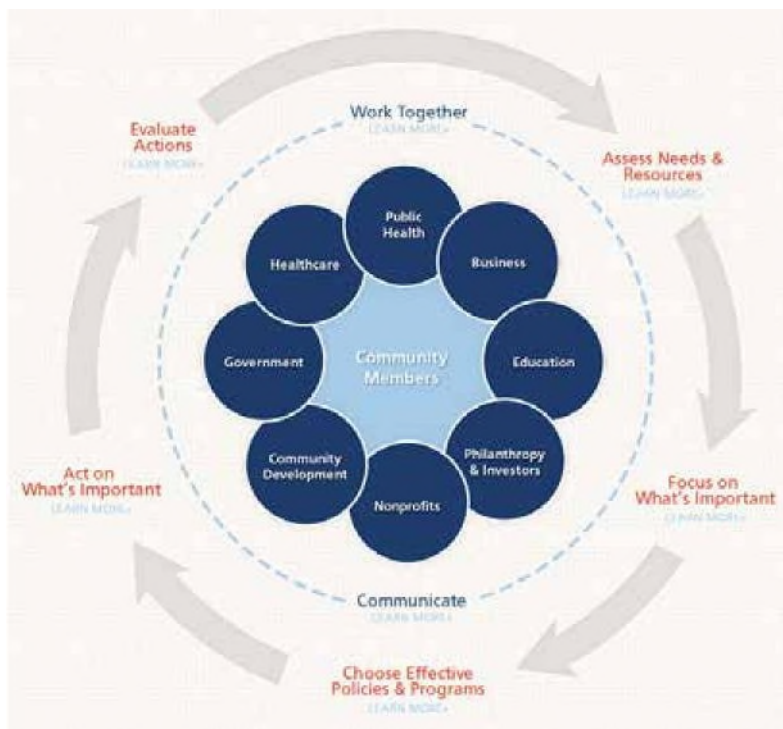
### Learning From Others

Honoring the efforts of communities working at the forefront of health improvement, the Robert Wood Johnson Foundation annually awards the *RWJF Culture of Health Prize* to outstanding communities that are working toward better health. The *Prize* recognizes communities with strong and diverse partnerships that are coming together with a shared vision and commitment to address multiple factors that affect health and make lasting changes that create a culture of health for all. Visit [countyhealthrankings.org](http://countyhealthrankings.org) or [rwjf.org/prize](http://rwjf.org/prize) to learn about the work of past prize winners.

At [countyhealthrankings.org](http://countyhealthrankings.org), we also feature stories from communities across the nation who have used data from the *County Health Rankings* or have engaged in strategies to improve health. For example, you can learn from the successes and challenges of the 30 *Roadmaps to Health* Community Grantees. These grantees are working to create positive policy or systems changes that address social and economic factors that influence how healthy people are and how long they live, such as education and community safety. You might also want to contact your local affiliate of United Way Worldwide, the National Business Coalition on Health, or the National Association of Counties - their national parent organizations have partnered with us to raise awareness and stimulate action to improve health in their local members' communities.

### How can you get involved?

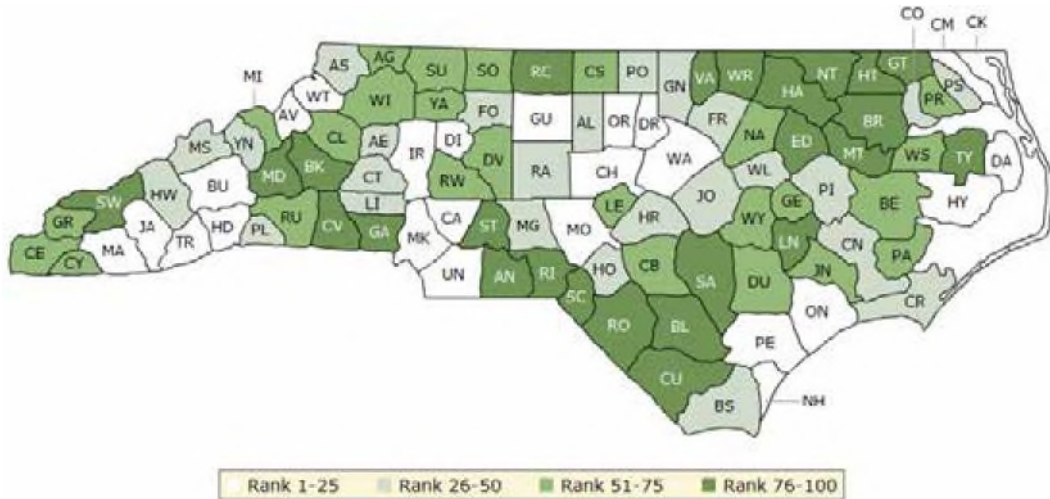
In communities large and small, people from all walks of life are taking ownership and action to improve health. Visit [countyhealthrankings.org](http://countyhealthrankings.org) to get ideas and guidance on how you can take action in your community. Working with others, you can improve the health of your community.



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 colors indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available on our web site.

**HEALTH OUTCOMES RANKS**

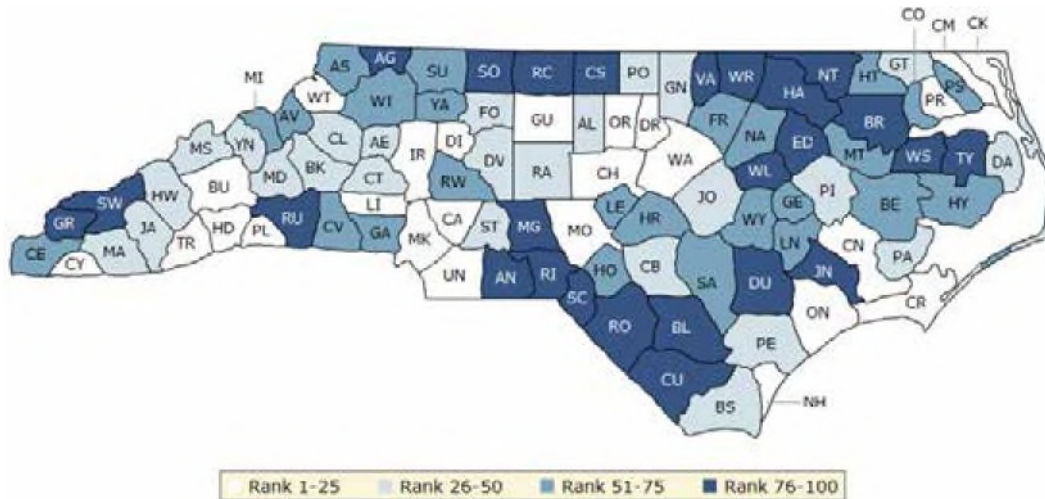


| County    | Rank | County         | Rank      | County      | Rank | County       | Rank |
|-----------|------|----------------|-----------|-------------|------|--------------|------|
| Alamance  | 29   | Cumberland     | 73        | Johnston    | 28   | Randolph     | 37   |
| Alexander | 43   | Currituck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

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 colors indicate better performance in the respective summary rankings. Detailed information on the underlying measures is available on our web site.

**HEALTH FACTORS RANKS**

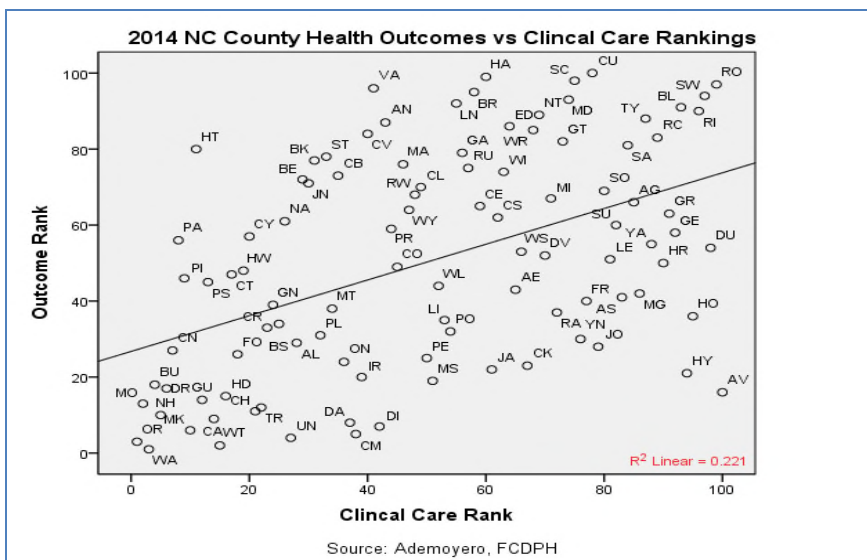
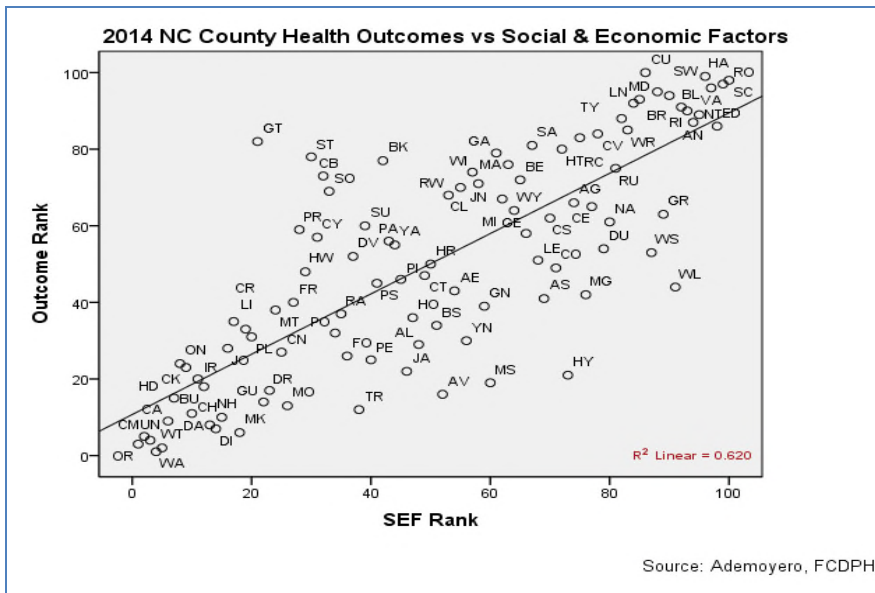


| County    | Rank | County         | Rank      | County      | Rank | County       | Rank |
|-----------|------|----------------|-----------|-------------|------|--------------|------|
| Alamance  | 41   | Cumberland     | 43        | Johnston    | 39   | Randolph     | 46   |
| Alexander | 44   | Currituck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



## 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=0.620). 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 a slight correlation between the outcomes and clinical care ranks (R-squared value=0.221); 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, income, family & social support and community safety.



## Snapshot 2014: 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 **length of life rank** is based on a measure of premature death: the years of potential life lost prior to age 75. The **quality of life 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 tobacco use, diet and exercise, alcohol & drug use, and sexual activity.

**Clinical care** includes measures of access to care and quality of care. **Social and economic factors** include

measures of education, employment, income, family & social support, and community safety. The **physical environment** includes measures of air & water quality and the housing & transit.

Below is a summary of findings comparing Forsyth County and the state of North Carolina to calculated target value for each factor. Thirteen (13) measures were better than state; Eleven (11) measures were significantly worse than state (*low birth weight; food environment index; physical inactivity; alcohol-impaired driving deaths; sexually transmitted infections; preventable hospital stays; mammography screening; children in poverty; child in poverty; children in single-parent household; violent crime rate; air pollution-particulate matter*). For more details on these measures, please visit

<http://www.countyhealthrankings.org>

|                                                                                                                               | Forsyth County | Error Margin | North Carolina | National Benchmark | FC Rank (of100) |
|-------------------------------------------------------------------------------------------------------------------------------|----------------|--------------|----------------|--------------------|-----------------|
| <b>Health Outcomes</b>                                                                                                        |                |              |                |                    | <b>26</b>       |
| <b>Length of Life</b>                                                                                                         |                |              |                |                    | <b>28</b>       |
| <b>Premature Deaths</b><br>Years of potential life lost before age 75 per 100,000 population                                  | 7,332          | 7,009-7,655  | 7,480          | 5,317              | <b>32</b>       |
| <b>Quality of Life</b>                                                                                                        |                |              |                |                    |                 |
| <b>Poor or Fair Health</b><br>Percentage of adults reporting poor or fair health.(age-adjusted)                               | 14%            | 12-16%       | 18%            | 10%                |                 |
| <b>Poor Physical Health Days</b><br>Average number of physically unhealthy days reported in last 30days                       | 3.0            | 2.6-3.3      | 3.6            | 2.5                |                 |
| <b>Poor Mental Health Days</b><br>Average number of mentally unhealthy days reported in last 30 days.                         | 3.1            | 2.5-3.4      | 3.4            | 2.4                |                 |
| <b>Low Birthweight</b><br>Percentage of live births with of infants weighing < 2500g                                          | 10.4%          | 10.1-10.8%   | 9.1%           | 6.0%               |                 |
| <b>Health Factors</b>                                                                                                         |                |              |                |                    | <b>29</b>       |
| <b>Health Behaviors</b>                                                                                                       |                |              |                |                    | <b>26</b>       |
| <b>Adult Smoking</b><br>Percentage of adults that report smoking at least 100 cigarettes                                      | 20%            | 18-22%       | 20%            | 14%                |                 |
| <b>Adult Obesity</b><br>Percentage of adults that report a BMI > or = 30                                                      | 26%            | 23-29%       | 29%            | 25%                |                 |
| <b>Food Environment Index</b><br>Index of factors that contribute to a healthy food environment                               | 6.3            |              | 6.9            | 8.7                |                 |
| <b>Physical Inactivity</b><br>Percent of adults 20 and over reporting no leisure time physical                                | 22%            | 19-24%       | 25%            | 21%                |                 |
| <b>Access to Exercise Opportunities</b><br>Percent of the population with adequate access to locations for physical activity. | 81%            |              | 65%            | 85%                |                 |
| <b>Excessive Drinking</b><br>Percentage of adults that report excessive drinking                                              | 12%            | 10-14%       | 13%            | 10%                |                 |

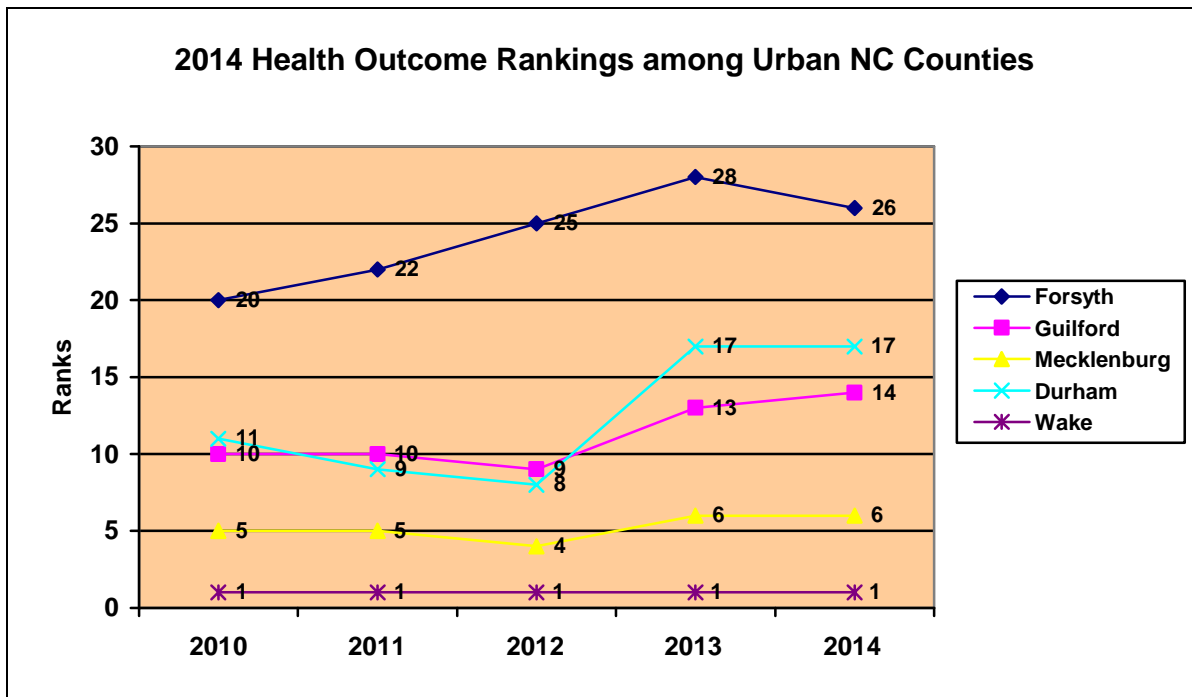
County Health Rankings 2014: North Carolina

|                                                                                                                                                                               | Forsyth County | Error Margin | North Carolina | National Benchmark* | FC Rank (of100) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------|----------------|---------------------|-----------------|
| <b>Alcohol-Impaired Driving Deaths</b><br>Proportion of driving deaths with alcohol involvement                                                                               | 42%            |              | 33%            | 14%                 |                 |
| <b>Sexually Transmitted Infection</b><br>Chlamydia rate per 100,000 population.                                                                                               | 766            |              | 568            | 123                 |                 |
| <b>Teen Birth Rate</b><br>Teen birthrate per 1,000 pop. among females ages 15-19                                                                                              | 44             | 43-46        | 44             | 20                  |                 |
| <b>Clinical Care</b>                                                                                                                                                          |                |              |                |                     | <b>18</b>       |
| <b>Uninsured</b><br>% of pop. under age 65 without health insurance                                                                                                           | 19%            | 17-20%       | 19%            | 11%                 |                 |
| <b>Primary Care Provider</b><br>Ratio on population to Primary care providers.                                                                                                | 997:1          |              | 1,462:1        | 1,051:1             |                 |
| <b>Dentists</b><br>Ratio of Population to dentists                                                                                                                            | 1,728:1        |              | 2,075:1        | 1,439:1             |                 |
| <b>Mental Health Providers</b><br>Ratio of population to mental health providers                                                                                              | 609:1          |              | 751:1          | 536:1               |                 |
| <b>Preventable Hospital Stays</b><br>Hospitalization rate for ambulatory- care sensitive conditions per 1,000 Medicare enrollees                                              | 62             | 59-65        | 60             | 46                  |                 |
| <b>Diabetic Screening</b><br>% of diabetic Medicare enrollees that receive HbA1c screenings                                                                                   | 87%            | 83-90%       | 88%            | 90%                 |                 |
| <b>Mammography screening</b><br>Percent of female Medicare enrollees having at least 1 mammogram in 2yrs (age 67-69)                                                          | 66%            | 62-69%       | 68%            | 71%                 |                 |
| <b>Social &amp; Economic Factors</b>                                                                                                                                          |                |              |                |                     | <b>36</b>       |
| <b>High School Graduation</b><br>Percent of 9th grade cohort that graduates in 4 years                                                                                        | 79%            |              | 79%            |                     |                 |
| <b>Some College</b><br>Percent of adults age 25-44 with some post secondary education                                                                                         | 63%            | 61-65%       | 63%            | 70%                 |                 |
| <b>Unemployment</b><br>Percent of pop. age 16+ unemployed but seeking work                                                                                                    | 9.0%           |              | 9.5%           | 4.4%                |                 |
| <b>Children in Poverty</b><br>Percent of children under age 18 in poverty                                                                                                     | 32%            | 29-35%       | 26%            | 13%                 |                 |
| <b>Inadequate Social Support</b><br>% of adults without social/emotional support                                                                                              | 18%            | 16-20%       | 21%            | 14%                 |                 |
| <b>Children in Single-Parent Households</b><br>% of children that live in household headed by single-parent                                                                   | 39%            | 37-41%       | 36%            | 20%                 |                 |
| <b>Violent Crime Rate</b><br>Violent crime rate per 100,000 population                                                                                                        | 564            |              | 372            | 64                  |                 |
| <b>Injury Deaths</b><br>Injury mortality per 100,000                                                                                                                          | 59             | 55-62        | 65             | 49                  |                 |
| <b>Physical Environment</b>                                                                                                                                                   |                |              |                |                     | <b>64</b>       |
| <b>Air Pollution- Particulate Matter</b><br>The average daily measure of fine particulate matter in                                                                           | 12.8           |              | 12.3           | 9.5                 |                 |
| <b>Drinking Water Violations</b><br>Percent of population exposed to water exceeding a violation limit                                                                        | 0%             |              | 2%             | 0%                  |                 |
| <b>Severe Housing Problems</b><br>Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, or lack of kitchen or plumbing facilities | 16%            | 15-17%       | 16%            | 9%                  |                 |
| <b>Driving Alone to Work</b><br>Percent of the workforce that drives alone to work                                                                                            | 84%            | 83-84%       | 81%            | 81%                 |                 |
| <b>Long Commute-Driving Alone</b><br>Among workers who commute in their car alone, the percentage that commute more than 30 minutes                                           | 20%            | 19-21%       | 30%            | 30%                 |                 |

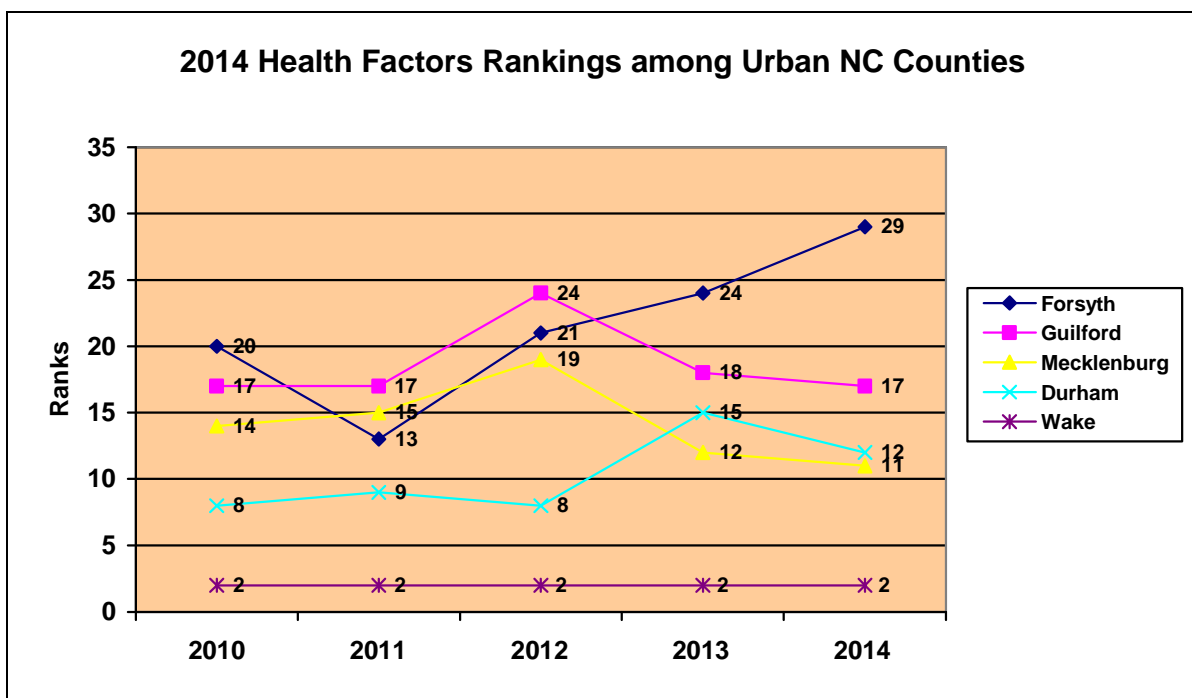
Note: \* 90<sup>th</sup> percentile, i.e., only 10% are better; Blank values reflect unreliable or missing data

Darker shade indicates worse than state values





\*Health outcomes represent how healthy a county, and is based on length and quality of life.



\*Health factors are what influences the health of the county, which is based on health behaviors, clinical care, social & economic factors, and physical environment.

## Summary Health Outcomes & Factors Rankings: North Carolina

The table below shows the health outcomes and health factor ranks for all 100 counties in North Carolina and Forsyth County is shown in **red**.

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

## Health Outcomes Sub Rankings: North Carolina

The table below shows the length and quality of life ranks for all 100 counties in North Carolina and Forsyth County is shown in **red**. Each of these ranks represents equal weighting of length and quality of life. Health outcomes represent how healthy a county is.

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

## Health Factors Sub Rankings: North Carolina

The table below shows the health behaviors and clinical care ranks for all 100 counties in North Carolina and Forsyth County is shown in **red**. Health behavior is weighted 30% and clinical care 20% of health factors.

Health factors are what influences the health of the county

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

## Health Factors Sub Rankings: North Carolina

The table below shows the social & economic factors and physical environment ranks for all 100 counties in North Carolina and Forsyth County is shown in **red**. Social & economic factors are weighted at 40% and physical environment at 10% of health factors. Health factors are what influences the health of the county

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



## 2014 County Health Rankings: Measures, 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                                                               | 2008-2010     |
| <b>Quality of Life</b>             | Poor or fair health                             | Behavioral Risk Factor Surveillance System                                                          | 2006-2012     |
|                                    | Poor physical health days                       | Behavioral Risk Factor Surveillance System                                                          | 2006-2012     |
|                                    | Poor mental health days                         | Behavioral Risk Factor Surveillance System                                                          | 2006-2012     |
|                                    | Low birthweight                                 | National Center for Health Statistics                                                               | 2005-2011     |
| <b>HEALTH FACTORS</b>              |                                                 |                                                                                                     |               |
| <b>HEALTH BEHAVIORS</b>            |                                                 |                                                                                                     |               |
| <b>Tobacco Use</b>                 | Adult smoking                                   | Behavioral Risk Factor Surveillance System                                                          | 2006-2012     |
| <b>Diet and Exercise</b>           | Adult obesity                                   | National Center for Chronic Disease Prevention and Health Promotion                                 | 2010          |
|                                    | Food environment index                          | USDA Food Environment Atlas, Map the Meal Gap                                                       | 2010-2011     |
|                                    | Physical inactivity                             | National Center for Chronic Disease Prevention and Health Promotion                                 | 2010          |
|                                    | Access to exercise opportunities                | OneSource Global Business Browser, Delorme map data, ESRI, & US Census Tigerline Files              | 2010 & 2012   |
| <b>Alcohol and Drug Use</b>        | Excessive drinking                              | Behavioral Risk Factor Surveillance System                                                          | 2006-2012     |
|                                    | Alcohol-impaired driving deaths                 | Fatality Analysis Reporting System                                                                  | 2008-2012     |
| <b>Sexual Activity</b>             | Sexually transmitted infections                 | National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention                               | 2011          |
|                                    | Teen births                                     | National Center for Health Statistics                                                               | 2005-2011     |
| <b>CLINICAL CARE</b>               |                                                 |                                                                                                     |               |
| <b>Access to Care</b>              | Uninsured                                       | Small Area Health Insurance Estimates                                                               | 2011          |
|                                    | Primary care physicians                         | HRSA Area Resource File                                                                             | 2011          |
|                                    | Dentists                                        | HRSA Area Resource File                                                                             | 2012          |
|                                    | Mental health providers                         | CMS, National Provider Identification                                                               | 2013          |
| <b>Quality of Care</b>             | Preventable hospital stays                      | Medicare/Dartmouth Institute                                                                        | 2011          |
|                                    | Diabetic screening                              | Medicare/Dartmouth Institute                                                                        | 2011          |
|                                    | Mammography screening                           | Medicare/Dartmouth Institute                                                                        | 2011          |
| <b>SOCIAL AND ECONOMIC FACTORS</b> |                                                 |                                                                                                     |               |
| <b>Education</b>                   | High school graduation                          | <a href="http://data.gov">data.gov</a> , supplemented with National Center for Education Statistics | 2010-2011     |
|                                    | Some college                                    | American Community Survey                                                                           | 2008-2012     |
| <b>Employment</b>                  | Unemployment                                    | Bureau of Labor Statistics                                                                          | 2012          |
| <b>Income</b>                      | Children in poverty                             | Small Area Income and Poverty Estimates                                                             | 2012          |
| <b>Family and Social Support</b>   | Inadequate social support                       | Behavioral Risk Factor Surveillance System                                                          | 2005-2010     |
|                                    | Children in single-parent households            | American Community Survey                                                                           | 2008-2012     |
| <b>Community Safety</b>            | Violent crime                                   | Uniform Crime Reporting - FBI                                                                       | 2009-2011     |
|                                    | Injury deaths                                   | CDC WONDER                                                                                          | 2006-2010     |
| <b>PHYSICAL ENVIRONMENT</b>        |                                                 |                                                                                                     |               |
| <b>Air and Water Quality</b>       | Air pollution - particulate matter <sup>1</sup> | CDC WONDER                                                                                          | 2011          |
|                                    | Drinking water violations                       | Safe Drinking Water Information System                                                              | FY 2012-2013  |
| <b>Housing and Transit</b>         | Severe housing problems                         | HUD, Comprehensive Housing Affordability Strategy                                                   | 2006-2010     |
|                                    | Driving alone to work                           | American Community Survey                                                                           | 2008-2012     |
|                                    | Long commute – driving alone                    | American Community Survey                                                                           | 2008-2012     |

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

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## County Health Rankings & Roadmaps

Building a Culture of Health, County by County

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