

Cumberland County Community Health Assessment-2013



**Cumberland County Department of Public Health
1235 Ramsey Street
Fayetteville, NC 28301
(910) 433-3600**



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Acknowledgements

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Community Health Assessment Advisory Team:

Buck Wilson, Health Director

Rodney Jenkins, Deputy Health Director

Mike Nagowski, Cape Fear Valley Health Systems

Shirley Johnson, Cumberland County Schools

Brenda Sparks, Carolina Collaborative Community Care (4 C)

Sandy Godwin, Cape Fear Valley Health Systems

Sharmila Udyavar, Fayetteville State University FSU)

Community Health Assessment Work Group:

Makkita Brown, DSS – Assisted in developing and distributing survey, and identifying health priorities.

Judy Klinck, Better Health- Assisted in developing and distributing survey, and identifying health priorities.

Shea Poteet, Cape Fear Valley Health Systems, Co-facilitated CHA work group, assisted in developing and distributing CHA survey, assisted with Populations, conducted Asthma and Inpatient Hospitalization information and data.

Russet Rogers, Southern Regional Area Health Education Center (AHEC), Completed socioeconomic factors, housing, and education.

Sharmila Udyavar, FSU- Assisted in developing, distributing, analyzing and writing narrative for the community health assessment opinion survey, identifying health priorities

Mitzi Johnson, FTCC- Assisted in developing and distributing the CHA survey, Conducted information on the Health Status of the county (BRFSS).

Kim Patawaran, 4-C- Assisted in developing and distributing the CHA survey.

Phyllis McLymore, Dept. of Public Health- assisted with secondary data, and CHA survey.

Karen McLeod- Dept. of Public Health – assisted with secondary data and CHA survey.

Martina Sconiers, Dept. of Public Health- assisted with secondary data and CHA survey.

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Fayetteville Metropolitan Housing Authority- Residents Coordinators- Health Priorities

Salvation Army- Health Priorities

Executive Summary

In the fall of 2012, The Cumberland County Department of Public Health and Cape Fear Valley Health Systems launched a comprehensive community health assessment and planning process collaborating with a wide range of community partners.

The Community Health Assessment (CHA) describes the health of the community by identifying and presenting information on the community's health status, needs, and resources. Its goal is to describe the health needs of the community and to develop strategies to address those needs. The CHA also identifies areas where better information is needed, especially information on health disparities among various subpopulations, and the quality of health care.

The Community Health Assessment (CHA) is the basis for all local public health planning, giving the local health unit the opportunity to identify and interact with key community leaders, organizations and concerned residents about health priorities and needs. This information forms the basis of improving the health status of the community through a strategic community action plan.

The CHA is conducted every three- four years to meet requirements for the Consolidated Agreement between the NC Division of Public Health and State Accreditation of Local Health Departments. As a part of the Affordable Care Act, Non-profit Hospitals are now required to conduct a Community Health (Needs) Assessment at least every three years.

The Department of Public Health and Cape Fear Valley Health Systems decided to collaborate on the CHA since both agencies were required to conduct an assessment. This collaboration created a broad-range of partners (Human Service Agencies, Institutions of Higher Learning, and Non-Profits etc.) to complete a comprehensive overview of the county's health.

Data Collection:

Primary data was collected through distribution of Community Health Assessment (CHA) Opinion Surveys. The purpose of the survey was to gather information about the health and quality of life of the community. The survey measured perceptions and attitudes of Cumberland County residents towards a variety of health and allied health issues that impact their lives. Survey results can be found in the appendix.

Secondary Data was collected from a variety of sources, including the North Carolina State Center for Health Statistics, U S Census Bureau, the Shep Center and other data sources for comparison with State data. Once all of the data was collected and analyzed the CHA work group, advisory group and community members selected the top four priority health concerns/issues.

Health Priorities:

After the CHA work and advisory groups reviewed and discussed the data obtained from the surveys, local and state data eight health problems were identified: Obesity, Heart Disease, Chronic Disease, Teen Pregnancy, Lack of Physical Activity, Diabetes, Infant Mortality, and Sexually Transmitted Diseases. To start the prioritizing process, a brief summary of the assessment findings was presented to the advisory and work groups and community members. Participants were given a list of the eight health concerns identified and asked to rank them as to what problem they wanted to see changed first, second, etc. Participants were given a health problem work sheet with a short summary of the data findings and the criteria for the rating the health problems: (1) Magnitude, (2) Seriousness of the Consequences, (3) Feasibility of Correcting, (4) Community and Financial Resources and (5) Existing Partnerships. The participants were asked to score each problem one to ten with ten being the highest. The scores were tallied and the health problem with the highest number was selected by descending order. The following health problems were selected:

- Reduce the Burden of Chronic Diseases
- Lack of Physical Activity
- Reduce Sexually Transmitted Infections
- Teen Pregnancy Prevention

Cumberland County Demographics-2011

Population: 324,885

Race/Ethnicity:

White-Non-Hispanic 48.6 %

African American 37.0%

Hispanic 9.9%

Other 4.5%

Gender:

Male 49%

Female 51%

Age:

Under 5 years 8.4%

Ages 20-29 years 19%

Ages 65 and over 8.6%

Unemployment: 2012

Cumberland County-10.20%

State- 9.50%

Residents living in poverty (2007-2011)

Cumberland County- 16.6%

State-16.1%

Children living in poverty

Cumberland County- 22.6%

State-22.6%

High School Graduation

Rate:

Cumberland County80.7%

State- 80.4%

Overview of Community Health Assessment

Demographic and Population Characteristics:

- In 2011, there were 324,885 people living in Cumberland County.
- Cumberland County has a young population. Nineteen percent (19%) of the county residents were 20-29 years of age.
- In 2011, Cumberland County had a greater percentage of White persons.

Socio-Economic Characteristics:

- In 2012, Cumberland County unemployment rate was 10.2, a little higher than the State's unemployment rate of 9.5.
- The percentage of Cumberland County families living in poverty is slightly higher than the State's rate and the percentage of Cumberland County children living in poverty was the same as that of the State.
- The 2012 Cumberland County high school graduation rate was slightly higher than the State's high school graduation rate.

Access to Care:

- During the period, 2010-2011, 18.4% of Cumberland County residents were uninsured, slightly lower than the State's uninsured (18.9%).
- According to the 2012 Behavioral Risk Factor Surveillance Survey (BRFSS), 80.0% of Cumberland County residents under age 65 had health coverage.
- According to the 2013 Community Health Assessment (CHA) survey, 27.7% of the respondents stated that the top factor that kept them from seeking medical treatment was their inability to pay for medical services.

Sources: www.dpi.state.nc.us <http://quickfacts.census.gov/qfd/state/>, www.schs.state.nc.us/SCHS/data/databook, 2013

Chronic Diseases create a heavy burden on health and healthcare.

Heart Disease, Cancer and Diabetes death rates exceeded the State.

According to the 2013 CHA survey, 56.5% of the respondents perceived that most people in Cumberland County die from heart disease/stroke.

According to 2013 CHA survey, 17% of the respondents perceived that obesity was a top issue in Cumberland County, followed by high blood pressure (13%).

According to the 2013 CHA, 26.8% of the respondents would like more physical activity programs in Cumberland County.

In 2012, 65.3% of Cumberland County adults that participated in the BRFSS reported being overweight or obese.

Sources: NC BRFSS (2012)
2013 Community Health Assessment Survey.
www.schs.state.nc.us/SCHS/data/databook_2013

Health Priorities

Chronic Diseases:

Chronic diseases, such as heart disease, stroke, cancer and diabetes, are leading causes of death and are among the most common, costly, and preventable of all health problems in Cumberland County. Chronic diseases create a heavy burden on health and healthcare.

According to the 2013 CHA survey, 56.5% of the respondents perceived that most people in Cumberland County die from heart disease/stroke.

Cumberland County's death rates for heart disease, cancer (all sites), and diabetes exceeded the State rates, however the county has improved slightly since the 2010 CHA, but has not met the Healthy NC 2020 target objectives.

Lack of Physical Activity:

According to the 2012 Behavioral Risk Factor Surveillance Survey (BRFSS), 65.3% of respondents in Cumberland County were overweight or obese.

According to the 2011 BRFSS, 51.8% of county adults did not meet the aerobic recommendation and 69.5% of county adults did not meet the muscle strengthen recommendations.

According to the 2012 BRFSS, 65.3% of adults in Cumberland County had a Body Mass Index (BMI) greater than 25.0 (overweight or obese).

Physical inactivity leads to being overweight or obese. Overweight and obesity are associated with increased risks of numerous diseases and health conditions such as type 2 diabetes, heart disease, stroke, and certain types of cancers.

In 2011 and 2012 Cumberland County's teen pregnancy rates exceeded the State and peer counties: Durham, Forsyth, Guilford, Mecklenburg and Wake.

African American teens had higher pregnancy rates both years (2011 and 2012).

In 2011, Cumberland County ranked number one in NC for gonorrhea with a total rate of 463.0 per 100,000 populations (1,479 new cases).

In 2011, Cumberland County ranked No. 3 in the State, more than twice the State rate.

In 2011 Cumberland County had 97 new cases of HIV.

Teen Pregnancy (2011 and 2012-Per 1,000 Females)

In 2011 and 2012 Cumberland County's total teen pregnancy rates of 61.8, (2011) and 56.0 (2012) were higher than the State rates of 43.8 (2011) and 39.6 (2012). When comparing Cumberland County teen pregnancy rate to peer counties, Cumberland County's total teen pregnancy rate was higher than all peer counties.

Sexually Transmitted Infections: (Per 100,000 Populations)

2006-2010:

Cumberland County's total primary and secondary syphilis rates of 4.4 were slightly higher than the State's total primary and secondary syphilis rate of 4.1.

Cumberland County's total gonorrhea rate of 326.8 was higher than the State's total gonorrhea rate of 168.9. Cumberland County's African American gonorrhea rate of 626.4 was significantly higher than the White gonorrhea rate of 157.6.

2007-2011:

Cumberland County's total Chlamydia rate of 799.9 cases p/100,000 was nearly twice as high as the State's total Chlamydia rate of 443.5 cases.

Source:

www.schs.state.nc.us/SCHS/data/databook,

2013

Chapter 1: Background and Introduction

Community Health Assessment:

The Community Health Assessment (CHA) describes the health of the community by identifying and presenting information on the community's health status, needs, and resources. Its goal is to describe the health needs of the community and to develop strategies to address those needs. The CHA also identifies areas where better information is needed, especially information on health disparities among various subpopulations, and the quality of health care.

The Community Health Assessment (CHA) is the basis for all local public health planning, giving the local health unit the opportunity to identify and interact with key community leaders, organizations and concerned residents about health priorities and needs. This information forms the basis of improving the health status of the community through a strategic community action plan.

The CHA is conducted every three- four years to meet requirements for the Consolidated Agreement between the NC Division of Public Health and State Accreditation of Local Health Departments. As a part of the Affordable Care Act, Non-profit Hospitals are now required to conduct a Community Health (Needs) Assessment at least every three years.

Cumberland County initiated the Community Health Assessment (CHA) process on September 27, 2012 when invitation letters signed by the Director of the Department of Public Health and the CEO of Cape Fear Valley Health Systems (CFVHS) were mailed to approximately twenty community agencies. The first CHA meeting was held on October 9, 2012 with fourteen agency representatives present. A review of the CHA process and requirements for Health Departments and Nonprofit Hospitals was presented to the group. A CHA team was created to help guide the process. The CHA team was divided into three categories: (1) Advisory Group, (2) Work Group, and (3) Facilitator. The advisory group was made up primarily of department heads or those in a leadership role; the work group was composed of representatives from seven community agencies and six staff members from the Department of Public Health. The workgroup had approximately twelve meetings (four were conference calls). The work group was responsible for: developing and distributing CHA survey tool to capture primary data (the surveys were distributed web-based by email), coordinating survey analysis and interpretation with Fayetteville State University (FSU), and setting criteria for prioritizing health problems. Also, each member of the work group was assigned a section of the CHA to complete i.e. Socio-economic, Education etc. The health education staff was responsible for secondary data collection. After examining the results of the CHA survey, secondary health data and input from the community members, the CHA team selected four health priorities for 2013: Reduce the Burden of Chronic Diseases, Lack of Physical Activity, Reduce Sexually Transmitted Infections and Teen Pregnancy Prevention.

The CHA team will continue to meet and prepare for development of the community action plans to address the selected priority health problems.

Community Health Assessment Advisory Group:

Buck Wilson, Health Director

Rodney Jenkins, Deputy Health Director

Mike Nagowski, Cape Fear Valley Health Systems

Shirley Johnson, Cumberland County Schools

Brenda Sparks, Carolina Collaborative Community Care (4 C)

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Kim Patawaran, 4-C– Assisted in developing and distributing the CHA survey.

Health Education Staff-Department of Public Health

Facilitators/Coordinators: Barbara Carraway, Department of Public Health

Shea Poteet, Cape Fear Valley Health Systems

Chapter 2: Health Data Collection Process:

Primary and secondary data were collected and analyzed as part of the community health assessment process.

Primary Data:

A community survey to assess the health of the population was conducted jointly by the Cumberland County Department of Public Health and the Cape Fear Valley Health System. The purpose of the assessment was to gather information about the health and quality of the community. The information from the surveys was used to develop a Community Health Assessment Report that will be published and available for the community to review. The survey measures perceptions and attitudes of Cumberland County residents towards a variety of health and allied health issues that impact their lives.

Methodology:

Primary data regarding community health and health perceptions was collected using web based surveys. Upon finalizing the survey questions to be included in the 2013 Community Health Assessment, the questions were entered into the web based survey software “Survey Monkey”. The link to the survey was extensively distributed at the Cape Fear Valley Health System among the employees; to patients at the satellite clinics, to visitors and patients at the Cumberland County Health Department and staff at the Health Department. A target group list was developed to which the survey link would be distributed. This target included the following agencies:

1. Better Health for Cumberland County
2. Care Clinic
3. Carolina Collaborative Community Care (4C)
4. Cape Fear Valley Health System Clinic Patients & Employees
5. City of Fayetteville
6. County Emergency Services
7. Cumberland County Department of Health Clinics and Staff
8. Cumberland County Department of Social Services Staff
9. Cumberland County Government/Public Library/Schools/Sheriff’s Office
10. Fayetteville City Police Department
11. Fayetteville Fire Department and Emergency Management
12. Fayetteville State University
13. Fayetteville Technical Community College Staff/Students
14. Fort Bragg Public Affairs Office
15. Methodist University
16. Public Works Commission (Fayetteville)
17. Southern Regional AHEC Family Medicine Center Patients

18. Staff Emergency Management
19. United Way
20. Veteran's Affairs Hospital, Fayetteville
21. Womack Army Medical Center

An email with a link to the survey was mailed out to the respondents and it contained the following information "The Cumberland County Department of Public Health and Cape Fear Valley Health System are currently collaborating with several other community agencies and organizations to complete the 2013 Community Needs Health Assessment. The purpose of the survey is to gather information about the health and quality of the Cumberland County community. The information will be used to identify needs, concerns and health problems per community opinion. A community health needs assessment report and action plans will be developed based on the survey data and additional data pulled from state databases. Please distribute the link within your organization and request survey participation by February 25, 2013." An ad was also placed in the newspaper and on the radio.

In instances where web based surveys could not be used, the Community Health Assessment Advisory group members circulated paper copies of the questionnaire and the responses were manually entered into the web based software. A total of 1751 respondents responded to the survey. The survey was kept available for approximately one month. After this period, the responses were downloaded in SPSS (Statistical Package for Social Sciences) and analyzed using this software. The major portion of the analysis included descriptive and bivariate analysis such as frequencies and cross tabulation. Results of survey in appendix

Secondary Data Collection and Analysis:

The primary source of health data for this report was the North Carolina State Center for Health Statistics (NC SCHS), including Health Stats for North Carolina, County Health Data Books, Behavioral Risk Factor Surveillance System (BRFSS), and the Cancer Registry. Other health data sources included: National Center for Health Statistics; Log into North Carolina (LINC), North Carolina Department of Medical Assistance, Health Indicator Warehouse, and North Carolina Action for Children, Kids Count Data Center, and UNC Cecil G. Sheps Center for Health Services Research. Secondary data was compared to the state and peer counties by calculating percentages differences and trend using the excel calculation sheets.

Health Priorities:

After the CHA work and advisory groups reviewed and discussed the data obtained from the surveys, local and state data eight health problems were identified: Obesity, Heart Disease, Chronic Disease, Teen Pregnancy, Lack of Physical Activity, Diabetes, Infant Mortality, and Sexually Transmitted Diseases. To start the prioritizing process, a brief summary of the assessment findings was presented to the advisory and work groups and community members. Participants were given a list of the eight health concerns identified and asked to rank them as to what problem they wanted to see changed first, second, etc. Participants were given a health problem work sheet with a short summary of the data findings and the criteria for rating the health problems: (1) Magnitude, (2) Seriousness of the Consequences, (3) Feasibility of Correcting, (4) Community and Financial Resources and (5) Existing Partnerships. The participants were asked to score each problem one to ten with ten being the highest. The scores were tallied and the health problem with the highest number was selected by descending order. The following health problems were selected:

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- Reduce Sexually Transmitted Infections
- Teen Pregnancy Prevention

Chapter 3: History of Cumberland County:

Cumberland County was formed in 1754 from Bladen. It is located in the southeastern section of the State and is bounded by Sampson, Bladen, Robeson, Hoke, Harnett and Johnson counties. The present land area is 652.32 square miles. Cumberland County was named in honor of William Augustus, Duke of Cumberland, and third son of King George II. Cumberland was the commander of the English Army at the Battle of Culloden, in which the Scotch Highlanders were defeated in 1746. Many of them came to America, and their principal settlement was in Cumberland County. Cumberland was changed to Fayette County in early 1784, but the act was repealed at the next General Assembly, which met in November 1784.

The county seat was first called Cumberland Court House. In 1762, Campbellton was established at Cross Creek with provisions for the public buildings. In 1778, Cross Creek and Campbellton were joined and the courthouse was ordered to be erected in that part of the town known as Cross Creek. In 1783, Campbellton was changed to Fayetteville in honor of Lafayette.¹ Currently, Fayetteville is the County's seat and its largest municipality. Other municipalities in Cumberland County are Eastover, Falcon, Godwin, Hope Mills, Linden, Spring Lake, Stedman and Wade.

Fort Bragg:

In 1918, the Chief of Field Artillery, General William J. Snow, seeking an area having suitable terrain, adequate water, rail facilities and a climate for year-round training, decided that the area now known as Fort Bragg met all of the desired criteria. Consequently, Camp Bragg came into existence on Sept. 4, 1918. Camp Bragg was named for a native North Carolinian and Confederate general, General Braxton Bragg. Prior to its establishment as a military reservation, the area was a desolate region. Huge forests of Longleaf and Loblolly pines covered the sandy area. About 1729, Highland Scots began cultivating the land in the Longstreet Presbyterian Church area in what was to become part of Fort Bragg. Because demobilization had begun, the War Department decided to reduce the size of Camp Bragg from the planned six to a two brigade cantonment to provide a garrison for Regular Army units and a training center for National Guard Artillery units. Military personnel then took over all of the work at the Camp, a large part of which had been done by wartime civilian employees.

The year 1920 saw little military training taking place. A large tract of land on the reservation had been set aside as a landing field to be used in connection with observation of Field Artillery firing. Here were stationed various aircraft and balloon detachments to photograph terrain for mapping, carry mail, spot for artillery and forest fires, and serve in support of the Field Artillery Board. On April 1, 1919, the War Department officially established Pope Field, naming the landing field in honor of First Lieutenant Harley H. Pope. Lieutenant Pope and his crewman,

¹ <http://www.e-referencedesk.com/resource/counties/north-carolina/cumberland.html>

Sergeant Walter W. Flemming, were killed when their Curtiss JN-4 Jenny airplane crashed in the Cape Fear River Jan. 7, 1919 while mapping a U.S. airmail route between Emerson Field, Camp Jackson, South Carolina and Newport News, Virginia. Now one of the oldest installations serving the Air Force, early pilots landing at Pope Field were instructed to make one or two low passes over the landing strip to clear it of wild deer.

Early in 1921, two Field Artillery units, the 13th and 17th Field Artillery Brigades, began training in the camp. However, due to postwar cutbacks, the War Department decided to abandon Camp Bragg on Aug. 23, 1921. This was averted by the determined efforts of General Albert J. Bowley, Commanding General of Camp Bragg, various civic organizations in the nearby city of Fayetteville, and a personal inspection by the Secretary of War. The abandonment order was rescinded on Sept. 16, 1921.

One year later, Sept. 30, 1922, Camp Bragg became Fort Bragg, a permanent Army post. Under the direction of General Bowley, development of the fort progressed rapidly. Parade grounds, training facilities, baseball diamonds and other athletic facilities were constructed to lend a permanent air to Camp Bragg. Because Camp Bragg was the only reservation in the United States with room enough to test the latest in long range artillery weapons, the Field Artillery Board was transferred here from Fort Sill, Okla. on Feb. 1, 1922. The Camp was designated as Fort Bragg, Sept. 30, 1922.²

Fort Bragg is one of the largest military installations in the world comprising approximately 60,000 military personnel, and has an annual pay roll of about 3 billion dollars. Fort Bragg has a 12.9 billion direct and indirect annual impact on the ten counties that surround Fort Bragg.³

² www.bragg.army.mil/newcomers-click on Ft. Bragg History

³ www.ncse.org/regional-cluster/fort-bragg

Location/Geography

Cumberland County consists of 664 square miles located in the upper coastal plain section of the State. The area is better known as the “Sandhills”. Elevations in Cumberland County range from 40 to 486 feet above sea level. Cumberland County has progressed from its beginnings as a river front distribution center to a highly commercialized area offering a variety of services to its citizens. Fayetteville is located in the Coastal Plain at the foot of North Carolina’s Piedmont plateau. The city, located next to the Cape Fear River, is 107 feet above sea level.

Climate

The climate in Cumberland County is comparable to other communities in the Carolinas, with pleasant spring and fall seasons, mild winters and hot summers. Snow and sleet are rare and even freezing temperatures normally occur only during the months of December through February.

Although hurricanes do occur along the coast of North Carolina, and can wreak damage far inland, only 8 hurricanes in the past 50 years have had a significant impact on Cumberland County. Fayetteville is 90 miles from the closest point on the NC coast, and the effect of storms is usually limited to water damage caused by heavy rains.

(www.co.cumberland.nc.us/brac_welcome.aspx)

Cumberland County gets 47 inches of rain per year. Snowfall is 3 inches. The number of days with any measurable precipitation is 106. On average, there are 217 sunny days per year in Cumberland County. The July high is around 91 degrees. The January low is 31. Our comfort index, which is based on humidity during the hot months, is a 32 out of 100, where higher is more comfortable. ⁴

Climate	Cumberland, NC
Rainfall (in.)	46.5
Snowfall (in.)	2.5
Precipitation Days	106
Sunny Days	217
Avg. July High	90.9
Avg. Jan. Low	31.2
Comfort Index (higher=better)	32
UV Index	4.7
Elevation ft.	148

⁴ www.bestplaces.net/climate/county/north_carolina/cumberland

Cumberland County Government

The County of Cumberland functions under a Board of Commissioners – County Manager form of government. The Board of County Commissioners consists of seven members. Two members are elected from District 1 which follows the 17th House District line, three members from District 2 which follows the 18th House District line, and two members at large. Each member of the board is elected for a four-year term. The terms are staggered with two members from District 1 and two members at large elected in a biennial general election, and three members from district 2 elected two years later. The chairman and vice chairman are elected by the members on a yearly basis. The Board is the policy-making and legislative authority for Cumberland County. They are responsible for adopting the annual budget, establishing the tax rate, approving zoning and planning issues and other matters related to health, welfare and safety of citizens.

Although the governments of the City and County are separate, many local government agencies serve the residents of both, including the Schools, Libraries, Health Department, Mental Health and Department of Social Services. Commissioners serve on the Board of Health, Alliance Behavioral Health, Board of Department of Social Services and Cape Fear Valley Health System's Hospital Board.

The Board of Commissioners meets twice a month, the first Monday of each month at 9:00 a.m. and the third Monday of the month at 7:00 p.m. The board holds special meetings, when necessary. The meetings are advertised in advance. The meetings are open to the public and are held in the Commissioners' meeting room on the first floor of the County Courthouse located on Dick Street. The agenda for each regular scheduled Board meeting is normally available on the Thursday prior to the Monday meeting on the county web site; www.co.cumberland.nc.us . The County Manager is appointed by, and serves at the pleasure of the Board of Commissioners. The County Manager is the Chief Executive Officer and has the responsible for implementing policies and procedures of the Board, delivery of services, managing daily operations and appointment of subordinate department managers.



Economy

Fort Bragg and Pope Air Force Base are the backbone of the county's economy, pouring billions a year into the region's economy.

Cumberland County has a heritage of agriculture but began the transition to manufacturing in early 1920's. Using the agriculture base, many commodities were packaged and shipped throughout North America. These companies were soon joined by chemical, textile, and furniture operations. Existing industry lists include bio-tech/pharmaceutical (gelatin), automotive (tires and filters), plastics (resins and films); call centers (in-bound/out-bound), and major distribution centers for Wal-Mart. Military contractors use the areas veteran population to provide research and development, information technology, logistics and many other services to the military worldwide.

Top Employers for Cumberland County

Company Name	Industry	# of Employees
Department of Defense	Public Administration	1,000+
Cumberland County Board of Education	Education & Health Services	1,000+
Cape Fear Valley Health Systems	Education & Health Services	1,000+
Wal-Mart Associates, Inc.	Trade, Transportation & Utilities	1,000+
Goodyear Tire & Rubber, Inc.	Manufacturing	1,000+
County of Cumberland	Public Administration	1,000+
City of Fayetteville	Public Administration	1,000+
Fayetteville Technical Community College	Education & Health Services	1,000+
Veterans Administration	Public Administration	1,000+
Non-Appropriated Fund Activity-Army	Leisure & Hospitality	1,000+
Fayetteville State University (18321)	Education & Health Services	1,000+
Army & Air Force Exchange Service	Public Administration	500-999
Food Lion, Inc.	Trade, Transportation & Utilities	500-999
U.S. Postal Service	Trade, Transportation & Utilities	500-999
Purolator Filters, Na, LLC	Manufacturing	500-999
Eaton Corporation	Manufacturing	500-999
Public Works Commission	Public Administration	500-999
ITT Systems Corporation	Other Services	500-999
Lowes Home Centers, Inc.	Trade, Transportation & Utilities	500-999
Worldwide Language Resources, Inc.	Professional & Business Services	500-999
E.I. DuPont De Nemours & Co., Inc.	Professional & Business Services	250-499
Methodist University (Branch)	Education & Health Services	250-499
Linc Government Services, LLC	Construction	250-499
AT&T Services, Inc.	Information	250-499
L3 National Security Solutions, Inc.	Professional & Business Services	250-499

www.theNCAlliance.co

Economic Indicators

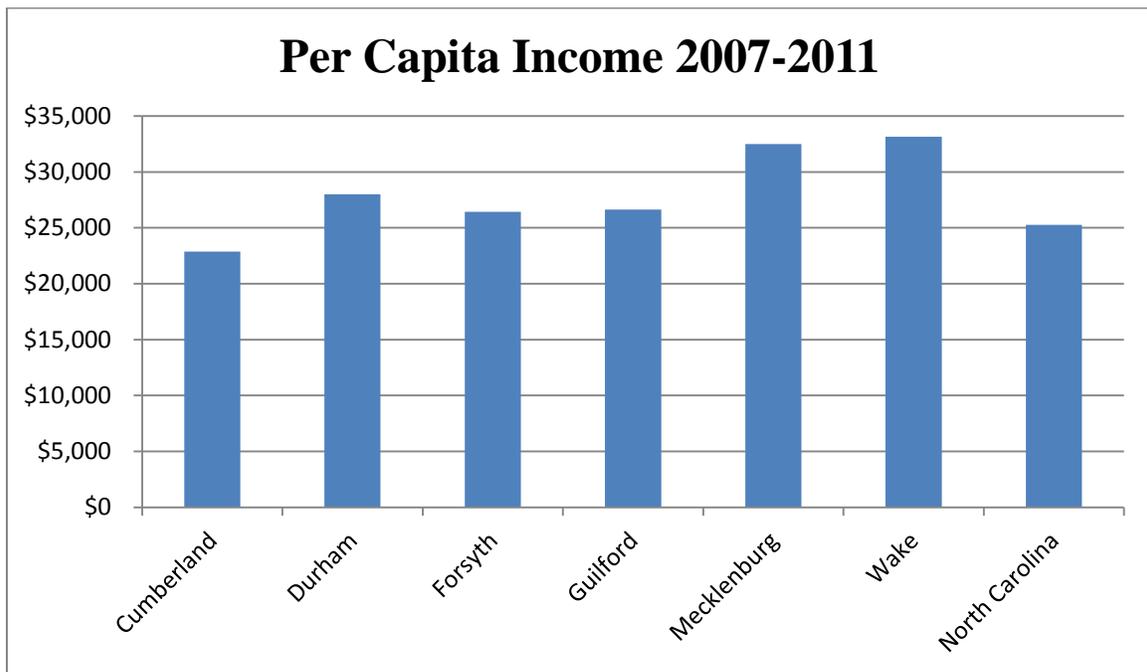
Per Capita Income (2011 dollars), 2007-2011

Per capita personal income is the income that is received by persons from all sources. From 2007 – 2011 the per capita personal income for Cumberland County was \$22,888, compared to the State’s per capita personal income of \$25,256. Cumberland County’s per capita income was lower than all of its peer counties: Durham (\$27,988), Forsyth (\$26,424), Guilford (\$26,644), Mecklenburg (\$32,506), and Wake (\$33,161).

Per Capita Income 2007-2011

Cumberland	\$22,888
Durham	\$27,988
Forsyth	\$26,424
Guilford	\$26,644
Mecklenburg	\$32,506
Wake	\$33,161
North Carolina	\$25,256

Source: <http://quickfacts.census.gov/qfd/states/37000.html>



Cumberland County’s per capita income fell to 35th in the state from 5th as reported in the last community health assessment. Durham County ranked 8th, Forsyth County 15th, Guilford County 13th, Mecklenburg County 3rd, and Wake County 2nd.

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_11_5YR_DP03&prodType=table

Poverty Rates 2011

In 2011, 16.6% of Cumberland County residents lived below the poverty level compared to 16.1% of North Carolina residents. Cumberland County had a higher percent of residents living in poverty than all but one of its peer counties: Durham (17.1%), Forsyth (16.3%), Guilford (16.2%), Mecklenburg (13.6%), and Wake (10.1%).

Cumberland County's percentage of children living in poverty during 2011 was 22.6%, matching the state percent of 22.6%. Cumberland County's percentage of children living in poverty was lower than Durham (23.0%) and Forsyth (24.8%) but higher than Guilford (22.5%), Mecklenburg (18.8%), and Wake (12.9%)

	Percentage of Residents Living in poverty (2007 - 2011)*	Percentage of children living in poverty (2007 - 2011)**
Cumberland	16.6%	22.6%
Durham	17.1%	23.0%
Forsyth	16.3%	24.8%
Guilford	16.2%	22.5%
Mecklenburg	13.6%	18.8%
Wake	10.1%	12.9%
North Carolina	16.1%	22.6%

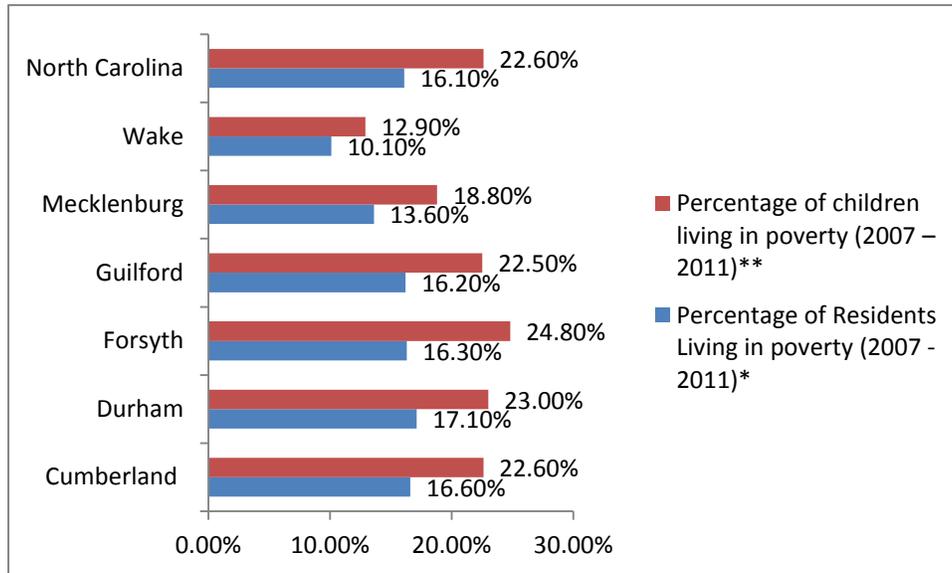
Sources: * <http://quickfacts.census.gov/qfd/states/37000.html>

** U.S. Census Bureau, 2007-2011 American Community Survey

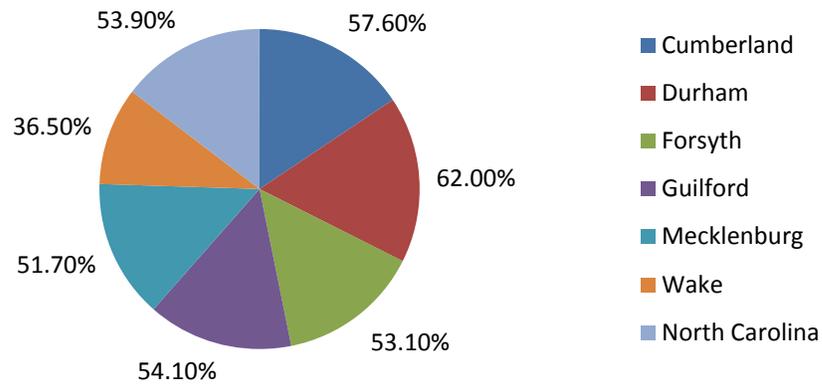
Other key indicators of poverty levels are the number of children who receive free and reduced lunch and children that receive work first assistance. Families must be at or below 130 percent of the federal poverty level to be enrolled in the free school lunch program and under 185 percent of the federal poverty level to enroll in the reduced price program. In 2010/2011, 57.6% of the children were enrolled in the free and reduced lunch program compared to 53.9% of children statewide. Cumberland County's percentage of children enrolled in free and reduced lunch was lower than Durham County (62.0%) but higher than Forsyth (53.1%), Guilford (54.1%), and Mecklenburg (51.7%, and Wake (36.5%).

	Percentage of children Enrolled in free and reduced lunch (2010-2011)	Number of children receiving work first (2010)
Cumberland	57.6%	2,180
Durham	62.0%	1,032
Forsyth	53.1%	1,509
Guilford	54.1%	2,096
Mecklenburg	51.7%	6,425
Wake	36.5%	2,398
North Carolina	53.9%	39,341

Poverty Rates 2011

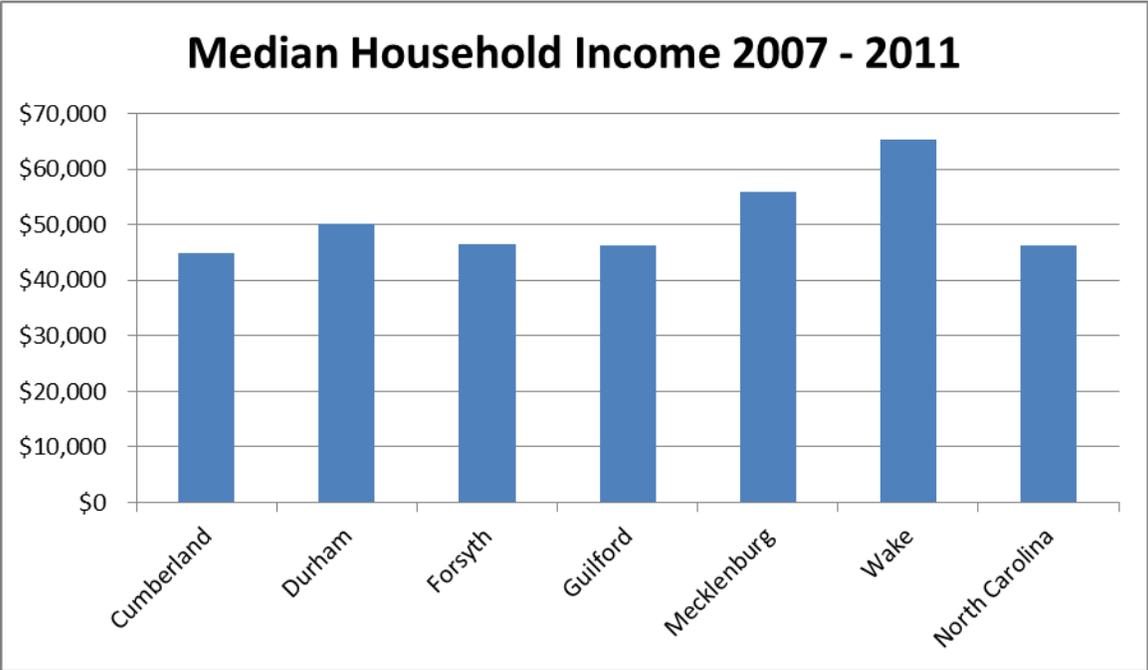


Percentage of children Enrolled in free and reduced lunch (2010-2011)



Median Household Income 2007 – 2011

Median household income is the middle income of all households, half of the households earn more and half earn less. Household income is the total income of all income earners over age 15 living in a household. In 2011, the median household income of Cumberland County was \$44,861 compared to \$46,291 for North Carolina. Cumberland County’s median household income was lower than Forsyth County (\$46,417), Guilford County (\$46,288), Durham (\$50,078), Mecklenburg (\$55,994) and Wake (\$65,289).



Source: <http://quickfacts.census.gov/qfd/states/37000.html>

When asked on a survey, “What was your household income last year (2012)?” The highest income category was families with annual income between \$30,000-49,999 per annum (24%).

Work Force

The current state of the economy continues to have an impact upon employment, although some improvement in unemployment numbers is occurring. Cumberland County's unemployment rate of 10.2% continues to exceed the state rate of 9.5% and all of its peer counties: Durham (7.5%), Forsyth (8.8%), Guilford (9.5%), Mecklenburg (9.3%), and Wake (7.3%). Unemployment rates declined for North Carolina by 1% in the past year and in each of the peer counties. Cumberland County's unemployment remained the same. This statistic warrants some discussion as to what factors are contributing to higher unemployment in Cumberland County.

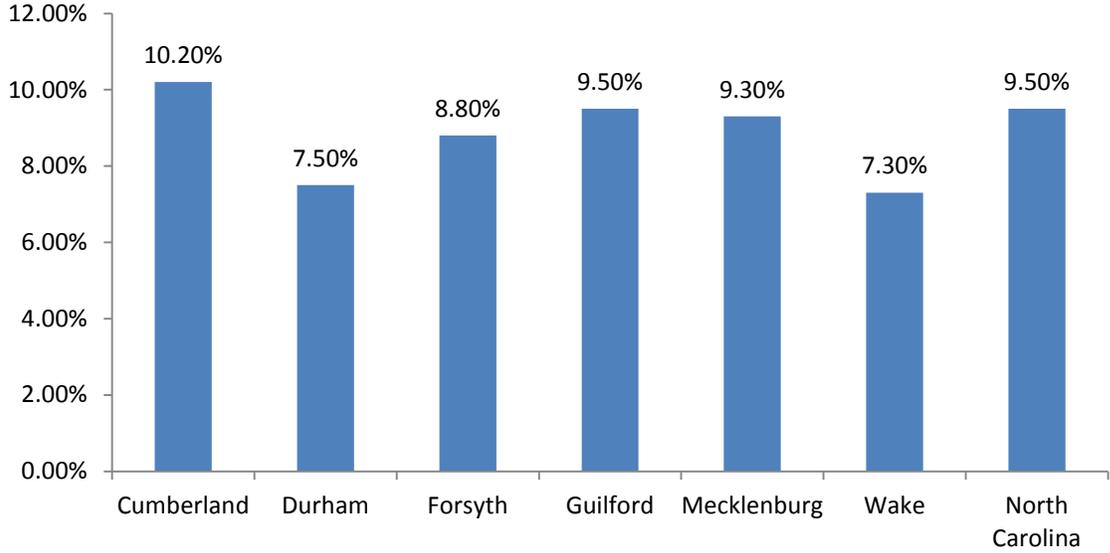
Civilian Work Force Estimates As of December 2012 (not seasonally adjusted)

	Cumberland	Durham	Forsyth	Guilford	Mecklenburg	Wake	NC
Labor Force	145,160	145,046	179,296	258,583	495,027	484,276	4,707,210
Employed	130,414	134,156	163,449	233,917	448,863	449,007	4,262,359
Unemployed	14,746	10,890	15,847	24,666	46,164	35,269	444,851
Rate Percent Dec. 2012	10.2%	7.5%	8.8%	9.5%	9.3%	7.3%	9.5%
Rate Percent 2011	10.2%	8.5%	10.0%	10.8	10.7%	8.3%	10.5%
Percent Change	0%	-1.0%	-1.2%	-1.3%	-1.4%	-1.0%	-1.0%

Source: <http://eslmi03.esc.state.nc.us/ThematicLAUS/clfasp/CLFAASY.ASP>

When asked on the community health survey "What is the top concern in your community?" Thirty-four percent of the respondents said employment opportunities.

Unemployment Rate Dec 2012



Housing

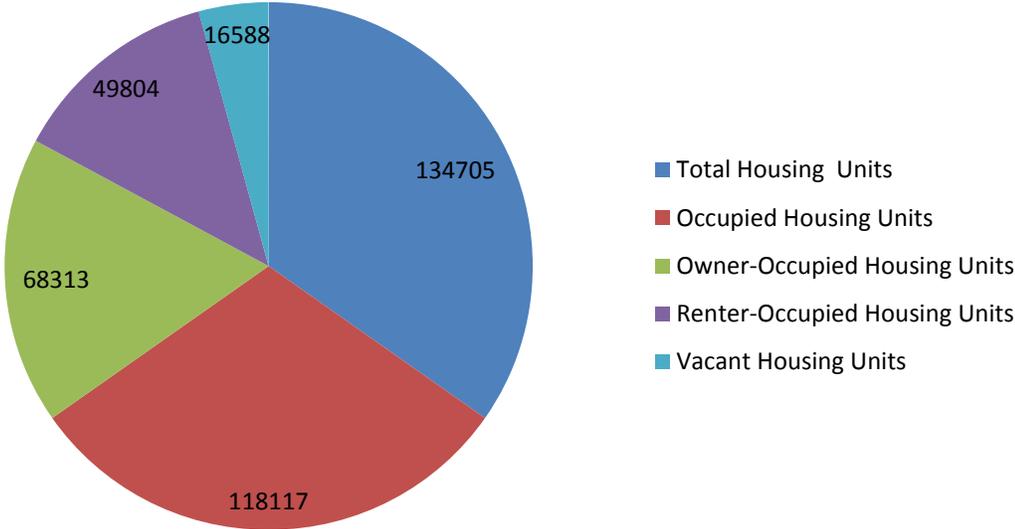
Historically, homeownership has been a major way to build wealth for middle class Americans. Families continue to struggle to keep their homes or purchase a home, although signs are beginning to indicate that the market is improving. In 2011, Cumberland County had 118,117 occupied housing units. Fifty-eight percent (68,313) were owner-occupied and forty-two percent (49,804) were renter-occupied. Durham County had fifty-five percent (59,354) owner-occupied units, Forsyth County had sixty-six percent (90,729), Guilford County had sixty-three percent (120,778), Mecklenburg County had sixty-two percent (220,693) and Wake County had sixty-seven percent (222,745) owner-occupied units. North Carolina overall had sixty-eight percent (2,483,743) housing units that were owner-occupied. Cumberland County's percent of owner occupied units falls below the state average and all its peer counties except for Durham County.

2011	Cumberland	Durham	Forsyth	Guilford	Mecklenburg	Wake	North Carolina
Total housing units	134,705	119,137	155,739	216,137	393,157	364,702	4,286,863
Occupied housing units	118,117	107,150	137,682	192,064	356,833	334,302	3,664,119
Owner-occupied housing units	68,313	59,354	90,729	120,778	220,693	222,745	2,483,743
Renter-occupied housing units	49,804	47,796	46,953	71,286	136,140	111,557	1,180,376
Vacant housing units	16,588	11,987	18,057	24,073	36,324	30,400	622,744

Source: U.S. Census Bureau, 2007-2011 American Community Survey

When asked on a survey, what is the top concern in your community? Six percent of respondents said affordable housing.

Cumberland



Education

The Cumberland County School system’s vision is “to empower all students to collaborate, compete, and succeed in an increasingly interconnected world.” The following statistics provide a snapshot of the Cumberland County School System. Unless otherwise noted, the 2011-2012 Annual Report entitled *Cumberland County School: Staying the Course*” is the source for these facts and figures.

Schools:

Total Number of Schools	86
Elementary Schools	53
Middle Schools	15
High Schools	15
Year-Round Classical Schools	1
Special Schools	2

Enrollment:

Total enrollment (not including pre-K)	52,166
Pre-K Students	897
Elementary School Students	24,035
Middle School Students	11,941
High School Students	16,190
Dropout Rate*	2.63%

*Source: <http://www.dpi.state.nc.us/docs/research/discipline/reports/consolidated/2011-12/consolidated-report.pdf>

Employees

Total Employed (Full Time)	6,531
Certified Teachers	3,476
National Board Certified Teachers	241
Student Support Staff	1,389
Other	1,666

Transportation:

Total Number of Yellow School Buses	446
Bus Routes Traveled Daily	1,344
Total Number of Students Transported Daily	26,358

Student Demographics (Ethnicity)

Black	44.91%
White	33.78%
Hispanic	10.93%
Asian	1.69%
Native American	1.92%
Other	6.46%
Military/Federally Connect Students (16,672)	31.82%

Special Services:

Students receiving free or reduced lunch	56.90%
Students receiving exceptional children's services	13.80%
Students enrolled in AIG programs	9.30%

Graduates (class of 2011)

Total Number of Graduates	3,466
Graduates Pursuing Higher Education	2,865
Graduates Entering the Military	342
Military Academy Appointments	9
Graduates Awarded Military Scholarships to Attend the University of Their Choice	77
Total Amount of Scholarship Dollars Awarded (academic, athletic, and military)	\$40,227,718

Budget:

Total Annual Operating Budget	\$430 Million
State	63.2%
Local	19.9%
Federal	13.4%
Competitive Grants	3.5%
Per Pupil Expenditure	\$8,294

Source: Cumberland County Schools: "Staying the Course" 2011-2012 Annual Report

Choice Programs

Choice programs are offered at twelve elementary, five middle and fourteen high schools. The choice programs are offered on a year-round schedule or curriculum that focuses on a topical area of study. Parents must apply to these schools and provide transportation for their children.

Cumberland County Public Schools Governed Choice Programs

Academy of Information Technology
Academy of Engineering Technologies
Academy of Agriculture and Natural Science
School of the Arts
International Baccalaureate Academy
Academy of Math and Science
Health and Life Sciences
Academy of Natural Science
Academy of Global Studies
Academy of Finance
Fire Academy
Classical Studies
Early College
Academy of Health Sciences
Academy of Green Technology
Academy of Public Safety and Security
Global Communications
Foreign Language and Global Communications
Middle School Immersion Program
Communications with Foreign Language
School of Leadership
Montessori
Language Immersion (Spanish and Mandarin Chinese)
Math and Science

**SAT Scores
(2012)**

Approximately 1839 (56.2%) of Cumberland County students took the SAT exam with an average score of 1383. Sixty-three thousand, two-hundred and seventy-one (68.0%) students took the test statewide with an average score of 1469. As shown in the chart below, Cumberland County falls below its peer counties in percent of students taking the SAT exam as well as the average score on the exam.

	Scores	Number of Students Tested	Percentage of Students Tested
Cumberland	1383	1839	56.2%
Durham	1399	1531	72.5%
Forsyth	1479	2158	63.8%
Guilford	1424	3404	73.2%
Mecklenburg	1463	5531	67.5%
Wake	1565	6602	74.4%
North Carolina	1469	63,271	68.0%

Source: The North Carolina 2012 SAT Report

<http://www.ncpublicschools.org/docs/accountability/reporting/sat/2012/satreport2012.pdf>

**Educational Attainment
(25 years and older)**

	High School Diploma or Higher	Bachelor's Degree or Higher
Cumberland	89.0%	20.8%
Durham	87.9%	42.1%
Forsyth	86.9%	30.9%
Guilford	86.7%	33.8%
Mecklenburg	89.3%	42.3%
Wake	90.8%	47.0%
North Carolina	84.7%	26.9%

Eighty-nine percent of Cumberland County residents 25 years and older attained a high school diploma or higher. Only 20.8% attained at least a Bachelor's degree. Cumberland County exceeded high school or higher compared to Durham (87.9%), Forsyth (86.9%) and Guilford (86.7%) counties. Conversely, the five peer counties and the state exceeded Cumberland County on the percent of individuals who attain a Bachelor's Degree or higher.

**4-Year Cohort Graduation Rate Report
2008-09 Entering 9th Graders Graduating in 2011-12 or Earlier**

**Cumberland County Schools
LEA Code: 260**

Subgroup	Denominator	Numerator	Percent
All Students	3917	3161	80.7
Male	1973	1504	76.2
Female	1944	1657	85.2
American Indian	91	73	80.2
Asian	68	62	91.2
Black	1880	1473	78.4
Hispanic	355	304	85.6
Two or More Races	188	160	85.1
White	1322	1077	81.5
Economically Disadvantaged	1841	1381	75.0
Limited English Proficient	36	21	58.3
Students With Disabilities	424	226	53.3

Source: <http://accrpt.nepublicschools.org/app/2012/cgr/>

The four year cohort graduation rate reflects the percentage of ninth graders who graduate from high school four years later. Overall graduation rate for Cumberland County was 80.7%. Females have a higher graduation rate at 85.2% compared to males at 76.2%. Asian students continue to have the highest graduation rate at 91.2%. Hispanic students ranked second at 85.6%, two or more racial/ethnic students ranked third at 85.1%, White students ranked fourth (81.5%) followed by American Indian students at 80.2%. Black students ranked last at 78.4%. These figures show a shift from the prior 2010 report where White students ranked second and there was little difference between the rates for Hispanic, Black and American Indian students.

Private Schools

Abney Chapel Christian School	488-7525
Adventist Christian School	484-6091
Bal-Perazim Christian Academy	487-4220
Berean Baptist Academy	868-2511
College Lakes Christian Academy	488-8344
Cornerstone Christian Academy	867-1166
Fayetteville Academy	868-5131
Fayetteville Christian School	483-3905
Flaming Sword Christian Academy	764-3500
Freedom Christian Academy	485-7777
Guy Schools	484-8308
Harvest Preparatory Academy	483-6838
LEJ Diagnostic Center	485-5655
Liberty Christian Academy	424-1205
Montessori School	323-4183
New Life Christian Academy	868-9640
Northview Baptist Academy	488-4748
Northwood Temple Academy	822-7711
Renaissance Classical Christian Academy	916-1000
St. Ann Catholic School	484-3902
St. Patrick Catholic School	323-1865
Stedman Christian Academy	483-2611
Temple Christian Academy	321-3160
Trinity Christian School	488-6779
Village Christian Academy	483-5500
Willowbrook Treatment Center	733-0617

Source: 2012 North Carolina Directory of Non-Public Schools: Conventional School Edition
<http://www.ncdnpe.org/documents/11-12-CS-Directory.pdf>

Higher Education

Fayetteville State University
Information: www.uncfsu.edu
Phone: (910) 672-1474

Methodist University
Information: www.methodist.edu
Phone: (910) 630-7000

Fayetteville Technical Community College
Information: www.faytechcc.edu
Phone: (910) 678-8400

Campbell University
Information: www.campbell.edu
Phone: (800) 949-8627

University of North Carolina at Pembroke
Information: www.uncp.edu
Phone: (910) 521-6000

Miller-Motte College
Information: www.miller-motte.edu
Phone: (866) -297-0267

Troy University
Information: www.troy.edu
(910) 484-6839

University of Phoenix
Information: www.phoenix.edu
(910) 485-9000

Local Transportation

Passenger Rail Service

Fayetteville is served by passenger trains of the Amtrak system with four trains stopping daily in route between New York and Miami. Amtrak's Carolinian Line in Raleigh provides passenger service within North Carolina and on to Richmond and Washington.

FAST

Fayetteville's public transportation system, FAST, is a community-wide bus system linking places of interest within the urban area, including shopping centers, hospitals, schools, and institutions of higher learning, industrial parks, office parks, businesses. FAST operates twelve bus routes and two shuttle routes. Most routes begin and end at the Transfer Center located at 147 Old Wilmington Road, Fayetteville.

In addition to the fixed-route buses, FAST operates a complimentary Para transit service for those qualifying under the Americans with Disabilities Act. This service operates the same time and in the same area as the fixed-route system. Individuals desiring to use this service must be certified in accordance with the ADA provisions.

The Fayetteville Area System of Transit also operates a coordinated transportation system. Transportation is provided to those human services agencies that have entered into a contract with the City of Fayetteville for those services. Transportation is provided to all areas of Cumberland County.

Source: 2010 Community Health Assessment



Fayetteville, NC Regional Airport

Located in the "City of Dogwoods," the Fayetteville Regional Airport serves a 12-county area in the Sandhills of southern North Carolina, along the I-95 corridor. Fayetteville Regional Airport (400 Airport Road, Suite 1, Fayetteville, NC 28306) is serviced by three main airlines: US Airways Express, with daily service to its Charlotte, NC hub, Delta Air Lines, with daily service to its Atlanta hub and United, with daily service to its Washington DC (Dulles) hub.

Recreation

Fayetteville-Cumberland Parks & Recreation Department offers a wide variety of leisure activities, programs and facilities. The department serves a diverse population and programs activities for all ages. These include summer camps, sports camp, youth athletics, adult athletics, and recreational classes for youth and adults, parks, and out-door programs. Fayetteville-Cumberland Parks & Recreation Department has twelve recreation centers with fitness equipment (treadmills, stationary bikes, elliptical and weight machines) that the public can use at no cost to help support healthier lifestyles. Also, for those who enjoy being outdoors there is The Cape Fear River Trail, which is a 10-foot wide paved path for walkers, joggers and bicyclists. It winds for nearly four miles through trees, plants and wildlife, with a view of the river. The trail is designated as part of the East Coast Greenway.

Cross Creek Park

Green Street

This Park is easily accessible and beautifully landscaped in the center of downtown Fayetteville. Benches surrounding a statue of the Marquis de Lafayette invite visitors to enjoy a small oasis of quiet during their day's activities. The fountain at the front of the park on Green Street is a popular site for weddings.

Fayetteville Community Garden

Intersection of Vanstory and Mann Streets

Fayetteville has a community garden, a 5 acre tract of land with approximately 100 plots available to citizens for the planting vegetables, flowers and herbs. The concept of community gardening is very simple; patrons rent space and FCPR supplies garden boxes, compost and water. The garden is organic in nature therefore no chemicals or synthetic herbicides, insecticides, fungicides or fertilizers are allowed. Plots are raised beds approximately 20 ft. by 20 ft. gardening is a wonderful activity for all ages and can be physically and mentally engaging. The potential benefits are endless. Plots may be rented for \$25, with the option to renew January of each year.

Festival Park

Festival Park, located at the corner of Ray Avenue and Rowan Street in downtown Fayetteville, has been described as the "crown jewel of downtown." Consisting of 14 acres, it opened in April

2007, and created a class venue consistent with the quality of life that is our community's hallmark. Festival Park offers:

- An infrastructure for special event vendor booths to include power and water on a creatively patterned pavement promenade that enables quick planning and set-up for festivals
- A main stage that can accommodate performances and events on its 40' x 66' surface
- Grass lawn seating for intimate groups as well as large crowds for community celebrations ranging in the thousands
- Support areas to include backstage dressing rooms, loading dock, concession area and public restroom
- Pedestrian walkways that tie into a creek trail

North Carolina Veterans Park

300 Bragg Boulevard

433-1457, 433-1458 or 433-1944

Tues.-Sat. 10 am-5 pm, Sun. noon- 5 pm

Closed Mon., except open on Federal Holidays when hours will be 10 am-5 pm

Closed Easter, Thanksgiving Day, Christmas Day and New Year's Day

www.ncveteranspark.org

Fayetteville is proud to be the home of the North Carolina Veterans Park. The first state park dedicated to military veterans – young and old...living or deceased...from all branches of the Armed Services; Army, Navy, Marines, Air Force, and Coast Guard.

With its rich military heritage, Fayetteville is the perfect place to house the North Carolina Veterans Park. The city's beautifully revitalized downtown is a fitting location, given the spirit of renewal embodied in the park. What's more, North Carolina is proud to call itself the "Most Military Friendly" state, and the Veterans Park incorporates many natural and architectural elements that represent the state. Symbolic features pay homage to the veterans from all 100 counties of North Carolina and represent the citizens who support them.

The primary theme of the North Carolina Veterans Park (NCVP) is a "Veteran's Journey: life before, during, and after service." The secondary theme is rebirth and healing. This park represents that redevelopment.

A 3,500 square foot Visitors Center anchors the park near the entrance. The Visitors Center includes a Service Ribbon Wall made of fused glass, representing every service medal awarded since the Civil War, as well as a unique chandelier made from 33,500 "dog tags" (service member identification tags). There is also an interactive globe that allows you to pinpoint a location and learn about the heroic events that happened there.

Outside the Visitors Center is the North Carolina Soils Wall, built with soil collected from the state's 100 counties. Native soils from North Carolina are featured and used throughout the park. Numerous fountains and sculptures help tell the story of a service member's journey through their military career and beyond.

Riverside Dog Park
555 N. Eastern Blvd.

This Fayetteville facility has gone to the dogs – literally! The Riverside Dog Park, located near the Cape Fear Botanical Gardens opened in Sept. 2008 and was an instant success. A joint effort between the Bark for a Park Committee and Fayetteville-Cumberland Parks and Recreation Department, Riverside Dog Park is open each day dawn to dusk. Dogs outside the enclosed area must be on a leash. A small enclosure is provided for small dogs that weigh less than 25 pounds and another, larger area, is set aside for larger dogs. All dogs must be legally licensed and have current vaccinations. Tags must be securely attached to the dog's collar. Have fun with your dog at Riverside!

REGIONAL PARKS

Arnette Park
2165 Old Wilmington Road

This 100-acre park is a combination of developed facilities and natural woodland and is the home to the award winning "Haunted Hayride" in October and "Christmas in the Park" in December. It is open to the public daily from 9 a.m.-9 p.m. from March through October. Winter hours (November through February) are 9 a.m. - 5 p.m. Security patrols the park during operating hours. Picnic pavilions, ball fields, and more make this a popular gathering spot for families and large groups. The one mile long perimeter road is ideal for biking and walking. For more information on reserving the pavilions and other amenities call 433-1547.

Amenities: Baseball fields, sand volleyball courts, concession stand, horseshoe pits, disc golf, picnic pavilions, playground, tennis courts, nature trails and restrooms.

J. Bayard Clark Park
631 Sherman Drive

Clark Park is the city's second largest regional park and is considered a gem to those who frequent it. It was designed, and remains, a natural woodland area dedicated to preserving the environment and educating the public on North Carolina plants and wildlife. Three trails wind through the park and along the Cape Fear River. The Nature Center showcases both static displays and live reptiles and amphibians. Certified park rangers educate visitors at the center, along the park trails and through school visits. They conduct yearly events at the park such as nature fairs, basic astronomy, animal print tracking and much more!

A visit to the Nature Center can include a picnic at one of the eight tables on the back deck overlooking the woods and waterfall. The park also has a put-in point on the Cape Fear River for canoes. You must provide your own canoe and equipment. For those interested in walking, jogging or bicycling, use the main parking lot to start your visit to the Cape Fear River Trail, a four mile paved trail running between the park and the Jordan Soccer Complex. A sign at the corner of the parking lot directs patrons to the trailhead.

Amenities: Nature center w/restrooms, walking trails, trailhead for Cape Fear River Trail, primitive camping, and canoe put-in on Cape Fear River.

Lake Rim Park **2214 Tar Kiln Drive**

Whether you want to take a stroll on the one-mile border trail through the wetlands to Bones Creek, play a game of soccer with friends, or have a family picnic, Lake Rim Park offers something for everyone. All facilities are open to the public on a first come, first serve basis unless they are reserved. To find out how you can reserve a picnic shelter or athletic fields for your special event contact the park office at 433-1018. Well-behaved, furry family members are welcome to enjoy a walk around the park too, but they must be on a leash and under your control at all times.

Amenities: Picnic areas, horseshoe pits, walking trails, tennis courts, sand volleyball courts, athletic fields, natural areas, a Native American themed garden, children's playgrounds and restrooms.

Masaryk Park **Belvedere Avenue**

Masaryk Park is a multi- purpose park featuring fishing, boat rentals, a Frisbee Golf course, picnic shelters, and trails. A tennis court and baseball field is available for a quick game. Picnic areas are open to the public on a first come, first serve basis unless they are reserved. For more information on shelter rentals, call 433-1547.

Amenities: Softball field, pavilions, concession stand, fishing pier, rowboat rental, trails, playground, tennis courts, disc golf and restrooms.

Source: www.fcpr.us/parks.aspx .

Crime:

The North Carolina Uniform Crime Reporting (UCR) Program is part of a nationwide, cooperative statistical effort administered by the Federal Bureau of Investigation. While the program's primary objective is to generate a reliable set of criminal statistics for use in law enforcement administration, operation, and management, its data have over the years become one the country's leading social indicators. <http://crimereporting.ncdoj.gov/Introduction.aspx> According to the N.C. Department of Justice, the crime index rate includes the total number of violent crimes (murder, rape, robbery and aggravated assault) and property crimes (Burglary, larceny and motor vehicle theft). Violent crimes are defined in the Uniform Crime reporting (UCR) program as those offenses which involve force or threat of force.

Counties/State	Year	Index Crime Rate	Violent Crime Rate	Property Crime Rate
Cumberland	2011	6,620.2	548.5	6,071.7
Durham	2011	5,528.8	670.9	4,240.8
Forsyth	2011	5,683.0	553.2	5,129.8
Guilford	2011	4,724.3	483.5	4,240.8
Mecklenburg	2011	4,513.8	548.9	3,964.9
Wake	2011	2,857.7	259.6	2,598.2
State	2011	3,919.8	354.6	3,565.2

Index Crime Rates:

During the period 2011, Cumberland County's index crime rate was higher than the State and peer counties.

Violent Crime Rates

During the period 2011, Cumberland County's violent crime rate was higher than the State and peer counties Guilford and Wake.

Property Crime Rates:

During the period 2011, Cumberland County's property crime rate was higher than the State and peer counties.

When asked on a survey, "What is the top concern in your community?" Thirty-five percent (35%) of the respondents said that crime was a top concern.

OFFENSE DEFINITIONS

The Crime Index includes the total number of murders, rapes, robberies, aggravated assaults, burglaries, larcenies, and motor vehicle thefts. While arson is considered an Index Crime, the number of arsons is not included in the Crime Index tables.

Violent Crime includes the offenses of murder, rape, robbery, and aggravated assault as defined below.

Murder - The willful (non-negligent) killing of one human being by another.

Forcible Rape - The carnal knowledge of a female forcibly and against her will. Assaults or attempts to commit rape by force are also included.

Robbery - The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence, and/or by putting the victim in fear.

Aggravated Assault - An unlawful attack by one person upon another for the purpose of inflicting severe bodily injury. This type of assault is usually accompanied by the use of a weapon or other means likely to produce death or serious bodily harm. Includes attempted assaults.

Property Crime includes the offenses of burglary, larceny, and motor vehicle theft as defined below.

Burglary - The unlawful entry of a structure to commit a felony or theft. Includes attempted forcible entry.

Larceny - The unlawful taking, carrying, leading, or riding away of property from the possession or constructive possession of another.

Motor Vehicle Theft - The theft or attempted theft of a motor vehicle.

Arson - Any willful or malicious burning or attempt to burn, with or without the intent to defraud

NOTE: Information in this report represents data submitted by law enforcement agencies to the Uniform Crime Reporting Program

(www.ncdoj.gov/about-doj/state-bureau-of-investigation.aspx)

Homelessness:

Homelessness is a major problem in Cumberland County. According to the Point-in-Time Count conducted January 30, 2013 by Continuum of Care, Cumberland County had a total of 615 individuals who were homeless. In an effort to combat homelessness Cumberland County and the City of Fayetteville developed a ten year plan to end homelessness. The plan maps out strategies to guide the City/County in providing homeless men, women and children with coordinated services and housing options. The ten year homeless plan can be viewed at www.co.cumberland.nc.us/community_dev/downloads/H.



When asked on a survey, what issue is a major problem in your community, 23% of the respondents said "homelessness."

Environmental Health



The mission of Environmental Health is to safeguard life, promote human health and protect the environment through the practice of modern environmental health science, the use of technology, rules, public education and above all, dedication to the public trust. (State environmental health website).

Cumberland County Department of Public Health's Environmental Health Division works to protect county residents by preventing morbidity and mortality from environmental contamination. This is accomplished through public health education, inspections and active enforcement of county and state rules and regulations.

The Environmental Health Division is grouped into the following two sections:

- Food, Lodging, Solid Waste and Vector Management: Food Handling Establishments, Childhood Lead Investigations, Sanitation for Food Service Personnel Classes, Rest Home Inspections, and Hospital Inspections.
- Onsite Wastewater and Private Water Supplies: Onsite Wastewater Systems, Individual Water Supplies and Public Swimming Pools, Rabies Clinics, Solid Waste, and Tattoo Establishments.

Each section is responsible for routine inspections as well as inquiries and complaints regarding their areas of expertise. User fees are in effect for many of the services provided by the Environmental Health Division. <http://www.co.cumberland.nc.us/health/services/env>

When asked, what is the top concern in your community, food safety, (1.1%) and animal control (0.9%) were top concerns for some respondents.

Air Quality

Back ground and History:

Congress established much of the basic structure of the Clean Air Act in 1970, and made major revisions in 1977 and 1990. Dense, visible smog in many of the nation's cities and industrial centers helped to prompt passage of the 1970 legislation at the height of the national environmental movement. The subsequent revisions were designed to improve its effectiveness and to target newly recognized air pollution problems such as acid rain and damage to the stratospheric ozone layer. <http://www.epa.gov/air/caa/requirements.html>

Air Quality Index (AQI)

The AQI is an index for reporting daily air quality. It tells you how clean or polluted your air is, and what associated health effects might be a concern for you. The AQI focuses on health effects you may experience within a few hours or days after breathing polluted air. EPA calculates the AQI for five major air pollutants regulated by the Clean Air Act: ground-level ozone, particle pollution (also known as particulate matter), carbon monoxide, sulfur dioxide, and nitrogen dioxide. For each of these pollutants, EPA has established national air quality standards to protect public health. Ground-level ozone and airborne particles are the two pollutants that pose the greatest threat to human health in this country.

(<http://www.airnow.gov/index.cfm?action=aqibasics.aqi>)

What's the problem?

Air pollution can harm people's health and damage the environment. Air pollution can lead to breathing problems such as asthma and emphysema. Too much exposure to pollution during childhood can permanently reduce lung function. Some types of air pollution also can cause heart problems. Air pollution can harm you even if you can't see it or smell it. It also can hurt trees and wildlife, cause haze that blocks scenic views, and contribute to water pollution and climate change. (<http://daq.state.nc.us/airaware/whatstheproblem.shtml>)

In December 2002, Cumberland County entered into an agreement with the North Carolina Department of Environment and Natural Resources (NCDENR), local government and organizations, and the United States Environmental Protection Agency (EPA), that addressed strategies to attain the 1997 8-hour ozone primary and secondary standards (set at 0.08 parts per million and expanded to 0.085 ppm). The Early Action Compact (EAC) provided for a set of "Milestones" that had to be met by December 2007 in order to maintain a "non-attainment deferred" designation through the process and achieve attainment by the end of the agreement. Through the implementation of federal, state and local strategies, Cumberland County fulfilled its obligation to improve air quality by the established deadline and was designated "in attainment" for ground level ozone on April 15, 2008 with a 2005-2007 three year average ozone design value of 0.082 ppm.

On March 12, 2008, EPA strengthened the National Ambient Air Quality Standards (NAAQS) for ground level ozone by setting the primary and secondary standards to 0.075 ppm and a final designation date of March 2010. The decision to set the standards to 0.075 ppm did not reflect the recommendations of the Clean Air Scientific Advisory Committee (CASAC) Ozone Review Panel and on January 6, 2010 EPA proposed to change the Primary ground level ozone standards based on scientific evidence and consider a range of 0.060-0.070 ppm and set a separate Secondary standard by August 31, 2010 with a final designation by July 2011.

Those deadlines were not met and in September 2011 President Obama decided to keep the 2008 Ozone standards set by the Bush administration, as the scientific review had already begun and should be completed by late 2013 with final recommendations set for 2014 and official designation in 2016.

The air quality in Cumberland County has been constantly improving since the EAC was signed in 2002, with ground level ozone design values of 0.072 ppm for the 2010-2012 three year average. These values are still not enough to guarantee that this area will maintain an attainment status for ground level ozone, so in September 2012 the Cumberland County Board of Commissioners, on behalf of all of its municipalities, elected to participate in the new EPA's Ozone Advance Program, a voluntary program similar to the Early Action Compact. The Cumberland County Air Quality Stakeholders and the Combined Air Team are in the process of developing an Ozone Advance Action Plan, which will include locally selected strategies to improve air quality. If this area should be designated non-attainment for ozone, new requirements will be in effect that will have a significant impact on our region. These requirements include, but are not limited to, transportation planning conformity analysis and new source reviews for new or expanding industrial facilities. www.fampo.org/airquality

Indoor Air Quality:

Indoor air pollutants include Volatile Organic Compounds (or VOCs, such as paint fumes), particulates (or tiny pieces of chemicals and debris), tobacco, smoke, radon, laboratory and art supplies, and building materials. House dust may also contain toxins such as lead, bacteria, viruses, dust mites, flea eggs, pesticides, asbestos, mold, and hazardous particulate matter from natural and human products. Dangers from hazardous air pollutants (HAPs) increase with certain environmental conditions such as temperature, moisture level, and poor ventilation in public and private buildings.

Poor indoor air quality can cause serious health problems such as asthma, respiratory and pulmonary disease, chronic bronchitis, cancer, and a general decrease in feelings of wellness. Asthma is the leading cause of serious illness among children nation-wide and the most common reason for student absenteeism.

<http://www.cehn.org/education/airquality>

Secondhand Smoke

Secondhand smoke is a mixture of the smoke given off by the burning end of a cigarette, pipe, or cigar, and the smoke exhaled by smokers. Secondhand smoke is also called environmental tobacco smoke (ETS) and exposure to secondhand smoke is sometimes called involuntary or

passive smoking. Secondhand smoke contains more than 4,000 substances, several of which are known to cause cancer in humans or animals.

- EPA has concluded that exposure to secondhand smoke can cause lung cancer in adults who do not smoke. EPA estimates that exposure to secondhand smoke causes approximately 3,000 lung cancer deaths per year in nonsmokers.
- Exposure to secondhand smoke has also been shown in a number of studies to increase the risk of heart disease. (www.epa.gov/smokefree/healtheffects.html)

Serious Health Risks to Children

Children are particularly vulnerable to the effects of secondhand smoke because they are still developing physically, have higher breathing rates than adults, and have little control over their indoor environments. Children exposed to high doses of secondhand smoke, such as those whose mothers smoke, run the greatest relative risk of experiencing damaging health effects.

(www.epa.gov)

Lead

Childhood Lead:

Approximately 500,000 U.S. children aged 1-5 years with blood lead levels above 5 micrograms of lead per deciliter of blood, the reference level at which CDC (Centers for Disease Control) recommends public health actions are initiated. Lead poisoning can affect nearly every system in the body. Because lead poisoning often occurs with no obvious symptoms, it frequently goes unrecognized. Lead poisoning can cause learning disabilities, behavioral problems, and, at very high levels, seizures, coma, and even death.

CDC's Childhood Lead Poisoning Prevention Program is committed to the Healthy People (www.healthypeople.gov/) goal of eliminating elevated blood lead levels in children by 2010. CDC continues to assist state and local childhood lead poisoning prevention programs, to provide a scientific basis for policy decisions, and to ensure that health issues are addressed in decisions about housing and the environment. <http://www.cdc.gov/lead>

Prevention Tips:

Lead poisoning is entirely preventable. The key is stopping children from coming into contact with lead and treating children who have been poisoned by lead. The goal is to prevent lead exposure to children before they are harmed. There are many ways parents can reduce a child's exposure to lead. The most important is stopping children from coming into contact with lead. Lead hazards in a child's environment must be identified and controlled or removed safely. <http://www.cdc.gov/lead tips.htm>.

2010 North Carolina Childhood Blood Lead

Ages 1 and 2 years tested for Lead Poisoning

County	Target population*	Number Tested	Percent Tested	Tested Among Medicaid**	Lead \geq 10	Percent \geq 10
Cumberland	11,898	3,732	31.4	76.1	18	0.5
Durham	9,047	4,071	45.0	83.0	14	0.3
Forsyth	9,930	6,146	61.9	88.5	37	0.6
Guilford	12,531	9,009	71.9	91.2	31	0.3
Mecklenburg	29,355	9,618	32.8	67.0	24	0.2
Wake	26,552	10,441	39.3	78.9	27	0.3
NC	257,543	132,014	51.3	81.1	519	0.4

*Target Population is based on the number of live births in 2008 and 2009

** Includes ages 9-11 months (www.ehs.ncpublichealth.com/children_Health/Lead 2012-11)

Adult Blood Lead

The National Adult Blood Lead Epidemiology and Surveillance (ABLES) Program was created in 1987 to identify and prevent cases of elevated blood lead levels in adults. Children's blood lead levels are tracked and addressed separately through the N.C. Division of Public Health's Environmental Health Section Children's Lead Poisoning Prevention.

<http://epi.publichealth.nc.gov/oeo/programs/ables.ht>

Lead is a common metal that can be found at work, at home and in the environment. People can be exposed to lead by breathing it in or by ingesting it when contaminated substances get in their mouths. The primary source of lead exposure for most children is lead-based paint in older homes. Lead in drinking water can add to that exposure. If too much lead builds up in the body, it can cause serious health problems in both children and adults.

Elevated blood lead levels (BLLs) in adults can damage various systems in the body, especially the nervous system, blood, reproductive system, renal, cardiovascular system, and gastrointestinal system. Some of the health effects caused by high blood lead levels are muscle and joint pain, headaches, fatigue, slower reflexes, kidney damage, higher blood pressure, and reproductive problems. The majority of high blood lead levels result from workplace exposures, although people who have hobbies or participate in recreational activities that involve lead or lead-based paint can be affected as well. The average BLL of adults in the U.S. is under 3 $\mu\text{g}/\text{dL}$.
http://epi.publichealth.nc.gov/oeo/a_z/lead.html

Water Quality:

Water Quality Standards are the foundation of the water quality-based pollution control program mandated by the Clean Water Act. Water Quality Standards define the goals for a water body by designating its uses, setting criteria to protect those uses, and establishing provisions such as anti-degradation policies to protect water bodies from pollutants.

<http://www.water.epa.gov/scitech/swguidance/standards/index.cfm>

Since 1972, the Clean Water Act has protected our health and environment by reducing the pollution in streams, lakes, rivers, wetlands and other waterways.

<http://www.water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>

Cumberland County has two resources of water for human consumption (1) Public Works Commissions, known as a Public Water System and (2) private wells.

Public Works Commissions (PWC) is owned by the City of Fayetteville. The Fayetteville Public Works Commission treats over eight billion gallons of water a year and performs more than 150,000 tests to ensure they provide the highest quality of drinking water.

The water processed at PWC is surface water. Surface water comes from rivers, streams, creeks, lakes, ponds and reservoirs. The water processed at PWC's water treatment facility comes from the Cape Fear River, Bonnie Doone Lake, Kornbow Lake, Mintz Pond and Glenville Lake. PWC is committed to providing safe, high quality drinking water for their customers. They use the disinfection method chloramination, which uses both ammonia and chlorine. Ammonia is added to the water at a carefully controlled level, and the chlorine and ammonia react chemically to produce chloramines. Chloraminated drinking water is perfectly safe for drinking, cooking, bathing and other daily water uses. There are, however, two groups of people who need to take special care with chloraminated water: customers who use drinking water for kidney dialysis machines and fish owners. www.faypwc.com/brochures/water_quality.pdf

The Department of Public Health's Environmental Health Division is committed to protecting drinking water wells by following well regulations, issuing county permits and inspecting drinking water wells. This includes finding suitable sites that wells can be drilled and making sure that wells are located the proper distance from sources of contamination. They also inspect wells after they are drilled to ensure they were drilled in the proper area and that the cement grout placed around the well is done properly.

Effective 1 July 2008, the State of North Carolina requires all new drinking water wells be sampled for: arsenic, barium, cadmium, chromium, copper, fluoride, lead, iron, magnesium, manganese, mercury, nitrates, nitrites, selenium, silver, sodium, zinc, pH and bacterial indicators.

When a new well is installed, the testing is included in the cost of the well permit and will be conducted by the health department. (<http://www.co.cumberland.nc.us/safewater/>)

When asked on a community health assessment survey “What is the top concern in your community?” According to 1.5% of the respondents, water supply and quality was a top concern.

Solid Waste:

Solid waste – more commonly known as trash or garbage – consists of everyday items such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, batteries, and household cleaning/other chemicals. Solid waste management refers to the collection, transport, storage and disposal of waste and debris generated from residential, commercial, industrial, as well as medical facilities. Accumulation of debris, including tire piles, contributes to increasing populations of disease vectors such as rodents and mosquitoes, which cause diseases. An additional concern with both household hazardous waste and agricultural waste is the potential for toxic content. The improper management of hazardous chemicals from these sectors may result in their leaching into surface or ground water affecting recreational water quality as well as drinking water quality.

The Cumberland County Solid Waste Department provides for efficient use of a sanitary landfill to further Cumberland County's efforts in developing the current and future solid waste disposal-resource recovery system. The program conserves natural resources, reduces the volume of non-recoverable waste and disposes of it in an environmentally sound manner.

The Wilkes Road Division operates the clean wood and yard waste collection facility to further the county's efforts in reducing waste to the sanitary landfill.

The Operations Division operates the Container Sites/Recycling Centers, which collect solid waste from county facilities and provide recycling for household residents.

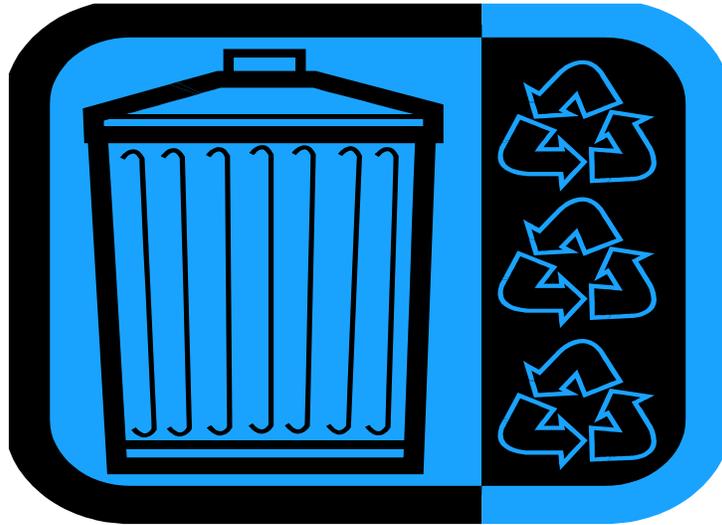
The Planning/Environmental Enforcement Division operates the Household Hazardous Waste Facility, which provides for the efficient, effective, and environmentally safe disposal of household hazardous waste. They also enforce local, state, and federal laws on illegal dumping and disposal of hazardous materials

Cumberland County Solid Waste Management offers:

- A drop-off Recycling Program
- 17 collection sites for used oil
- 17 collection sites for lead acid batteries

- 2 collection sites for antifreeze
- A household hazardous waste collection site for hazardous materials
- C & D recycling/salvage/reuse that includes clean wood, brick, concrete, asphalt, and reuse of dirt for cover
- Mulching of yard waste, pallets, and clean wood
- An education program with take-home items (brochures, magnets, etc.), a telephone hotline, and special events (tours of the landfill, etc.).(www.co.cumberland.nc.us/solid_waste.aspx)

When asked on a community health assessment survey, “What is the top concern in your community?” According to 0.4% of respondents, solid waste disposal was a top concern.



Public Health Preparedness and Response

Because of its unique abilities to respond to infectious, occupational, or environmental incidents that affect the public's health, Centers for Disease Control (CDC) plays a pivotal role in ensuring that state and local public health departments are prepared for public health emergencies. CDC's Office of Public Health Preparedness and Response, Division of State and Local Readiness, administers funds for preparedness activities to state and local public health systems through the Public Health Emergency Preparedness (PHEP) cooperative agreement. Through the PHEP, CDC helps public health departments strengthen their abilities to respond to all types of public health incidents and build more resilient communities. (www.cdc.gov/phpr).

Public health plays a vital role in emergency preparedness. After major disasters, public health workers are often called upon to participate in a coordinated response and to protect residents from disease outbreaks and other hazards due to contaminated food and water, chemical releases, insect-borne diseases, and unmet medical needs. (www.cdc.gov/phpr).

The Preparedness Coordinator at the Department of Public Health plans for public health responses to public health emergencies both natural and manmade and works in collaboration with internal and external partners to ensure that emergency plans are current, practiced, and implemented to assure readiness to events that affect the health of the community.

Being prepared not only increases the family's ability to survive, but also reduces the workload of first responders, emergency medical services, fire fighters, and law enforcement.

Families are encouraged to have an emergency plan and an emergency supply kit. An emergency supplies kit is simply a collection of items your family may need in an emergency. You likely have most of the items around the house, so it's just a matter of gathering them together.

Basic Supplies

- Water - 1 gallon per person per day for 3 to 7 days
- Food – non-perishable and canned food supply for 3 to 7 days
- Battery-powered or hand crank radio and NOAA Weather Radio with extra batteries
- Cell phone with charger
- First aid kit and first aid book
- Flashlight and extra batteries
- Manual can opener for food
- Anti-bacterial hand wipes or gel
- Wrench or pliers to turn off utilities
- Blanket or sleeping bag per person
- Prescription medications and glasses
- Seasonal change of clothing, including sturdy shoes

- Toiletries – toothbrush, toothpaste, soap, feminine supplies
- Extra house and car keys
- Important documents – insurance policies, identification, bank account records
- Fire extinguisher - ABC-type
- Cash and change
- Books, games or cards

Source: www.ncdps.gov.click on Emergency preparedness for families

When asked on a survey, 63.1% of respondents said that they have a household Basic Emergency Supply Kit.



When asked on a survey, “What is the top concern in your community?” According to 1.6% of the respondents, Emergency Preparedness was a top concern.

County Demographics



Population Characteristics: Cumberland County

In 2011, Cumberland County had an estimated population of 324,885 persons with a population density of 490 persons per square mile. A population percent change of 1.7 % occurred from April 1, 2010 (319,431) to July 1, 2011 (324,885). Eighty-seven percent of the population was urban and 13 % was rural. (www.quickfacts.census.gov/qfd/states/37/37051.html)

Gender:

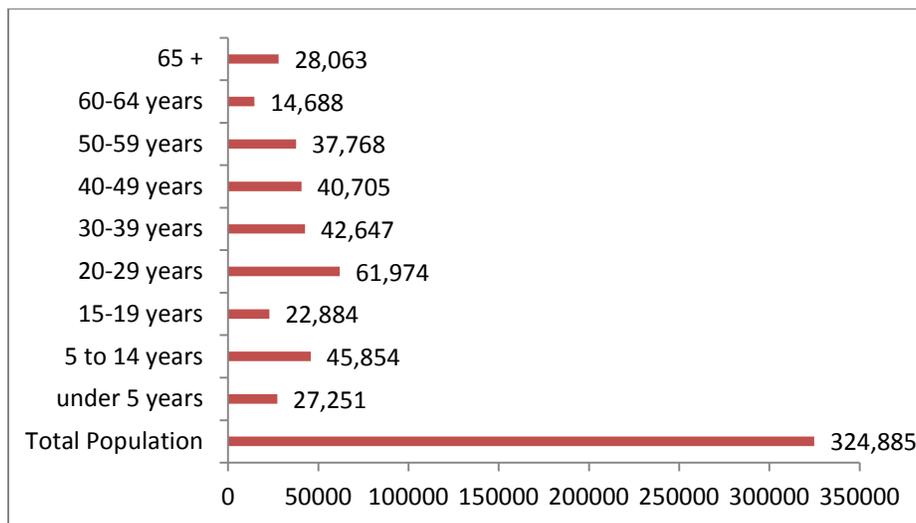
- 49 % (157,740) of the population was male and 51 % (167,145) of the population was female.

Race:

- 48.6 % (158,044) of the County's population was White, Non-Hispanic.
- 37.0 % (120,075) of the County's population was Black/African American.
- 9.9 % (32,017) of the County's population was Hispanic.
- 4.5 % (14,749) of the County's population was other.

Age:

- 8.4% (27,251) of the County's population was under 5 years old.
- 14.1% (45,854) of the County's population was 5-14 years old.
- 7.0% (22,884) of the County's population was 15-19 years old
- 19 % (61,974) of the County's population was 20-29 years old.
- 13.1% (42,647) of the County's population was 30-39 years old.
- 12.5% (40,705) of the County's population was 40-49 years old.
- 11.6% (37,768) of the County's population was 50-59 years old
- 4.5 % (14,688) of the County's population was 60-64 years old.
- 8.6% (28,063) of the County's population was 65 years old and over.



Cumberland County- Population estimates enumerated on July 1, 2011 (based on the 2010 census) April 1, 2011 Population Estimates By Age, Race and Sex.

	TOTAL	RACE/ETHNICITY				SEX	
		WHITE NON-HISPANIC	AF. AM. NON-HISPANIC	OTHER NON-HISPANIC	HISPANIC	MALE	FEMALE
TOTAL	324,885	158,044	120,075	14,749	32,017	157,740	167,145
0-4	27,251	11,954	10,045	1,087	4,165	13,794	13,457
5-9	23,365	10,097	8,940	951	3,377	11,929	11,436
10-14	22,489	9,180	9,648	955	2,706	11,426	11,063
15-19	22,884	9,212	10,289	916	2,467	11,998	10,886
20-24	32,097	16,406	10,428	1,320	3,943	17,055	15,042
25-29	29,877	15,418	9,224	1,422	3,813	15,138	14,739
30-34	23,062	10,773	8,203	1,156	2,930	11,242	11,820
35-39	19,585	9,372	7,213	1,038	1,962	9,116	10,469
40-44	19,917	9,678	7,625	1,013	1,601	9,190	10,727
45-49	20,788	10,175	8,219	951	1,443	9,614	11,174
50-54	20,279	9,958	8,157	971	1,193	9,499	10,780
55-59	17,489	8,964	6,776	927	822	8,042	9,447
60-64	14,688	8,114	5,244	746	584	6,898	7,790
65-69	10,270	5,868	3,574	490	338	4,558	5,712
70-74	7,771	4,554	2,614	321	282	3,307	4,464
75-79	6,049	3,721	1,893	248	187	2,530	3,519
80-84	3,973	2,588	1,093	165	127	1,522	2,451
85+	3,051	2,012	890	72	77	882	2,169

www.schs.state.nc.us/SCHS/data/databook-Population, <http://quickfacts.census.gov/qfd/states/37/37051.html>,
www.countyhealthranking.org/app/



Population Characteristics: North Carolina

In 2011, North Carolina had an estimated population of 9,656,401, with a population density of 196.1 persons per square mile. A population percent change of 1.3 % occurred from April 1, 2010 (9,535,475) to July 1, 2011 (9,656,401). 66 % of the population was urban and 34 % was rural.

Gender:

- ✚ 49 % (4,731,636) of the population was male and 51 % (4,924,765) of the population was female.

Race:

- ✚ 65 % (158,044) of the State's population was White, Non-Hispanic.
- ✚ 22.0 % (2,124,408) of the State's population was Black/African American.
- ✚ 9.0 % (869,076) of the State's population was Hispanic.
- ✚ 4.0 % (386,256) of the State's population was other.

Age:

- 6.5 % (629,791) of the State's population was under 5 years old.
- 13.2% (1,279,562) of the State's population was 5-14 years old.
- 6.7% (653,621) of the State's population was 15-19 years old
- 13.5 % (1,309,482) of the State's population was 20-29 years old.
- 13.1% (1,267,262) of the State's population was 30-39 years old.
- 14.1% (1,369,585) of the State's population was 40-49 years old.
- 13.4% (1,300,991) of the State's population was 50-59 years old
- 5.8 % (567,321) of the State's population was 60-64 years old.
- 13.2% (1,278,786) of the State's population was 65 years +.

North Carolina - Population estimates enumerated on July 1, 2011 (based on the 2010 census) April 1, 2011 Population Estimates By Age, Race and Sex.

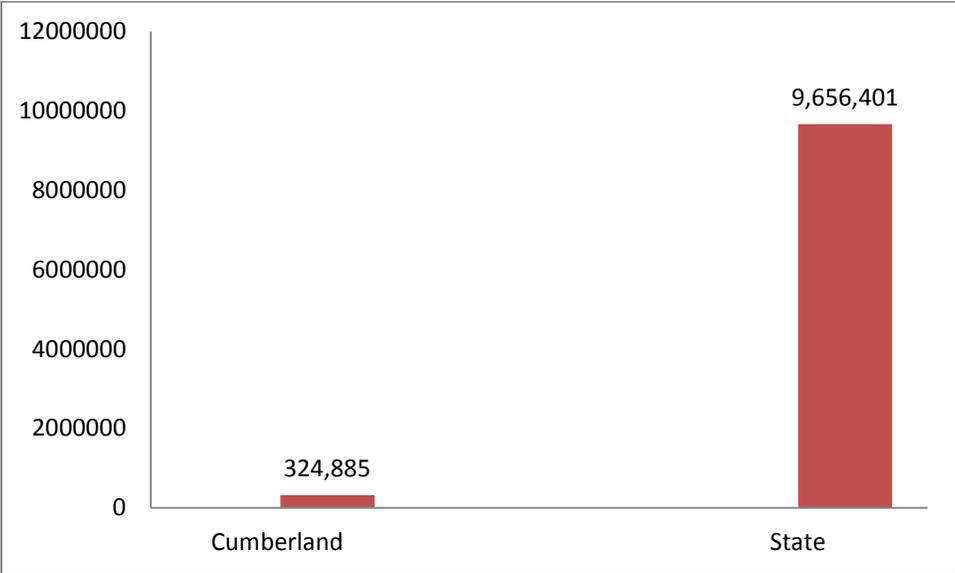
	TOTAL	RACE/ETHNICITY				SEX	
		WHITE NON-HISPANIC	AF. AM. NON-HISPANIC	OTHER NON-HISPANIC	HISPANIC	MALE	FEMALE
TOTAL	9,656,401	6,353,468	2,115,812	354,716	832,405	4,703,722	4,952,679
0-4	629,791	337,365	156,521	27,056	108,849	321,820	307,971
5-9	636,990	360,656	152,600	27,556	96,178	325,379	311,611
10-14	642,572	375,273	163,140	26,613	77,546	328,344	314,228
15-19	653,621	382,719	178,166	25,805	66,931	336,066	317,555
20-24	678,381	409,745	168,840	27,292	72,504	344,767	333,614
25-29	631,101	382,166	138,526	29,674	80,735	313,234	317,867
30-34	631,534	378,151	137,979	30,275	85,129	311,058	320,476
35-39	635,728	395,017	137,288	30,698	72,725	312,361	323,367
40-44	680,732	452,092	145,853	27,658	55,129	335,332	345,400
45-49	688,853	473,394	151,277	24,145	40,037	337,245	351,608
50-54	680,846	485,068	146,779	20,970	28,029	329,264	351,582
55-59	620,145	454,254	130,243	17,943	17,705	294,369	325,776
60-64	567,321	434,783	106,347	14,527	11,664	268,089	299,232
65-69	420,180	333,448	69,416	9,797	7,519	196,256	223,924
70-74	306,470	245,579	49,547	6,477	4,867	139,076	167,394
75-79	231,039	187,148	36,489	4,209	3,193	98,755	132,284
80-84	167,364	138,818	24,127	2,368	2,051	65,225	102,139
85+	153,733	127,792	22,674	1,653	1,614	47,082	106,651

www.schs.state.nc.us/SCHS/data/databook-Population, <http://quickfacts.census.gov/qfd/states/37/37051.html>,
www.countyhealthranking.org/app/



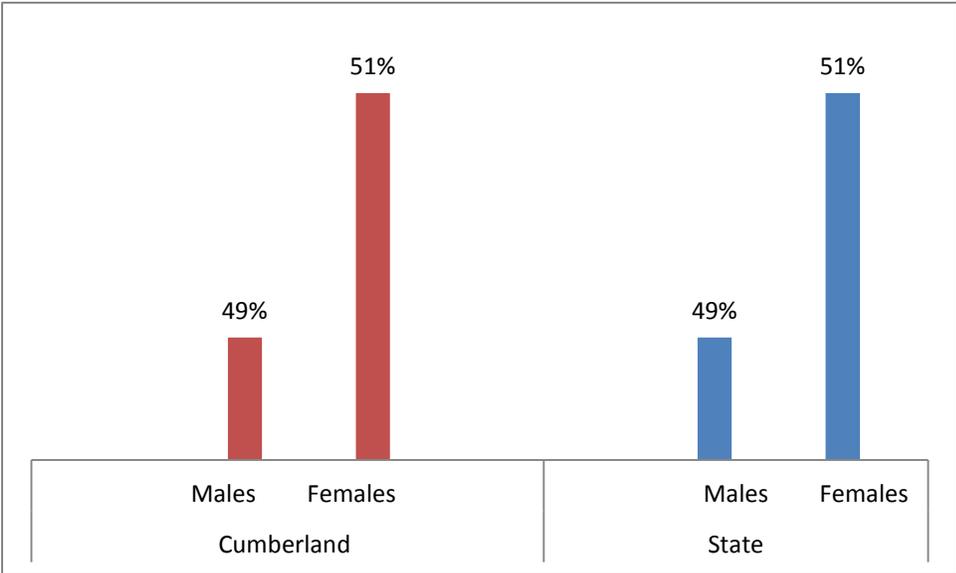
In 2011, Cumberland County's population was 324,885 compared to the State's population, 9,656,401

Population



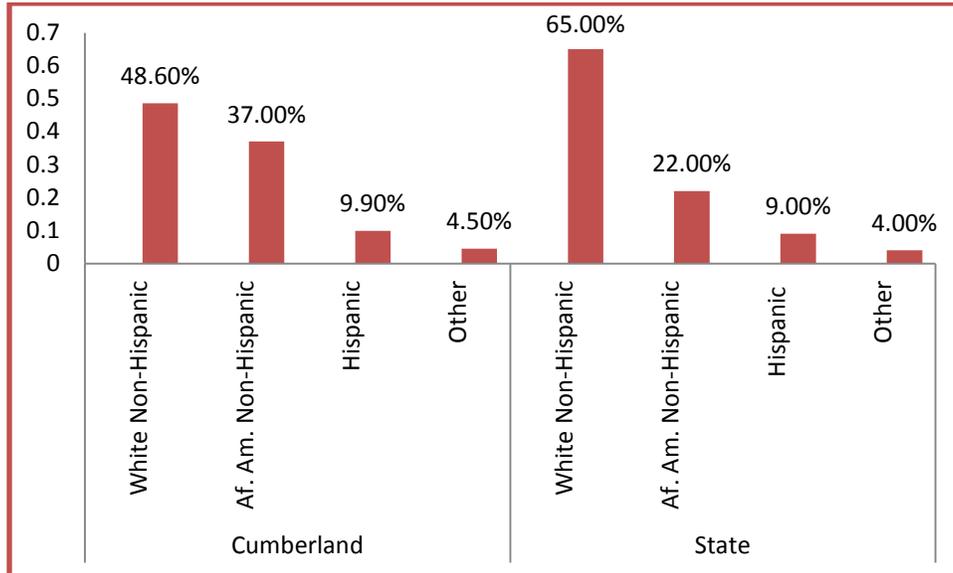
In 2011, Cumberland County and the State had the same percentage break-down of males and females.

Gender



In 2011, 48.6% of the County's population was White Non-Hispanic compared to 65% of the State's population, 37% of the County's population was African-American-Non-Hispanic compared to 22% of the State's population, 9.9% of the County's population was Hispanic compared to 9.0% of the State's population.

Race



Chapter 4: Health Status

According to the 2011 Behavioral Risk Factor Surveillance System (BRFSS), Cumberland County residents responded to the following survey questions:

Would you say that in general your health is?

Total Respondents	Excellent	Very Good	Good	Fair	Poor
288	33 (12.5%)	87 (40.4%)	88 (27.5%)	53 (14.7%)	27 (4.9%)

During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, i.e. self-care, work, or recreation?

Total Respondents	None	1 – 2 days	3 – 7 days	8 – 29 days	30 days
285	209 (74.7%)	15 (5.8%)	18 (6.9%)	24 (8.0%)	19 (4.7%)

Do you have any kind of health care coverage, including health insurance, pre-paid plans such as HMOs or government plans such as Medicare?

Total Respondents	Yes	No
288	254 (85.1%)	34 (14.9%)

Was there a time during the last 12 months when you needed to see a doctor, but could not because of the cost?

Total Respondents	Yes	No
290	40 (16.3%)	250 (83.7%)

During the past month, did you provide care or assistance to a friend or family member who has a health problem, long-term illness or disability?

Total Respondents	Yes	No
132	20 (14.6%)	112 (85.4%)

Overall, when good/fair responses were compared to fair/poor responses on the question of health status, Cumberland County responses mirrored the state average. For specific disease conditions noted in the survey, the following were above the state average:

Condition	Cumberland County Average	State Average
Arthritis, rheumatoid arthritis, gout, lupus, fibromyalgia	30.1%	25.1%
Kidney disease	2.9%	2.2%
Vision impairment	16.9%	16.3%

Some variances from state average were also noted for the following behaviors or circumstances:

Behavior/Circumstance	Cumberland County Average	State Average
Smoking	26.8%	21.7%
Participation in exercise	69.3%	73.3%
Limited activity because of physical, mental, or emotional problems	24.4%	23.1%
Tested for HIV	59.2%	41.4%
Cognitive impairment	8.9%	7.1%
Sexual orientation-heterosexual	94.2%	97.7%

The Youth Risk Behavior Survey (YRBS) is another potential source of data that could be used to assess the health status of Cumberland County middle and high school students.

Unfortunately, data collected for this survey were not specific to Cumberland County and, therefore, do not add significant additional information to this county specific report.

Survey responses compared to 2010 Community Health Assessment (2009 BRFSS)

According to the 2011 BRFSS:

- ❖ 27.5% of county residents reported that their health was “good” compared to 31.2% of residents reported “good” health in the 2010 CHA (2009 BRFSS Percentages).
- ❖ 74.7% of county residents reported “none: when asked how many days did poor physical or mental health keep you from doing your usual activities, compared to 78.4% of county residents reported “none” in the 2010 CHA (2009 BRFSS Percentages).
- ❖ 85.1% of county residents reported that they had health coverage, including health insurance, pre-paid plan or government plan (Medicare) compared to 85.9% of county residents who reported that they had health coverage in the 2010 CHA (2009 BRFSS).
- ❖ 83.7% of county residents reported “no” when asked if they needed to see a doctor in the past month, but could not because of cost, compared to 86.4% of county residents who reported “no” when asked if they needed to see a doctor in the past month, but could not because of cost in the 2010 CHA (2009 BRFSS Percentages).
- ❖ 85.4% of county residents reported “no” when asked if they provided care or assistance to a friend or family who had a health problem, long-term illness or disability compared to 74.2% of county residents who reported “no” in the 2010 CHA (2009 BRFSS percentages)

Mental Health:

The number of poor mental health days within the past 30 days is used as one measurement of a person's health-related quality of life. Poor mental health includes stress, depression, and other emotional problems and can prevent a person from successfully engaging in daily activities, such as self-care, school, work, and recreation." (North Carolina Institute of Medicine. Healthy North Carolina 2020: A Better State of Health).

According to the 2012 BRFSS, when residents were asked "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

Residence	Total Number	None	1-2 days	3-7 days	8-29 days	30 days
Cumberland	442	69.1	6.9	11.3	5.5	7.3
State	11,682	67.9	7.1	9.4	9.1	6.5

- According to the 2012 BRFSS results, 11.3% of Cumberland County residents reported they had 3-7 days when their mental health was not good and 9.4% of statewide residents reported they had 3-7 days when their mental health was not good.

"During the past 30 days, for about how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?"

Residence	Total Number	None	1-2 days	3-7 days	8-29 days	30 days
Cumberland	442	77.8	4.9	6.5	4.6	6.1
State	11,724	79.4	5.5	5.7	5.1	4.4

- According to the 2012 BRFSS results, 6.5% of Cumberland County residents reported that during the past 30 days they had 3-7 days when physical or mental health kept them from doing their usual activities and 5.7% of statewide residents reported that during the past 30 days they had 3-7 days when physical or mental health kept them from doing their usual activities.

Mental Health Services:

Public mental health, developmental disability and substance abuse services are all managed by Alliance Behavioral Healthcare. To access the wide array of services available in our community, please visit the [Alliance Behavioral Healthcare](http://alliancebhc.org) website (alliancebhc.org).

Cumberland County contracts with Cape Fear Valley Health System to provide outpatient mental health services for children, adolescents and adults. Patients are seen by appointment and on a walk-in basis at 109 Bradford Ave. Fayetteville, NC 28301. Call 910-615-3333 to make an appointment.

County Ranking:

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. (www.countyrankings.org)

In 2013, among 100 counties, Cumberland County ranks 74th /100 in the State. In 2010 the County ranked 54th /100 in the State.

Listed below are some of Cumberland County's health problems and how Cumberland County compared to the State. For additional information on the county's health outcomes and health factors go to www.countyrankings.org , select the "North Carolina, then Cumberland County".

Health Problems	Cumberland	NC
<u>Diabetes</u>	12%	10%
<u>HIV prevalence rate</u>	435	304
<u>Premature age-adjusted mortality</u>	443	373
<u>Infant mortality</u>	1,046	808
<u>Child mortality</u>	88	67
Health Care		
<u>Mental health providers</u>	4,158:1	3,186:1
<u>Health care costs</u>	\$8,699	\$8,924
<u>Uninsured adults</u>	22%	24%
<u>Uninsured children</u>	8%	8%
<u>Could not see doctor due to cost</u>	15%	17%

Maternal & Child Health



Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. Source: Healthy People 2020 objectives-Maternal Child Health

PREGNANCY AND LIVE BIRTHS

This section includes an overview of pregnancy, prenatal care, adolescent pregnancy, low birth weight, birth by cesarean section, infant and fetal deaths, and other maternal-child health issues.

Pregnancy and childbirth have a huge impact on the physical, mental, emotional, and socioeconomic health of women and their families. Pregnancy-related health outcomes are influenced by a woman's health and other factors like race, ethnicity, age, and income. Common barriers to a healthy pregnancy and birth include lack of access to appropriate health care before and during pregnancy. In addition, environmental factors can shape a woman's overall health status before, during, and after pregnancy by affecting her health directly and/or by affecting her ability to engage in healthy behaviors. The goal is to help ensure that all women have a safe and healthy pregnancy.

Safe motherhood begins before conception with good nutrition and a healthy lifestyle. It continues with appropriate prenatal care and preventing problems if they arise. The ideal result is a full-term pregnancy without unnecessary interventions, the delivery of a healthy baby, and a healthy postpartum period in a positive environment that supports the physical and emotional needs of the mother, baby, and family. Source: www.healthypeople.gov/2020 and www.cdc.gov/reproductivehealth/maternalinfanthealth.

The risk of maternal and infant mortality and pregnancy-related complications can be reduced by increasing access to quality preconception (before pregnancy) and interconception (between pregnancies) care. Moreover, healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Source: www.healthypeople.gov/2020 .

2011 Total Pregnancies

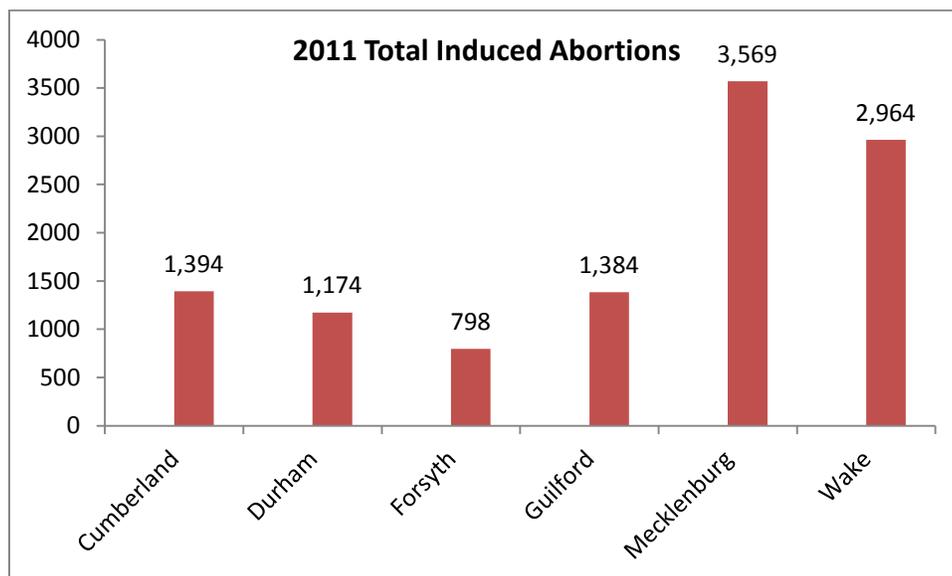
Total pregnancies equal the sum of live births, fetal deaths and induced abortions. In 2011, there were 7,500 pregnancies to the 73,683 women of reproductive age (15-44) in Cumberland County.

2011 Induced abortions

County	White	African Am.	Other	Hispanic	Unknown	Total
Cumberland	365	805	51	145	28	1,394
Durham	194	699	54	192	35	1,174
Forsyth	246	389	25	111	27	798
Guilford	356	831	71	97	29	1,384
Mecklenburg	842	1,935	148	518	126	3,569
Wake	931	1,378	182	375	98	2,964

Key Findings:

Cumberland County's total induced abortions were higher than peer counties Durham, Forsyth and Guilford. Also, in Cumberland County, induced abortions among African Americans were significantly higher than Whites and Hispanics.

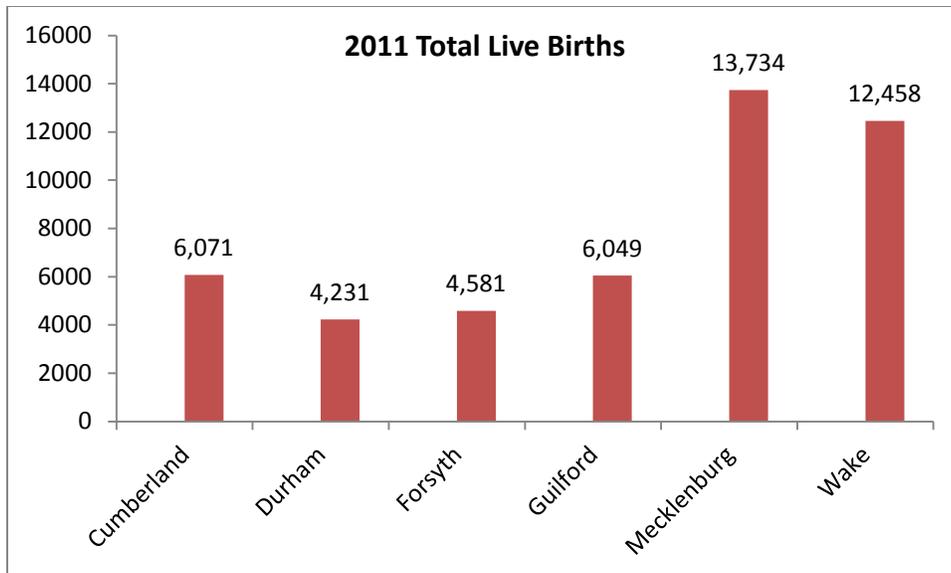


2011 Live Births

County	White	African Am.	Other	Hispanic	Unknown	Total
Cumberland	2,940	2,041	274	816	0	6,071
Durham	1,596	1,400	296	939	0	4,231
Forsyth	2,145	1,292	127	1,017	0	4,581
Guilford	2,549	2,367	392	741	0	6,049
Mecklenburg	5,770	4,320	1,073	2,571	0	13,734
Wake	6,672	2,846	987	1,953	0	12,458

Key Findings:

Cumberland County's total live births were higher than peer counties Durham, Forsyth and Guilford. In Cumberland County, live births among Whites were higher than African Americans.

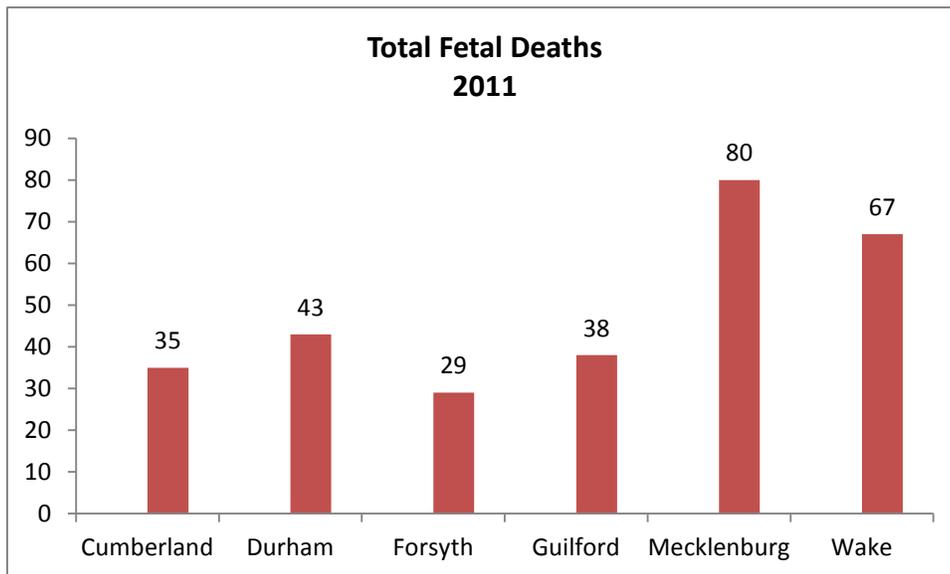


2011 Fetal Deaths

County	White	African Am.	Other	Hispanic	Unknown	Total
Cumberland	12	19	1	3	0	35
Durham	7	26	1	9	0	43
Forsyth	7	15	1	6	0	29
Guilford	9	24	0	5	0	38
Mecklenburg	22	44	6	8	0	80
Wake	24	25	4	14	0	67

Key Findings:

Cumberland County's total fetal deaths were higher than peer county Forsyth; lower than peer counties Durham, Guilford, Mecklenburg, and Wake. In Cumberland County, fetal deaths were higher among African Americans than Whites and Hispanics.

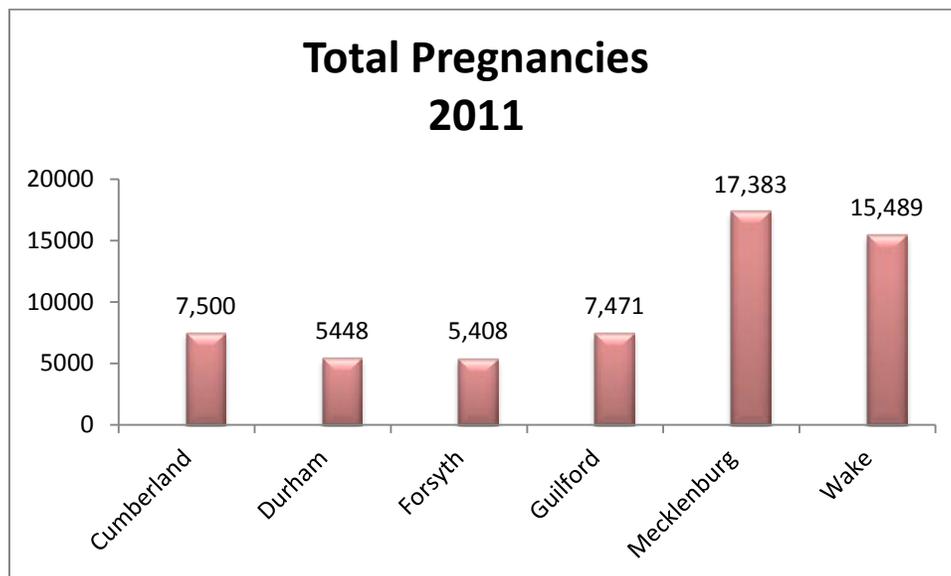


2011 Total Pregnancies

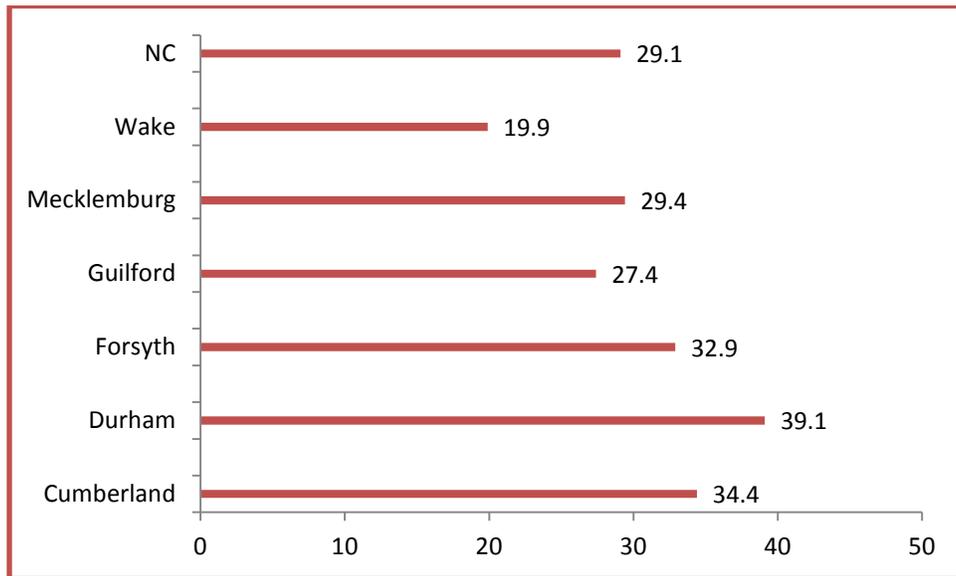
County	White	African Am.	Other	Hispanic	Unknown	Total
Cumberland	3,317	2,865	326	964	28	7,500
Durham	1,797	2,125	351	1,140	35	5,448
Forsyth	2,398	1,696	153	1,134	27	5,408
Guilford	2,914	3,222	463	843	29	7,471
Mecklenburg	6,634	6,299	1,227	3,097	126	17,383
Wake	7,627	4,249	1,173	2,342	98	15,489

Key Findings:

Cumberland County's total pregnancies were higher than peer counties Durham, Forsyth and Guilford and lower than peer counties Mecklenburg and Wake counties.



PREGNANCY RATES PER 1,000 POPULATIONS FOR GIRLS 15-17, 2007-2011



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

Key Findings:

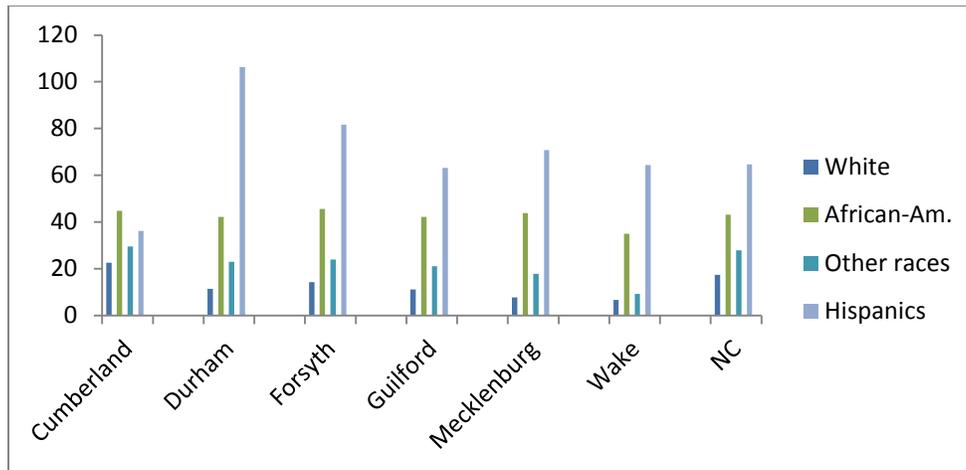
During the period, 2007-2011, Cumberland County pregnancy rates for females ages 15-17 was 34.4, 18.0 % higher than the State rate of 29.1.

When comparing peer counties, Cumberland County was:

- ✚ 12.0% lower than Durham County
- ✚ 4.6% higher than Forsyth County
- ✚ 25.5% higher than Guilford County
- ✚ 17.0% higher than Mecklenburg County
- ✚ 72.9% higher than Wake County

Note: When comparing Cumberland County data to the State and Peer Counties, the calculations represent percentage differences.

Pregnancy Rates for females ages 15-17 By Race/Ethnicity 2007-2011



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

By Race/Ethnicity:

Cumberland County White pregnancy rate of 22.7 was:

- ✚ 49.3% lower than Cumberland County's African American pregnancy rate of 44.8.
- ✚ 29.7% higher than the State rate of 17.5
- ✚ 97.4% higher than Durham County rate of 11.5
- ✚ 58.7% higher than Forsyth County rate of 14.3
- ✚ 102.7% higher than Guilford County rate of 11.2.
- ✚ 191.0% higher than Mecklenburg County rate of 7.8
- ✚ 238.8% higher than Wake County rate of 6.7

Cumberland County African American pregnancy rate of 44.8 was:

- ✚ 97.3% higher than Cumberland County's White pregnancy rate of 22.7
- ✚ 3.7% higher than the State pregnancy rate of 43.
- ✚ 5.9% higher than Durham County pregnancy rate of 42.3.
- ✚ 1.8% lower than Forsyth County pregnancy rate of 45.6
- ✚ 5.9% higher than Guilford County pregnancy rate of 42.3
- ✚ 2.3% higher than Mecklenburg County pregnancy rate of 43.8
- ✚ 28.0% higher than Wake County pregnancy rate of 35.0

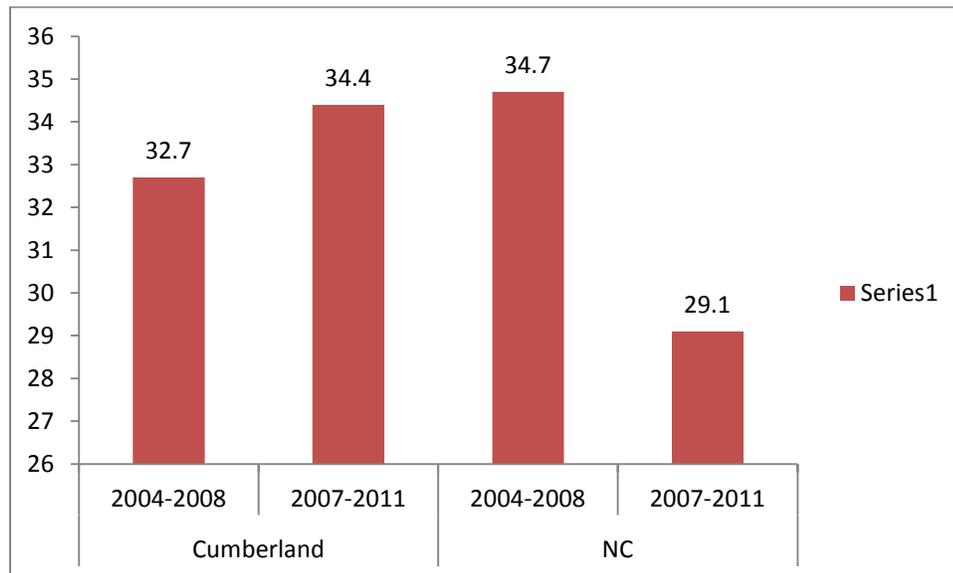
Cumberland County Other Races (Non-Hispanic) pregnancy rate of 29.6 was:

- ✚ 30.4% higher than Cumberland County's White pregnancy rate of 22.7
- ✚ 5.7% higher than the State pregnancy rate of 28.0
- ✚ 28.1% higher than Durham County pregnancy rate of 23.1
- ✚ 23.3% higher than Forsyth County pregnancy rate of 24.0
- ✚ 40.3% higher than Guilford County pregnancy rate of 21.1
- ✚ 65.3% higher than Mecklenburg County. pregnancy rate of 17.9
- ✚ 218.3% higher than Wake County pregnancy rate of 9.3

Cumberland County Hispanic pregnancy rate of 36.2 was:

- ✚ 59.5% higher than Cumberland County's White pregnancy rate of 22.7
- ✚ 44.0% lower than the State pregnancy rate of 64.7
- ✚ 65.9% lower than Durham County pregnancy rate of 106.3
- ✚ 55.7% lower than Forsyth County pregnancy rate of 81.7
- ✚ 42.7% lower than Guilford County pregnancy rate of 63.2
- ✚ 48.9% lower than Mecklenburg County pregnancy rate of 70.8
- ✚ 43.8% lower than Wake County pregnancy rate of 64.4

When comparing the total pregnancy rate among this age group (ages 15-17), periods between 2004-2008 and 2007-2011 shows that there was a 5.1% increase in Cumberland County pregnancy rate and a 19.2% decrease in the State pregnancy rate. (See Chart below).



www.schs.state.nc.us/SCHS/data/databook

2011 PREGNANCY RATES PER 1,000 POPULATIONS FOR GIRLS 15-19

Key Findings:

In 2011, Cumberland County total teen pregnancy rate of 61.8, was higher than the State rate of 43.8. When comparing Cumberland County teen pregnancy rate to peer counties, Cumberland County's total teen pregnancy rate was:

- ✚ 31.8% higher than Durham County
- ✚ 40.8% higher than Forsyth County
- ✚ 73.6% higher than Guilford County
- ✚ 52.6% higher than Mecklenburg County
- ✚ 119.9% higher than Wake County

By Race/ Ethnicity :(see chart below).

Cumberland County White pregnancy rate of 54.5 was:

- ✚ 15.7% lower than Cumberland County's African American pregnancy rate.
- ✚ 76.9% higher than the State.
- ✚ 292.1% higher than Durham County
- ✚ 153.5% higher than Forsyth County
- ✚ 244.9% higher than Guilford County
- ✚ 270.7% higher than Mecklenburg County
- ✚ 378.0% higher than Wake County

Cumberland County African American pregnancy rate of 64.7 was:

- ✚ 18.7% higher than Cumberland County's White pregnancy rate.
- ✚ 5.0% higher than the State.
- ✚ 14.1% higher than Durham County
- ✚ 6.9% higher than Forsyth County
- ✚ 18.9% higher than Guilford County
- ✚ 11.7% higher than Mecklenburg County
- ✚ 21.4% higher than Wake County

Cumberland County Other Races (Non-Hispanic) pregnancy rate of 74.3 was:

- ✚ 36.3% higher than Cumberland County’s White pregnancy rate.
- ✚ 88.6% higher than the State.
- ✚ 192.5% higher than Durham County
- ✚ 131.5% higher than Forsyth County
- ✚ 179.3% higher than Guilford County
- ✚ 194.8% higher than Mecklenburg County
- ✚ 504.0% higher than Wake County

✚ **Cumberland County Hispanic pregnancy rate of 66.4 was:**

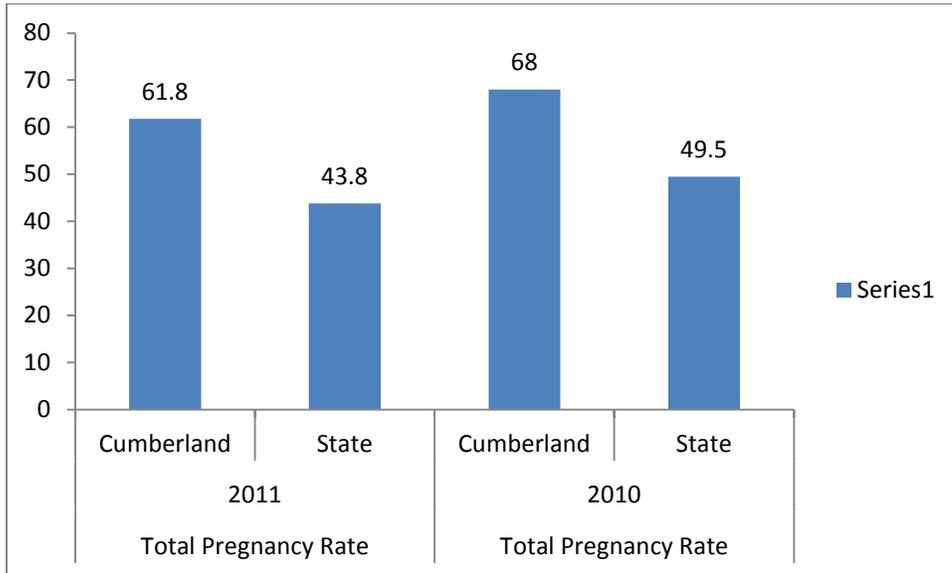
- ✚ 218.3% higher than Cumberland County’s White pregnancy rate.
- ✚ 6.6% lower than the State.
- ✚ 25.8% lower than Durham County
- ✚ 18.7% lower than Forsyth County
- ✚ 14.9% higher than Guilford County
- ✚ 6.1% lower than Mecklenburg County
- ✚ 12.2% higher than Wake County

2011 PREGNANCY RATES PER 1,000 POPULATIONS FOR GIRLS 15-19

Residence	Total Pregnancies	Rate	White	Rate	African-American	Rate	Other Race	Rate	Hispanic	Rate
North Carolina	13,909	43.8	5,719	30.8	5,399	61.6	495	39.4	2,241	71.1
Cumberland	673	61.8	227	54.5	332	64.7	33	74.3	76	66.4
Durham	421	46.9	37	13.9	261	56.7	13	25.4	107	89.5
Forsyth	554	43.9	133	21.5	267	60.5	10	32.1	138	81.7
Guilford	664	35.6	135	15.8	420	54.4	25	26.6	83	57.8
Mecklenburg	1,210	40.5	184	14.7	692	57.9	35	25.2	288	70.7
Wake	877	28.1	203	11.4	445	53.3	20	12.3	203	59.2

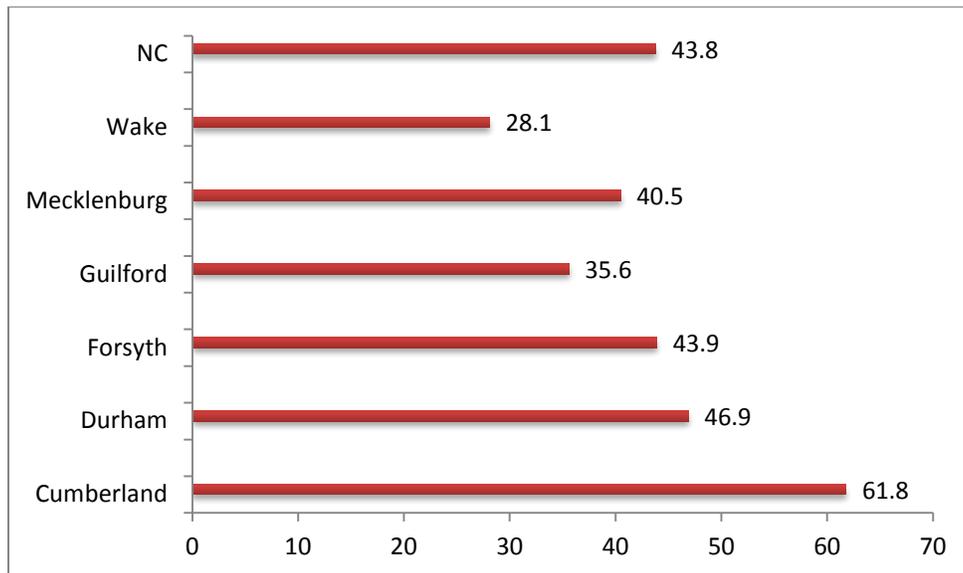
Source: www.schs.state.nc.us/SCHS/data/databook

When comparing the year 2011 to 2010, the total pregnancy rate among this age group decreased by 9.1% in Cumberland County and decreased by 11.5% in the State. (See Chart below).



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

Pregnancy Rates per 1,000 Populations for Girls 15-19



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

2012 PREGNANCY RATES PER 1,000 POPULATIONS FOR GIRLS 15-19

Key Findings:

In 2012, Cumberland County pregnancy rate for females ages 15-19 was 56.0, 41.4% higher than the State rate of 39.6. When comparing Cumberland County to the peer counties, Cumberland County was:

- ✚ 24.4% higher than Durham County
- ✚ 39.3% higher than Forsyth County
- ✚ 64.2% higher than Guilford County
- ✚ 56.0% higher than Mecklenburg County
- ✚ 119.6% higher than Wake County

The pregnancy rate of 56.0 for girls ages 15-19 was 24.8% lower from 2012 than from 2008 (74.5) 2010 CHA.

By Race/ Ethnicity :(see chart below).

Cumberland County White pregnancy rate of 47.7 was:

- ✚ 22.2% lower than Cumberland County's African American pregnancy rate.
- ✚ 68.6% higher than the State.
- ✚ 224.5% higher than Durham County
- ✚ 112.9% higher than Forsyth County
- ✚ 157.89% higher than Guilford County
- ✚ 269.8% higher than Mecklenburg County
- ✚ 350.0% higher than Wake County

Cumberland County African American pregnancy rate of 61.3 was:

- ✚ 28.5% higher than Cumberland County's White pregnancy rate.
- ✚ 11.5% higher than the State.
- ✚ 7.5% higher than Durham County
- ✚ 18.8% higher than Forsyth County
- ✚ 29.9% higher than Guilford County
- ✚ 18.3% higher than Mecklenburg County
- ✚ 23.3% higher than Wake County

Cumberland County Other Races (Non-Hispanic) pregnancy rate of 49.6 was:

- ✚ 4.0% higher than Cumberland County’s White pregnancy rate.
- ✚ 36.3% higher than the State.
- ✚ Fewer than 20 cases are unstable and are not reported for Durham County
- ✚ Fewer than 20 cases are unstable and are not reported for Forsyth County
- ✚ 14.5% higher than Guilford County
- ✚ 215.9% higher than Mecklenburg County
- ✚ Fewer than 20 cases are instable and are not reported for Wake County

✚ **Cumberland County Hispanic pregnancy rate of 59.9 was:**

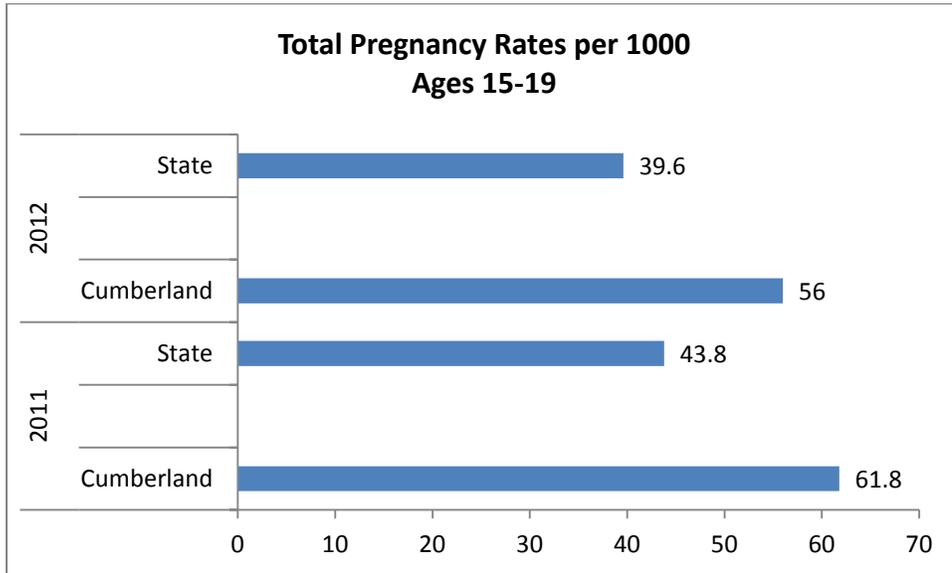
- ✚ 25.5% higher than the County’s White pregnancy rate.
- ✚ 3.4% lower than the State.
- ✚ 22.7% lower than Durham County
- ✚ 19.5% lower than Forsyth County
- ✚ 20% higher than Guilford County
- ✚ 6.0% lower than Mecklenburg County
- ✚ 15.4% higher than Wake County

2012 PREGNANCY RATES PER 1,000 POPULATIONS FOR GIRLS 15-19

Residence	Total Pregnancies	Rate	White	Rate	African-American	Rate	Other Race	Rate	Hispanic	Rate
North Carolina	12,535	39.6	5,233	28.3	4,742	55.0	471	36.4	2,045	62.0
Cumberland	592	56.0	188	47.7	307	61.3	21	49.6	72	59.9
Durham	412	45.0	39	14.7	268	57.0	4	*	99	77.5
Forsyth	508	40.2	139	22.4	221	51.6	11	*	134	74.4
Guilford	633	34.1	157	18.5	360	47.2	41	43.3	75	49.9
Mecklenburg	1,106	35.9	164	12.9	632	51.8	23	15.7	282	63.7
Wake	825	25.5	196	10.6	420	49.7	13	*	193	51.9

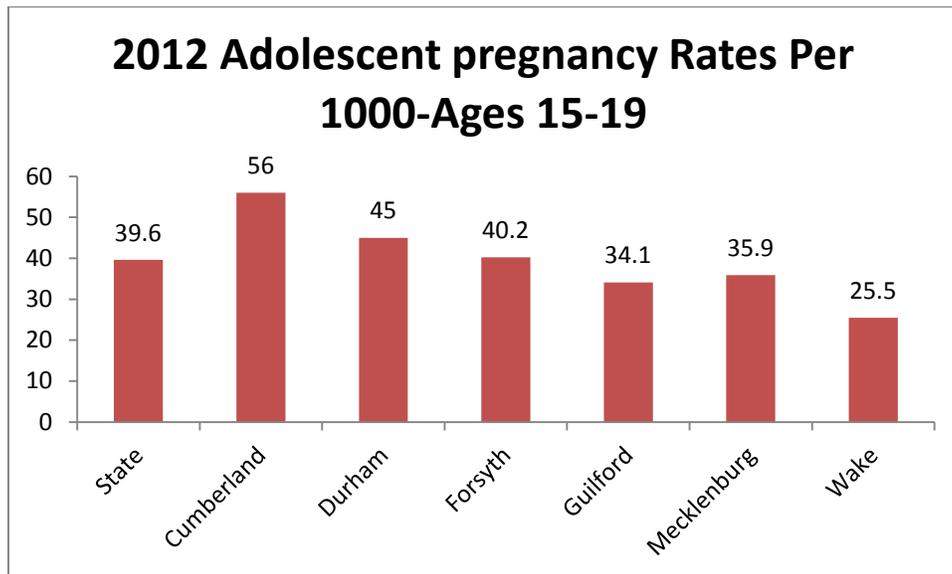
Source: www.schs.state.nc.us/SCHS/data/databook * fewer than 20 cases are unstable and are not reported.

When comparing the year 2012 to 2011, the total pregnancy rate among this age group decreased by 9.4% in Cumberland County and decreased by 9.6% in State. (See Chart below).



Source: www.appnc.org/data

Pregnancy Rates per 1,000 Populations for Girls 15-19



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

2011 Fertility Rates Per 1,000 for females ages 15-19

Fertility Rates are the number of live births per 1,000 women of reproductive age (15 to 44). Numerators and denominators may also be specific for ages within the 15 to 44 range, i.e., 15 to 19.

Key Findings:

In 2011, Cumberland County fertility rate for females ages 15-19 was 46.8, 34.5% higher than the State rate of 34.8. When comparing Cumberland County to the peer counties, Cumberland County was:

-  52.4% higher than Durham County
-  30.7% higher than Forsyth County
-  76.6% higher than Guilford County
-  69.0% higher than Mecklenburg County
-  160.0% higher than Wake County

2011 FERTILITY RATES PER 1,000 POPULATION: FEMALES AGES 15-19

Residence	Total Pregnancies	Rate	White	Rate	African American	Rate	Other	Rate	Hispanic	Rate
North Carolina	11,061	34.8	4,685	25.2	3,987	45.5	413	32.9	1,976	62.7
Cumberland	509	46.8	196	47.0	224	43.7	25	56.3	64	55.9
Durham	275	30.7	20	7.5	159	34.5	8	15.6	88	73.6
Forsyth	451	35.8	106	17.1	208	47.2	9	28.8	128	75.8
Guilford	493	26.5	99	11.6	308	39.9	15	15.9	71	49.4
Mecklenburg	829	27.7	106	8.5	462	38.7	27	19.5	234	57.5
Wake	560	18.0	113	6.4	274	32.8	7	4.3	166	48.4

Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

2011 ABORTION RATES PER 1,000 POPULATION: FEMALES AGES 15-19

The Abortion Rate is the number of induced abortions per 1,000 women of reproductive age (15 to 44). Numerator and denominator may also be specific for ages within the 15 to 44 range, i.e., 15 to 19, 20 to 24, etc.

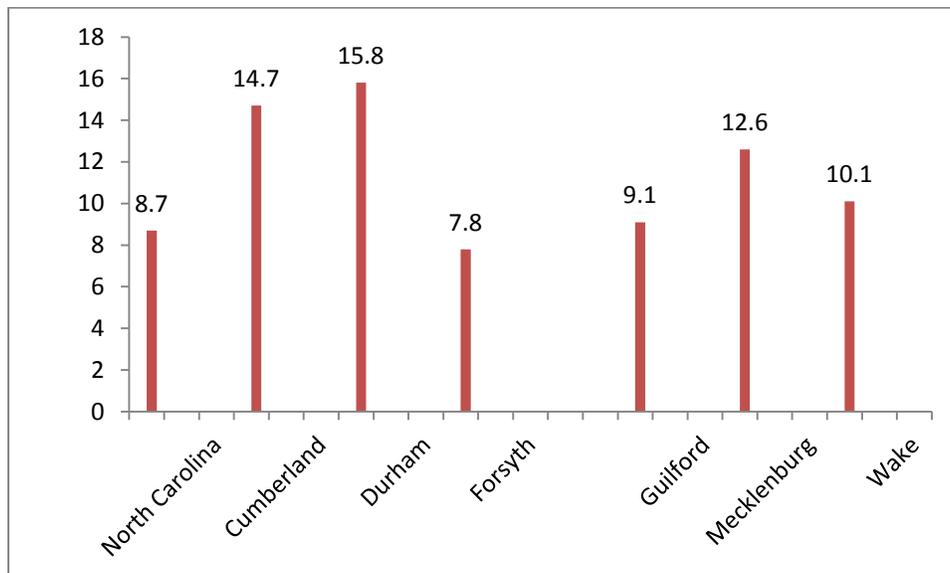
Key Findings:

In 2011, Cumberland County abortion rate for females ages 15-19 was 14.7, 69.0% higher than the State rate of 8.7. When comparing Cumberland County to the peer counties, Cumberland County was:

The abortion rate of 14.7 was 25.0% lower from 2011 than from 2008 (19.6) 2010 CHA.

- 7.0% lower than Durham County
- 88.5% higher than Forsyth County
- 61.5% higher than Guilford County
- 16.7% higher than Mecklenburg County
- 45.5% higher than Wake County

2011 ABORTION RATES PER 1,000 POPULATION: FEMALES AGES 15-19



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

2011 ABORTION RATES PER 1,000 POPULATION: FEMALES AGES 15-19

Residence	Total Pregnancies	Rate	White	Rate	African Am.	Rate	Other Races	Rate	Hispanic	Rate
North Carolina	2,774	8.7	1,018	5.5	1,364	15.6	80	6.4	257	8.2
Cumberland	160	14.7	30	7.2	106	20.7	7	15.8	12	10.5
Durham	142	15.8	16	6.0	99	21.5	5	9.8	19	15.9
Forsyth	98	7.8	27	4.4	55	12.5	1	3.2	9	5.3
Guilford	169	9.1	36	4.2	110	14.3	10	10.6	12	8.4
Mecklenburg	376	12.6	77	6.2	228	19.1	7	5.0	53	13.0
Wake	314	10.1	90	5.1	169	20.2	13	8.0	36	10.5

Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

By Race/Ethnicity:

Cumberland County White abortion rate of 7.2 was:

- ✚ 65.2% lower than Cumberland County's African American abortion rate.
- ✚ 30.9% higher than the State.
- ✚ 20.0% higher than Durham County
- ✚ 63.6% higher than Forsyth County
- ✚ 71.4% higher than Guilford County
- ✚ 16.1% higher than Mecklenburg County
- ✚ 41.1.0% higher than Wake County

Cumberland County African American abortion rate of 20.7 was:

- ✚ 187.5% higher than Cumberland County's White rate.
- ✚ 32.7% higher than the State.
- ✚ 3.7% lower than Durham County
- ✚ 65.6% higher than Forsyth County
- ✚ 44.8% higher than Guilford County
- ✚ 8.4% higher than Mecklenburg County
- ✚ 2.5% higher than Wake County

Cumberland County Other Races (Non-Hispanic) abortion rate of 15.8 was:

- ✚ 119.4% higher than Cumberland County's White rate.
- ✚ 146.9% higher than the State.
- ✚ 61.2% higher than Durham County
- ✚ 393.8% higher than Forsyth County
- ✚ 49.1% higher than Guilford County
- ✚ 216% higher than Mecklenburg County
- ✚ 97.5% higher than Wake County

Cumberland County Hispanic abortion rate of 10.5 was:

- ✚ 45.8% higher than Cumberland County's White abortion rate.
- ✚ 28.0% higher than the State.
- ✚ 34.0% lower than Durham County
- ✚ 98.1% higher than Forsyth County
- ✚ 25.0% higher than Guilford County
- ✚ 19.2% lower than Mecklenburg County
- ✚ The same in Wake County

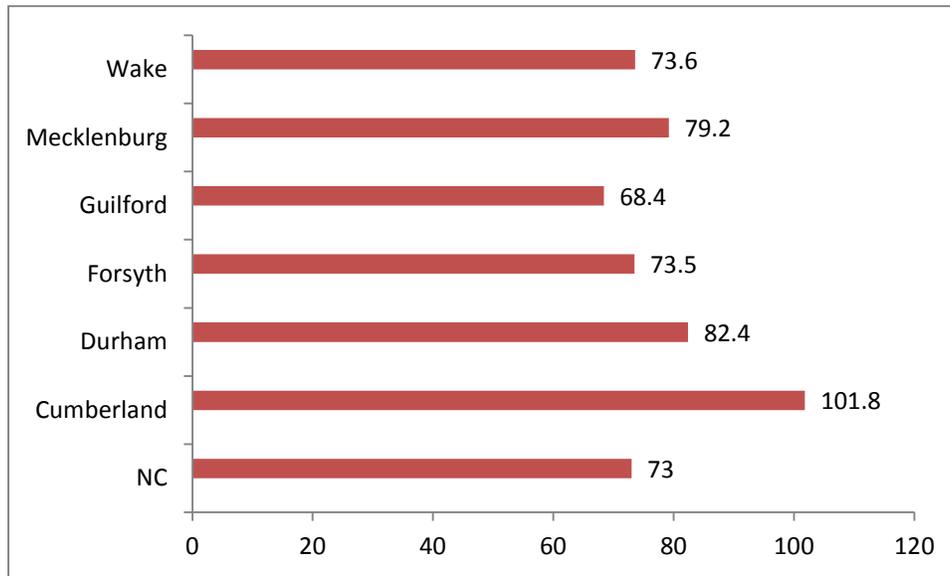
2011 Pregnancy Rates Per 1,000 Population: females ages 15-44

Key Findings:

In 2011, Cumberland County total pregnancy rate for females ages 15-44 was 101.8, 38.9% higher than the State rate of 73.3. When comparing Cumberland County to the peer counties, Cumberland County was:

- ✚ 23.5% higher than Durham County
- ✚ 38.5% higher than Forsyth County
- ✚ 48.8% higher than Guilford County
- ✚ 28.5% higher than Mecklenburg County
- ✚ 38.3% higher than Wake County

2011 Pregnancy Rates Per 1,000 Population: females ages 15-44



Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

By Race/Ethnicity:

Cumberland County White pregnancy rate of 98.0 was:

- ✚ 3.4% lower than Cumberland County's African American pregnancy rate.
- ✚ 54.1% higher than the State.
- ✚ 43.5% higher than Durham County
- ✚ 58.1% higher than Forsyth County
- ✚ 74.1% higher than Guilford County
- ✚ 51.0% higher than Mecklenburg County
- ✚ 58.3% higher than Wake County

Cumberland County African American pregnancy rate of 101.5 was:

- ✚ 3.6% higher than Cumberland County's White pregnancy rate.
- ✚ 24.5% higher than the State pregnancy rate.
- ✚ 25.6% higher than Durham County pregnancy rate.
- ✚ 35.0% higher than Forsyth County pregnancy rate.
- ✚ 35.0% higher than Guilford County pregnancy rate.
- ✚ 21.6% higher than Mecklenburg County pregnancy rate.
- ✚ 19.7% higher than Wake County pregnancy rate.

Cumberland County Other Races (Non-Hispanic) pregnancy rate of 90.4 was:

- ✚ 7.8% lower than Cumberland County’s White pregnancy rate.
- ✚ 12.2% higher than the State pregnancy rate.
- ✚ 15.5% higher than Durham County pregnancy rate.
- ✚ 28.8% higher than Forsyth County pregnancy rate.
- ✚ 17.1% higher than Guilford County pregnancy rate.
- ✚ 0.9% lower than Mecklenburg County
- ✚ 11.7% higher than Wake County

✚ **Cumberland County Hispanic pregnancy rate of 120.7 was:**

- ✚ 23.2% higher than Cumberland County’s White pregnancy rate.
- ✚ 13.2% higher than the State.
- ✚ 4.2% lower than Durham County
- ✚ 8.3% higher than Forsyth County
- ✚ 23.5% higher than Guilford County
- ✚ 11.0% higher than Mecklenburg County.
- ✚ 16.1% higher than Wake County

2011 PREGNANCY RATES PER 1,000 POPULATION: Females Ages 15-44

Residence	Total Pregnancies	Rate	White	Rate	African-American	Rate	Other Races	Rate	Hispanic	Rate
North Carolina	143,526	73.3	76,225	63.6	38,929	81.5	7,121	80.6	20,669	106.6
Cumberland	7,500	101.8	3,317	98.0	2,865	101.5	326	90.4	964	120.7
Durham	5,448	82.4	1,797	68.3	2,125	80.8	351	78.3	1,140	126.0
Forsyth	5,408	73.5	2,398	62.0	1,696	75.2	153	70.2	1,134	111.5
Guilford	7,471	68.4	2,914	56.3	3,222	75.2	463	77.2	843	97.7
Mecklenburg	17,383	79.2	6,634	64.9	6,299	83.5	1,227	91.2	3,097	108.7
Wake	15,489	73.6	7,627	61.9	4,249	84.8	1,173	80.9	2,342	104.0

Source: www.schs.state.nc.us/SCHS/data/databook Click on pregnancies

2011 FERTILITY RATES PER 1,000 POPULATION: Females Ages 15-44

Fertility Rates are the number of live births per 1,000 women of reproductive age (15 to 44). Numerators and denominators may also be specific for ages within the 15 to 44.

Key Findings:

In 2011, Cumberland County fertility rate for females ages 15-44 was 82.4, 34.0% higher than the State rate of 61.5. When comparing Cumberland County to the peer counties, Cumberland County was:

- ✚ 28.8% higher than Durham County
- ✚ 32.3% higher than Forsyth County
- ✚ 48.7% higher than Guilford County
- ✚ 31.8% higher than Mecklenburg County
- ✚ 39.2% higher than Wake County

2011 FERTILITY RATES PER 1,000 POPULATION: Females Ages 15-44

Residence	Total Pregnancies	Rate	White	Rate	African Am.	Rate	Other Races	Rate	Hispanics	Rate
North Carolina	120,403	61.5	67,542	56.4	28,509	59.7	6,135	69.4	18,217	94.0
Cumberland	6,071	82.4	2,940	86.8	2,041	72.3	274	76.0	816	102.2
Durham	4,231	64.0	1,596	60.6	1,400	53.2	296	66.1	939	103.8
Forsyth	4,581	62.3	2,145	55.5	1,292	57.3	127	58.3	1,017	100.0
Guilford	6,049	55.4	2,549	49.2	2,367	55.2	392	65.4	741	85.9
Mecklenburg	13,734	62.5	5,770	56.4	4,320	57.3	1,073	79.8	2,571	90.3
Wake	12,458	59.2	6,672	54.1	2,846	56.8	987	68.0	1,953	86.7

2011 ABORTION RATES PER 1,000 POPULATION: FEMALES AGES 15-44

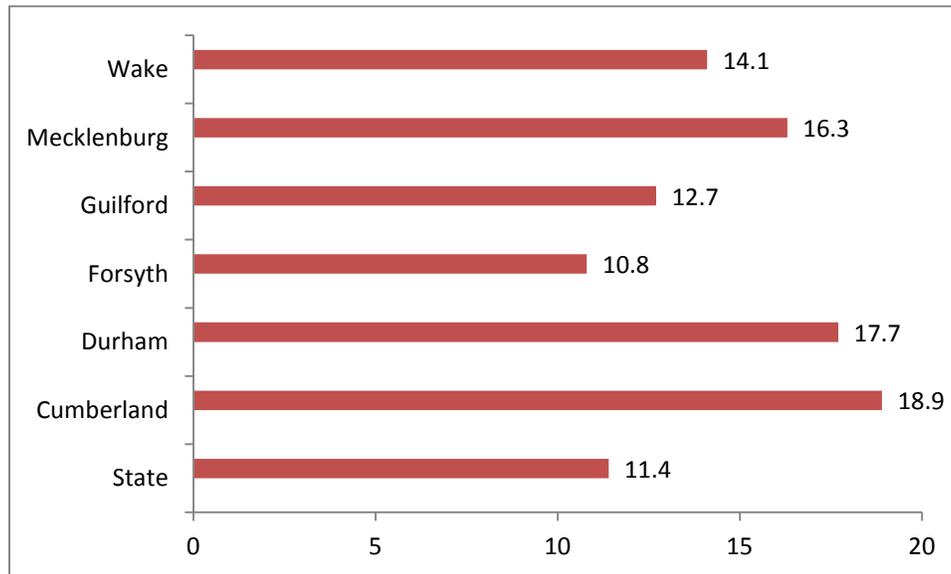
The Abortion Rate is the number of induced abortions per 1,000 women of reproductive age (15 to 44). Numerator and denominator may also be specific for ages within the 15 to 44 range, i.e., 15 to 19, 20 to 24, etc.

Key Findings:

In 2011, Cumberland County abortion rate for females ages 15-44 was 18.9, 65.8% higher than the State rate of 11.4. When comparing Cumberland County to the peer counties, Cumberland County was:

- 6.8% higher than Durham County
- 75.0% higher than Forsyth County
- 48.8% higher than Guilford County
- 16.0% higher than Mecklenburg County
- 34.0% higher than Wake County

2011 ABORTION RATES PER 1,000 POPULATION: FEMALES AGES 15-44



2011 ABORTION RATES PER 1,000 POPULATION: Females Ages 15-44

Residence	Total Pregnancies	Rate	White	Rate	Af. AM.	Rate	Other	Rate	Hispanic	Rate
North Carolina	22,370	11.4	8,363	7.0	10,097	21.1	959	10.9	2,369	12.2
Cumberland	1,394	18.9	365	10.8	805	28.5	51	14.1	145	18.2
Durham	1,174	17.7	194	7.4	699	26.6	54	12.1	192	21.2
Forsyth	798	10.8	246	6.4	389	17.3	25	11.5	111	10.9
Guilford	1,384	12.7	356	6.9	831	19.4	71	11.8	97	11.2
Mecklenburg	3,569	16.3	842	8.2	1,935	25.7	148	11.0	518	18.2
Wake	2,964	14.1	931	7.6	1,378	27.5	182	12.5	375	16.7

By Race/Ethnicity:

Cumberland County White abortion rate of 10.8 was:

- ✚ 62.1% lower than Cumberland County’s African American abortion rate.
- ✚ 54.3% higher than the State.
- ✚ 45.9% higher than Durham County
- ✚ 68.8% higher than Forsyth County
- ✚ 56.5% higher than Guilford County
- ✚ 31.7% higher than Mecklenburg County
- ✚ 42.1% higher than Wake County

Cumberland County African American abortion rate of 28.5 was:

- ✚ 163.9% higher than Cumberland County’s White rate.
- ✚ 35.1% higher than the State.
- ✚ 7.1% lower than Durham County
- ✚ 64.7% higher than Forsyth County
- ✚ 46.9% higher than Guilford County
- ✚ 10.9% higher than Mecklenburg County
- ✚ 3.6% higher than Wake County

Cumberland County Other Races (Non-Hispanic) abortion rate of 14.1 was:

- ✚ 30.6% higher than Cumberland County's White rate.
- ✚ 29.4% higher than the State.
- ✚ 16.5% higher than Durham County
- ✚ 22.6% higher than Forsyth County
- ✚ 19.5% higher than Guilford County
- ✚ 28.2% higher than Mecklenburg County
- ✚ 12.8% higher than Wake County

Cumberland County Hispanic abortion rate of 18.2 was:

- ✚ 68.5% higher than the County's White abortion rate.
- ✚ 49.2% higher than the State.
- ✚ 14.2% lower than Durham County
- ✚ 67.0% higher than Forsyth County
- ✚ 62.5% higher than Guilford County
- ✚ The same as Mecklenburg County
- ✚ 9.0% higher than Wake County

Live Birth Rates per 1,000 Populations, 2007-2011

Key Findings:

During the period, 2007-2011, Cumberland County's total live birth rate of 18.7 was 38.5% higher than the State's total live birth rate of 13.5. When comparing peer counties, Cumberland County was:

- ✚ 13.3% higher than Durham County
- ✚ 35. % higher than Forsyth County
- ✚ 46.1% higher than Guilford County
- ✚ 18.4% higher than Mecklenburg County
- ✚ 27.2% higher than Wake County

By Race/ Ethnicity :(see chart below).

Cumberland County White live birth rate of 17.7 was:

- ✚ 2.3% higher than Cumberland County's Black live birth rate.
- ✚ 58.0% higher than the State.
- ✚ 33.1% higher than Durham County
- ✚ 71.8% higher than Forsyth County
- ✚ 88.3% higher than Guilford County
- ✚ 42.7% higher than Mecklenburg County
- ✚ 46.3% higher than Wake County

Cumberland County Black live birth rate of 17.3 was:

- ✚ 2.3% lower than Cumberland County's White live birth rate.
- ✚ 17.7% higher than the State.
- ✚ 16.1% higher than Durham County
- ✚ 17.7% higher than Forsyth County
- ✚ 12.3% higher than Guilford County
- ✚ 6.1% higher than Mecklenburg County
- ✚ 11.6% higher than Wake County

Cumberland County Other Races (Non-Hispanic) live birth rate of 21.0 was:

- ✚ 18.6% higher than Cumberland County’s White live birth rate.
- ✚ 11.7% higher than the State.
- ✚ 2.3% lower than Durham County
- ✚ 25.7% higher than Forsyth County
- ✚ 11.1% higher than Guilford County
- ✚ 3.7% lower than Mecklenburg County
- ✚ 10.5% higher than Wake County

✚ **Cumberland County Hispanic live birth rate of 30.3 was:**

- ✚ 71.2% higher than Cumberland County’s White live birth rate.
- ✚ 10.2% higher than the State.
- ✚ 1.0% lower than Durham County
- ✚ The same for Forsyth County
- ✚ 15.6% higher than Guilford County
- ✚ 7.4% higher than Mecklenburg County
- ✚ 7.1% higher than Wake County

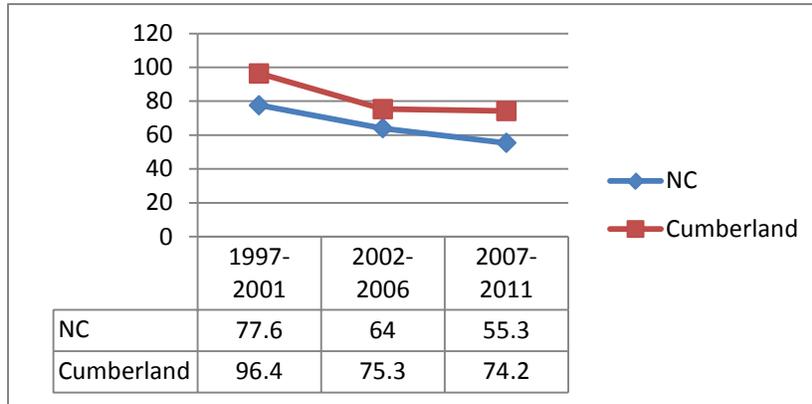
See Chart below:

Live Birth Rates per 1,000 Populations, 2007-2011

Residence	Total	Rate	Total	Rate	White	Rate	African Am.	Rate	Other	Rate	Hispanic	Rate
North Carolina	631,134	13.5	53,0307	12.3	350,686	11.2	149,337	14.7	30,284	18.8	100,827	27.5
Cumberland	29,459	18.7	25,827	17.7	14,201	17.7	10,182	17.3	1,444	21.0	3,632	30.3
Durham	21,910	16.5	16,843	14.5	7,953	13.3	7,463	14.9	1,427	21.5	5,067	30.6
Forsyth	24,338	13.8	18,403	11.7	11,095	10.3	6,681	14.7	627	16.7	5,935	30.3
Guilford	30,879	12.8	26,688	11.9	12,844	9.4	11,890	15.4	1,954	18.9	4,191	26.2
Mecklenburg	71,751	15.8	57,311	14.2	30,140	12.4	22,257	16.3	4,914	21.8	14,440	28.2
Wake	65,014	14.7	53,555	13.3	34,595	12.1	14,201	15.5	4,759	19.0	11,459	28.3

Trends

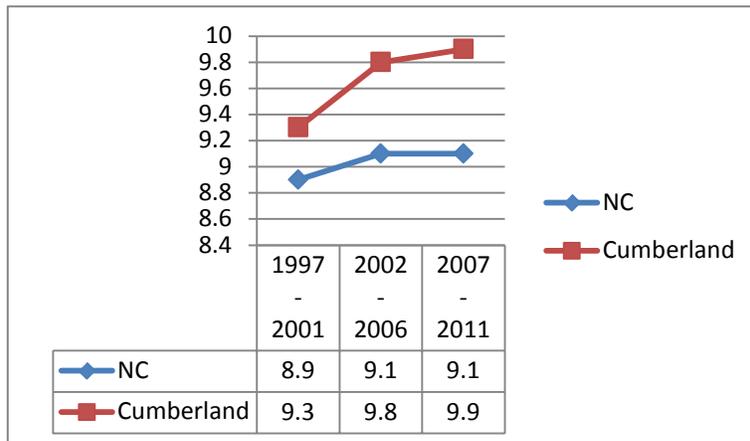
Teen Pregnancies (Ages 15-19) per 1,000 Female Residents



Observations:

- The teen pregnancy rate for Cumberland County was 23.0% lower from 2007-2011 than from 1997-2001.
- Overall, Cumberland County’s teen pregnancy rates are on a decline, but continue to exceed the State teen pregnancy rates.

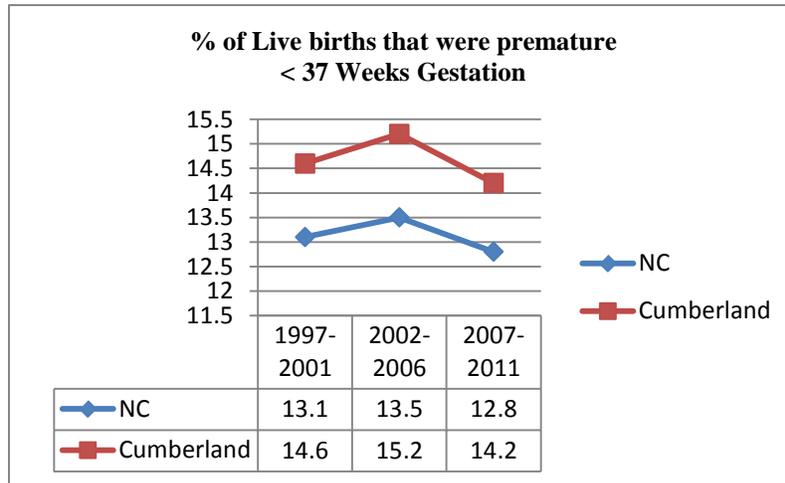
Percentage of Resident Live Births Classified as Low Birth weight (2,500 grams/5lbs 8ozs Or less



Observations:

- The low birth weight for Cumberland County was 6.5% higher from 2007-2011 than from 1997-2001. Cumberland County’s low birth weight continues to exceed the State’s birth rate.

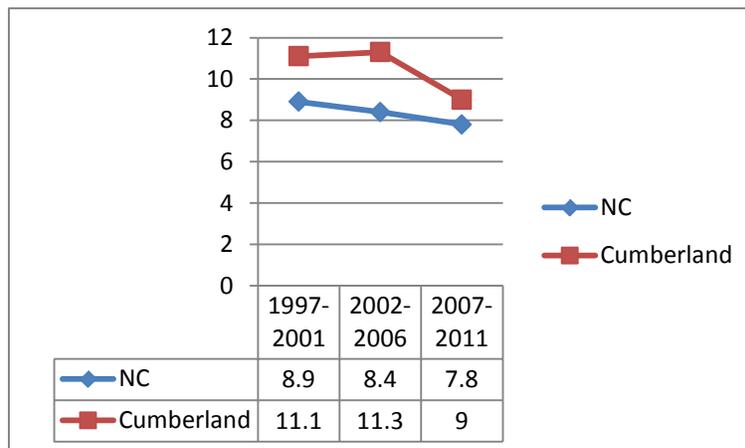
Premature Births



Observations:

- The percent of premature births for Cumberland County was 2.7% lower from 2007-2011 than from 1997-2001.
- Over the past 15 years, the percent of premature births for Cumberland County has exceeded the percent of premature births for the State.

Infants Deaths per 1,000 Live Births



Observations:

- The infant death rate for Cumberland County was 18.9% lower from 2007-2011 than from 1997-2001.
- Over the past 15 years, Cumberland County's infant death rate has exceeded the State's infant death rate.

Health Disparities

2011 Abortion Rates: (Ages 15-19)

The African American teen abortion rate was twice as high as the White abortion rate. In the 2010 Community Health Assessment, the minority abortion rate was also higher than the White abortion rate.

2011 Abortion Rates: (Ages 15-44)

The African American abortions rate was almost three times higher than White abortion rates. In the 2010 CHA, the minority abortion rate was almost twice as high as the White abortion rate.

2011 Teen Pregnancy Rates: (Ages 15-19)

African American and Hispanic pregnancy rates were similar; both were slightly higher than the White teen pregnancy rate. In the 2010 CHA, the minority pregnancy rate was slightly higher than the White pregnancy rate.

2011 Pregnancy Rates: (Ages 15-44)

The Hispanic pregnancy rate was significantly higher than the White and African American pregnancy rates. In the 2010 CHA, the White pregnancy rate was higher than the minority pregnancy rate.

2007-2011 Live Birth Rates:

The Hispanic live birth rate was higher than the White and African American live birth rate. The African American and White live birth rates were similar.

Initiatives and Resources in Cumberland County

Family Planning Services at Cumberland County Department of Public Health – Family planning services are offered to youth ages 12-19. Classes are Tuesdays from 12 noon-1pm. The Family Planning Health Educator educates the clients on contraceptive methods, male and female anatomy, abstinence, breast health, immunizations, signs and symptoms of sexually transmitted diseases (STD's) and pelvic/pap exams. A Pre & Post test is given to the clients during the class and an evaluation is given at the end of class. Educational brochures and condoms are also passed out in the class.

School-Based Family Planning Classes - The Cumberland County Department of Public Health markets the family planning services available for teens by partnering with Cumberland County Schools. The Family Planning Health Educator visits local high schools to educate teens on family planning methods and services provided by the health department. The school-based classes educate teens on abstinence, contraceptive methods, STD's, breast health, and testicular exams, and more.

Teen Pregnancy Prevention Month (Social Marketing) - May is Teen Pregnancy Prevention Month. In order to promote this campaign, the Family Planning Health Educator from Cumberland County Department of Public Health visits local high schools and coordinates a tee shirt design contest. Students design creative abstinence slogans that are judged by community members, then the chosen slogans are displayed on tee shirts to market the abstinence message. Cumberland County Department of Public Health partnered with radio station Foxy 99 and Cumberland County Schools to promote the campaign.

Parents Matter - Cumberland County Department of Public Health also implements Parents Matter, a program that encourages parents to communicate with their youth about puberty growth and development, abstinence, sexual behaviors, pregnancy, STD's, and much more. Parents attend 5 consecutive sessions to learn about issues that concern young adolescents today. The sessions usually last approximately 2-2 ½ hours. Cumberland County Department of Public Health partnered with Planned Parenthood of Central North Carolina to promote this program.

Planned Parenthood of Central NC - Planned Parenthood has several educational programs available to community youth. These include **Teen Connections**, **Smart Girls**, **Wise Guy**, and **Man-Up**. Teen Connections uses the *Becoming a Responsible Teen* (BART) curriculum to teach youth about topics such as healthy relationships, reproductive anatomy, contraceptive options, HIV/AIDs and STD prevention, sexual violence, substance abuse, mental health, leadership, activism, and higher education. This is a 12 week peer education program. To address sexual health disparities, Wise Guy and Man-Up were implemented in an effort to adequately reach out to the male population.

Teen Wellness Task Force - The main focus is on teen health and pregnancy prevention. The Teen Wellness Task Force sponsored its first Teen Pregnancy Prevention Campaign at a local high school raising awareness to teen pregnancy and the impact it has on families and the community at large. The next campaign is scheduled for the spring of 2014.

Community Health Intervention: Community Health Intervention provides a wide array of HIV prevention services. Staff conducts health education, with a focus on risk-reduction, at various community locations. Their health education curriculum is based on evidence-based programs such as *Real AIDS*. Additionally, they provide evening HIV testing hours (i.e. 6:00-9:00 pm) for those individuals who are not able to attend regular business hours.

Cumberland County Communicare: Communicare is a local organization providing a myriad of services to the community. **Teens' Making a Change (T-MAC)** is a youth-led Faith-Diversity Youth Leadership Initiative aimed at increasing positive outcomes for youth, especially among minority groups. The focus of the group is positive youth development, leadership skill building, and communication and community service.

Indicators for Family Planning Services

Parity refers to the number of times a woman has been pregnant for 20 or more weeks regardless of whether the infant is dead or alive at birth (the current pregnancy is not included). Parity, or the number of previous pregnancies, has been shown to impact the long-term health status of women and pregnancy outcomes, specifically birth weight, for some groups. A number of studies show that first-born children have a lower mean birth weight and are at greater risk of low birth weight than subsequent children. (www.cdc.gov/pednss/what_is/pnss_health_indicators.htm)

High Parity is defined as having been pregnant five or more times with gestation periods greater than 20 weeks.

High Parity among women less than 30 years of age:

Key Findings:

During the period 2007-2011, 15.0% of women less than 30 years of age living in Cumberland County were at risk due to high parity. Cumberland County's high parity among women less than 30 years of age was 11.8% lower than the State's high parity of 17.0%. When comparing peer counties, the county's high parity (15.0%) was:

- 16.7% lower than Durham Co.
- 21.1% lower than Forsyth Co.
- 16.7% lower than Guilford co.
- 11.8% lower than Mecklenburg Co.
- 7.1% higher than Wake Co.

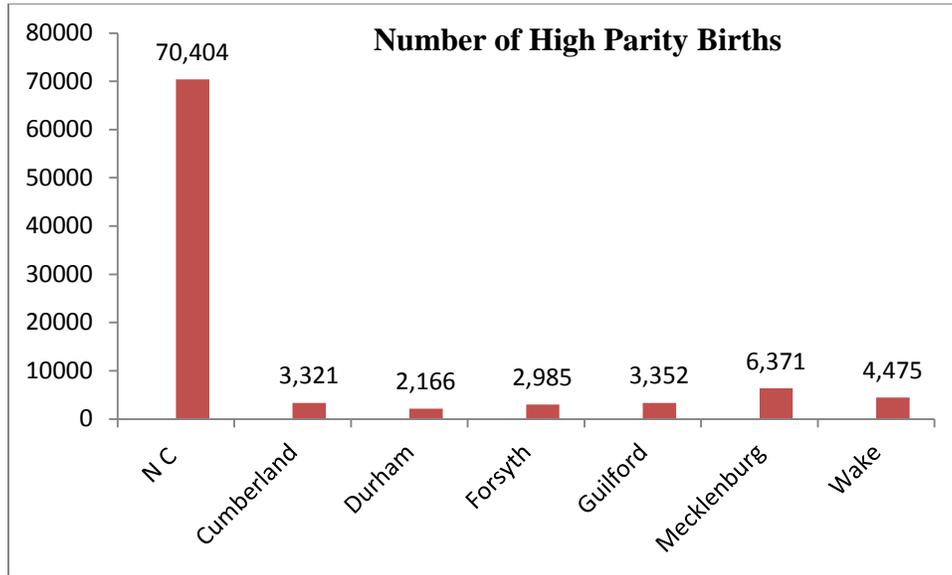
High Parity among women greater than 30 years of age:

Key Findings:

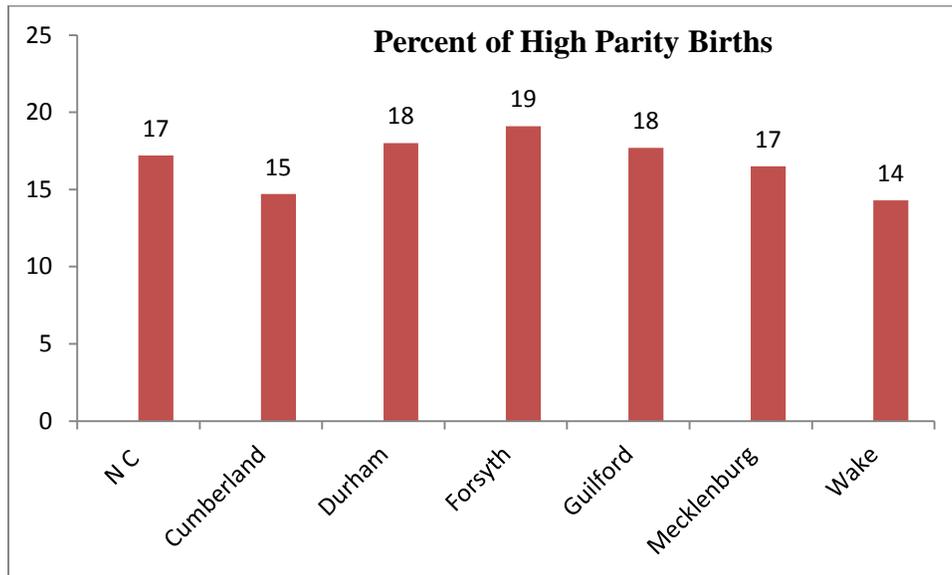
During the period 2007-2011, 24.4% of women greater than 30 years of age living in Cumberland County were at risk due to high parity. Cumberland County's high parity among women greater than 30 years of age was 15.1% higher than the State's high parity of 21.2%. When comparing peer counties, Cumberland County's high parity (24.4%) was:

- 14.0% higher than Durham County
- 11.9% higher than Forsyth County
- 9.9% higher than Guilford County
- 19.0% higher than Mecklenburg County
- 20.8% higher than Wake County

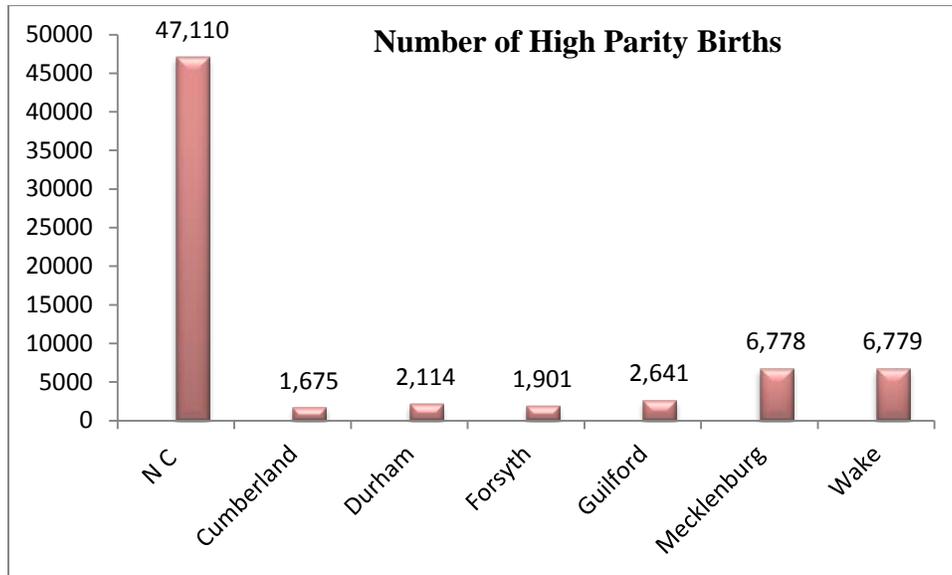
The number and percent at risk due to high parity (**mothers under 30 years of age**)



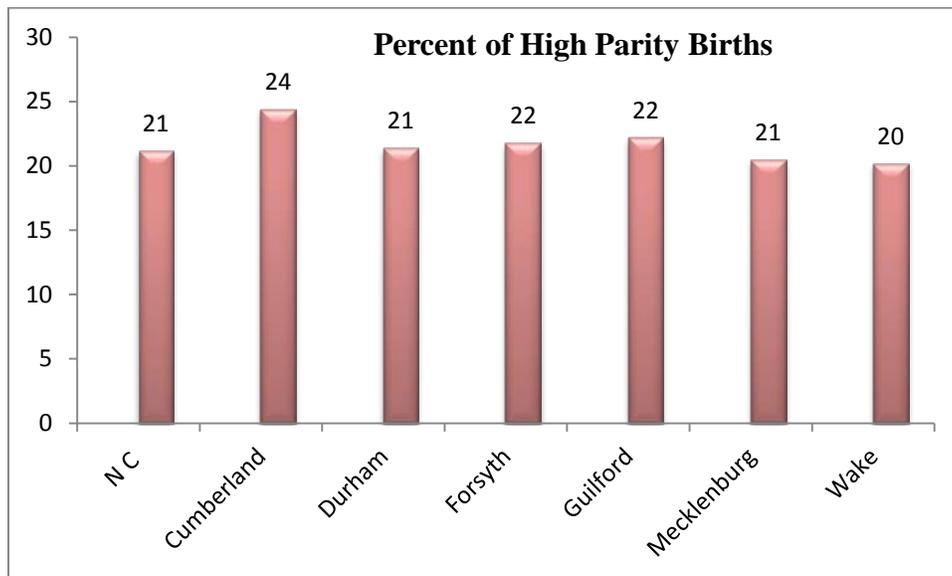
The percent of high parity births for women under 30 years of age was 6.3% lower from 2007-2011(15.0%) than from 2004-2008 (15.9%) 2010 CHA



The number and percent at risk due to high parity (**mothers over 30 years of age**).



The high parity for women over 30 years of age was 14.3% higher from 2007-2011 (24.0%) than from 2004-2008 (21.0%) 2010 CHA.



Short Interval Births: Short Interval birth is defined by the NC State Center for Health Statistics as births six months or less apart.

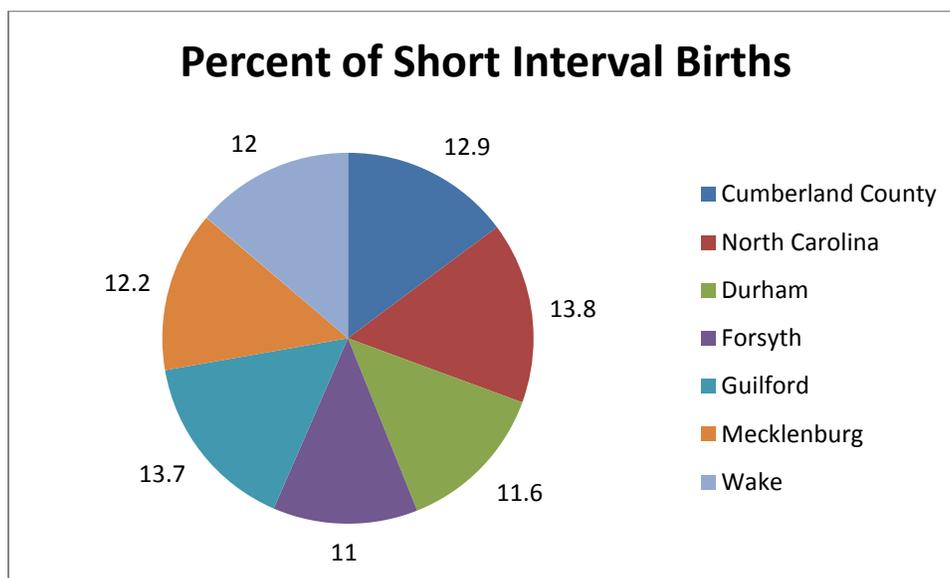
Residence	Number of Short Interval Births	Percent of Short Interval Births
Cumberland County	2,614	12.9
North Carolina	53,580	13.8
Durham	1,622	11.6
Forsyth	1,803	11.0
Guilford	2,913	13.7
Mecklenburg	5,736	12.2
Wake	5,126	12.0

Key Findings:

During the period 2007-2011, the percent of mothers in Cumberland County who have short interval births was 13.8, 7.0% higher than the State’s short interval rate of 12.9%. When comparing peer counties, the percent of mothers in Cumberland County who have short intervals births was:

- 19.0% higher than Durham County
- 25.5% higher than Forsyth County
- 0.7% higher than Guilford County
- 13.1% higher than Mecklenburg County
- 15.0% higher than Wake County

The percentage of short Interval births were 5.1% lower from 2007-2011 (12.9%) than from 2004-2008 (13.6%) 2010 CHA.



2007-2011 Live Births
Number and Percent of Low (<= 2500 grams) and Very Low (<= 1500 grams) Weight Births
by Race and Ethnicity

Residence	Birth Weight	Total	pct	White	pct	Black	pct	Other Race	pct	Hispanic	pct
North Carolina	Low	57,570	9.1	26,816	7.6	21,411	14.3	2,837	9.4	6,506	6.5
	Very Low	11,257	1.8	4,621	1.3	4,991	3.3	453	1.5	1,192	1.2
Cumberland	Low	2,928	9.9	1,075	7.6	1,446	14.2	110	7.6	297	8.2
	Very Low	605	2.1	213	1.5	317	3.1	15	1.0	60	1.7
Durham	Low	2,084	9.5	545	6.9	1,095	14.7	113	7.9	331	6.5
	Very Low	409	1.9	91	1.1	242	3.2	20	1.4	56	1.1
Forsyth	Low	2,526	10.4	927	8.4	1,109	16.6	62	9.9	428	7.2
	Very Low	535	2.2	152	1.4	279	4.2	7	1.1	95	1.6
Guilford	Low	2,964	9.6	957	7.5	1,519	12.8	198	10.1	290	6.9
	Very Low	666	2.2	183	1.4	382	3.2	24	1.2	77	1.8
Mecklenburg	Low	6,738	9.4	2,012	6.7	3,233	14.5	501	10.2	992	6.9
	Very Low	1,248	1.7	309	1.0	714	3.2	61	1.2	164	1.1
Wake	Low	5,162	7.9	2,226	6.4	1,864	13.1	363	7.6	709	6.2
	Very Low	1,052	1.6	405	1.2	466	3.3	54	1.1	127	1.1

Key Findings:

Cumberland County's total low birth weight of 9.9% is 8.8% higher than the State's low birth weight of 9.1%. When comparing peer counties, Cumberland County's low birth weight was:

- ✚ 4.2% higher than Durham County
- ✚ 4.8% lower than Forsyth County
- ✚ 3.1% higher than Guilford County
- ✚ 5.3% higher than Mecklenburg County
- ✚ 25.3% higher than Wake County

The total low birth weight rate was 1.0% higher from 2007-2011 (9.9%) than from 2004-2008 (9.8%). 2010

Cumberland County's total very low birth weight of 2.1% was 16.7% higher than the State's very low birth weight of 1.8%. When comparing peer counties, Cumberland County's very low birth weight was:

- ✚ 10.5% higher than Durham County
- ✚ 4.5% lower than Forsyth County
- ✚ 4.55 lower than Guilford County
- ✚ 23.5% higher than Mecklenburg County
- ✚ 31.3% higher than wake County

By Race/ Ethnicity :(see chart above).

Cumberland County. White low birth weight of 7.6% was:

- ✚ 46.5% lower than Cumberland County's Black low birth weight.
- ✚ The same as the State's low birth weight.
- ✚ 10.1% higher than Durham County
- ✚ 9.5% lower than Forsyth County
- ✚ 1.3% higher than Guilford County
- ✚ 660.0% higher than Mecklenburg County
- ✚ 533.3% higher than Wake County

Cumberland County Black low birth weight of 14.2% was:

- ✚ 86.8% higher than Cumberland County's White low birth weight.
- ✚ 0.7% lower than the State's low birth weight.
- ✚ 3.4% lower than Durham County
- ✚ 14.5% lower than Forsyth County
- ✚ 10.9% higher than Guilford County
- ✚ 343.8% higher than Mecklenburg County
- ✚ 8.4% higher than Wake County

Cumberland County Other Races (Non-Hispanic) low birth weight of 7.6% was:

- ✚ The same as the County's White low birth weight.
- ✚ 19.1% lower than the State.
- ✚ 3.8% lower than Durham County
- ✚ 23.2% lower than Forsyth County
- ✚ 24.8% lower than Guilford County
- ✚ 533.3% higher than Mecklenburg County
- ✚ The same as Wake County

✚ **Cumberland County Hispanic low birth weight of 8.2% was:**

- ✚ 7.9% higher than the County's White low birth weight.
- ✚ 26.2% higher than the State.
- ✚ 26.2% higher than Durham County
- ✚ 13.9% higher than Forsyth County
- ✚ 18.8% higher than Guilford County
- ✚ 18.8% higher than Mecklenburg County
- ✚ 32.3% higher than Wake County

Cumberland County White very low birth weight of 1.5% was:

- ✚ 51.6% lower than Cumberland County's Black very low birth weight.
- ✚ 15.4% higher than the State's very low birth weight.
- ✚ 36.4% higher than Durham County
- ✚ 7.1% lower than Forsyth County
- ✚ 7.1% higher than Guilford County
- ✚ 50.0% higher than Mecklenburg County
- ✚ 25.0% higher than Wake County

Cumberland County Black very low birth weight of 3.1% was:

- ✚ 106.7% higher than Cumberland County's White very low birth weight.
- ✚ 6.1% lower than the State's very low birth weight.
- ✚ 3.1% lower than Durham County
- ✚ 26.2% lower than Forsyth County
- ✚ 3.1% lower than Guilford County
- ✚ 3.1% lower than Mecklenburg County
- ✚ 6.1% lower than Wake County

Cumberland County Other Races (Non-Hispanic) very low birth weight of 1.0% was:

- ✚ 33.3% lower than Cumberland County's White very low birth weight.
- ✚ 33.3% lower than the State.
- ✚ 28.6% lower than Durham County
- ✚ 9.1% lower than Forsyth County
- ✚ 16.7% lower than Guilford County
- ✚ 16.7% lower than Mecklenburg County
- ✚ 9.1% lower than Wake County

✚ **Cumberland County Hispanic very low birth weight of 1.7% was:**

- ✚ 13.3% higher than Cumberland County's White very low birth weight.
- ✚ 41.7% higher than the State.
- ✚ 54.5% higher than Durham County
- ✚ 6.2% higher than Forsyth County
- ✚ 5.6% lower than Guilford County
- ✚ 54.5% higher than Mecklenburg County
- ✚ 54.5% higher than Wake County

FACTS ABOUT BABIES BORN TO WOMEN

WHO SMOKE:

- ◆ Babies have a 30% chance of being born prematurely.
- ◆ Babies are likely to be born at a low birth weight (less than 2500 grams).
- ◆ Babies are 1.4 – 3.0 times more likely to die from Sudden Infant Death Syndrome (SIDS).

FACTS ABOUT SECONDHAND SMOKE:

- ◆ Pregnant women exposed to secondhand smoke have a 20% greater chance of having a low birth weight baby than a pregnant woman who is not exposed.
- ◆ Infants exposed to secondhand smoke are more likely to die from SIDS.

Data: Centers for Disease Control

HOW HAS CUMBERLAND CHANGED?

Cumberland has improved. In 2010, 27.7% of women smoked 3 months prior to pregnancy compared to 30.5% of women who smoked 3 months prior to pregnancy in 2009.

Cumberland County Department of Public Health Maternity patients who smoke are referred to the NC Quit line.

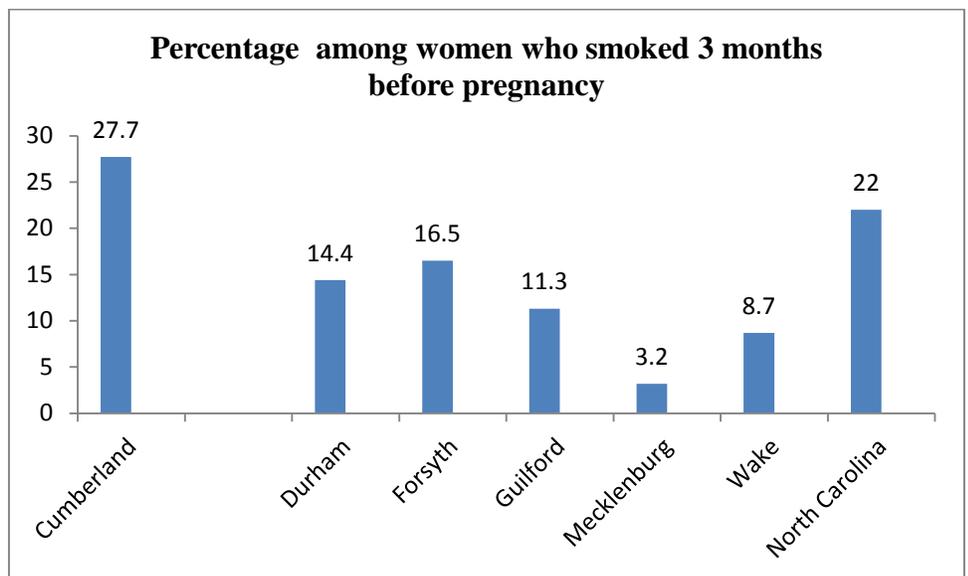
Comparison of Smoking Indicators

Observations on women who smoked 3 months prior to pregnancy:

During the year 2010 (Jan.1st –Dec.31st), 27.7% of women in Cumberland County smoked 3 months prior to pregnancy compared to 22.0% of women in the State. When comparing peer counties, Cumberland County had the highest percentage among women who smoked 3 months prior to pregnancy.

According to 27.7% of women in Cumberland County smoked 3 months prior to pregnancy were:

- 92.4% higher than Durham County
- 67.9% higher than Forsyth County
- 145.1% higher than Guilford County
- 739.4% higher than Mecklenburg County
- 218.4% higher than Wake County

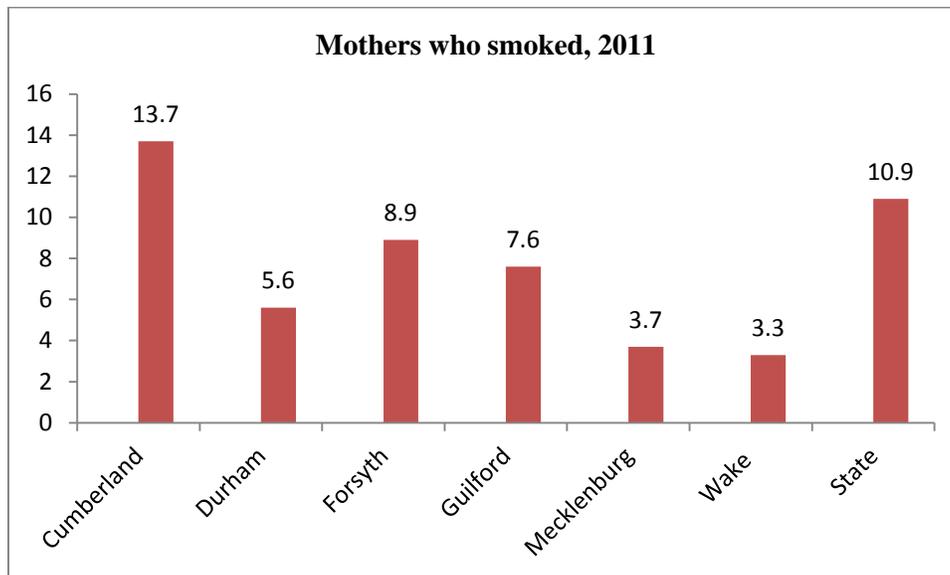


2010 Pregnancy Nutrition Surveillance-Comparison of smoking indicators

In 2011, 13.7 % of women who gave birth in Cumberland Co. smoked compared to 10.9% of women who gave birth in the State. The percent of Cumberland County women who smoked was 25.7% greater than the State's percent of women who smoked. When comparing peer counties, the percent of Cumberland County women who smoked was:

- 144.6% greater than Durham County
- 53.9% greater than Forsyth County
- 80.3% greater than Guilford County
- 270.3% greater than Mecklenburg County
- 315.2% greater than Wake County

Mecklenburg and Wake counties had the lowest percentage of women who smoked during pregnancy. At present, Cumberland County Department of Public Health maternity clients are offered smoking cessation classes, and they are referred to N. C. Quit Line.



Source: North Carolina Health Statistics Pocket Guide, 2011

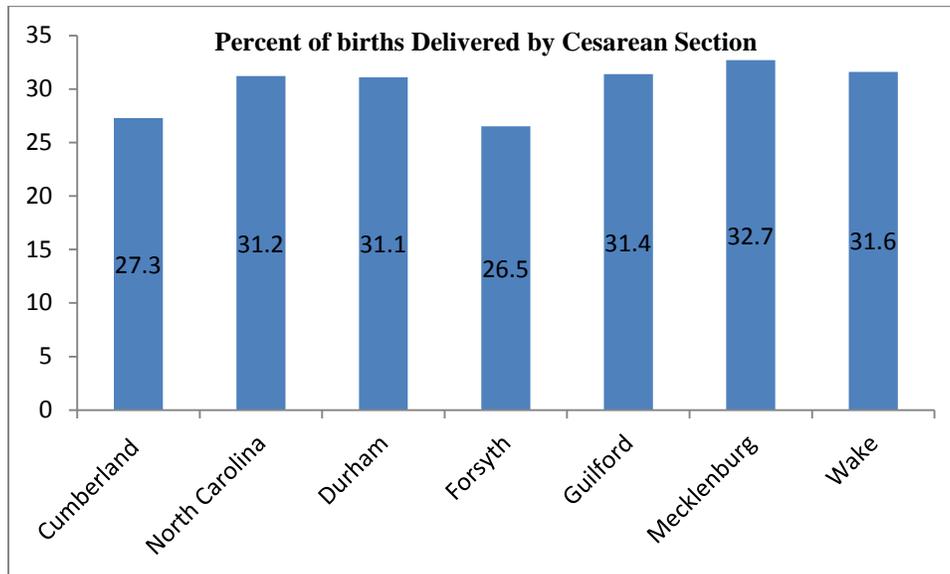
Number and Percent of Births delivered by Cesarean Section

During the period 2007-2011, 27.3% of births in Cumberland County were delivered by cesarean section, 12.5% lower than the State's 31.2% of cesarean section births. When comparing peer counties, Cumberland County's percent of births delivered by cesarean section was:

- ❖ 12.2% lower than Durham County
- ❖ 3.0% higher than Forsyth County
- ❖ 13.1% lower than Guilford County
- ❖ 16.5% lower than Mecklenburg County
- ❖ 13.6% lower than Wake County

See Chart below:

Residence	Total Births	Births by Cesarean	Percent
Cumberland	29,459	8,045	27.3
North Carolina	631,134	196,874	31.2
Durham	21,910	6,812	31.1
Forsyth	24,338	6,459	26.5
Guilford	30,879	9,701	31.4
Mecklenburg	71,751	23,446	32.7
Wake	65,014	20,544	31.6



Facts about Fetal Death:

- Fetal death is the loss of the fetus after 20 weeks of gestation and before birth.
- Contributing factors:
 - Late or no prenatal care.
 - Smoking
 - Alcohol Use
 - Drug Use
 - Stress
 - Teen Pregnancy
 - Previous pre-term births

The total fetal death rate was 2.5% lower from 2007-2011 (7.7%) than from 2004-2008 (7.7%).

Source: NC State Center for Health Statistics

Infant Mortality

Fetal Deaths:

Key Findings:

During the period 2007-2011, Cumberland County's total fetal death rate of 7.7 was 18.5% higher than the State's total fetal death rate of 6.5. When comparing peer counties, Cumberland County's total fetal death rate was:

- 20.3% higher than Durham County
- 57.1% higher than Forsyth County
- 10.0% higher than Guilford County
- 8.5% higher than Mecklenburg County
- 45.3% higher than Wake County

Race/Ethnicity

White:

Cumberland County's White fetal death rate of 5.2 is 57.7% lower than the County's African American fetal death rate and 6.1 higher than the State's White fetal death rate of 4.9. When comparing peer counties, Cumberland County's White fetal death rate was:

- 48.6% higher than Durham County
- 48.6% higher than Forsyth County
- 10.6% higher than Guilford County
- The same for Mecklenburg County
- 44.4% higher than Wake County

African American:

Cumberland County African American fetal death rate of 12.3 was 436.5% higher than Cumberland County's White fetal death rate and 5.1% higher than the State's African American fetal death rate of 11.7. When comparing peer counties, Cumberland County's African American fetal death rate was:

- 3.4% higher than Durham County
- 38.2% higher than Forsyth County
- 12.8% higher than Guilford County
- 5.1% higher than Mecklenburg County
- 23.0% higher than Wake County

Other Race (Non-Hispanic):

Cumberland County's other race (non-Hispanic) fetal death rate of 4.8 is 7.7% lower than Cumberland County's White fetal death rate and 2.1% higher than the State's fetal death rate. When comparing peer counties, Cumberland County's other-race fetal death rate was:

- 128.6% higher than Durham County
- The same for Forsyth County
- 33.3% higher than Guilford County
- 5.9% lower than Mecklenburg County
- 20.0% higher than Wake County

Hispanic Fetal Death Rate:

Cumberland County's Hispanic fetal death rate of 5.5 was 5.8% higher than Cumberland County's White fetal death rate and 17.0% higher than the State's Hispanic fetal death rate of 4.7. When comparing peer counties, Cumberland County's Hispanic fetal death rate was:

- 41.0% higher than Durham County
- 83.3% higher than Forsyth County
- 22.2% higher than Guilford County
- 14.6% higher than Mecklenburg County
- 12.2% higher than Wake County.

See chart below.

FETAL DEATH RATES PER 1,000 DELIVERIES, 2007-2011

Residence	Total	Rate	White	Rate	African Am.	Rate	Other Race	Rate	Hispanic	Rate
North Carolina	4,119	6.5	1,733	4.9	1,768	11.7	142	4.7	476	4.7
Cumberland	228	7.7	74	5.2	127	12.3	7	4.8	20	5.5
Durham	141	6.4	28	3.5	90	11.9	3	2.1	20	3.9
Forsyth	120	4.9	39	3.5	60	8.9	3	4.8	18	3.0
Guilford	218	7.0	61	4.7	131	10.9	7	3.6	19	4.5
Mecklenburg	514	7.1	157	5.2	263	11.7	25	5.1	69	4.8
Wake	344	5.3	124	3.6	144	10.0	19	4.0	57	4.9

Conclusions:

Low birth weight is a contributing factor to infant death and disability. Many factors influence a pregnant woman's ability to access needed health care. Some influencing factors serve as barriers to care, for example, the cost of healthcare services, the lack of transportation to healthcare services, access to transportation, and the lack of or limited number of healthcare providers in the community can impact the health of the mother and may contribute to infant death and disability.

FACTS ABOUT NEONATAL DEATH:

- ◆ Neonatal death is the death of an infant before 28 days of life.
- ◆ Neonatal death accounts for approximately 70% of infant mortality in NC.
- ◆ Contributing factors:
 - Birth defects
 - Low birth weight

The total neonatal death rate was 21.3% lower in 2007-2011 (5.9%) than from 2004-2008 (7.7%)

Source: NC State Center for Health Statistics

Neonatal Death Rates

Key findings:

During the period 2007-2011, Cumberland County's total neonatal death rate of 5.9 was 13.5% higher than the State's neonatal death rate of 5.2. When comparing peer counties, Cumberland County's total neonatal death rate was:

- 31.1% higher than Durham County
- 14.5 lower than Forsyth County
- 16.9% lower than Guilford County
- 51.3% higher than Mecklenburg County
- 25.5% higher than Wake County

Race/Ethnicity

White:

Cumberland County's White neonatal death rate of 4.7 was 46.0% lower than the County's African American neonatal death rate and 27.0% higher than the State's neonatal death rate. When comparing per counties, Cumberland County's White neonatal death rate was:

- 67.9% higher than Durham County
- 14.6% higher than Forsyth County
- 11.9% higher than Guilford County
- 13.5% higher than Mecklenburg County
- 51.6% higher than Wake County

African American:

Cumberland County's African American neonatal death rate of 8.7 was 85.1% higher than Cumberland County's White neonatal death rates and 11.2% lower than the State's neonatal death rate. When comparing peer counties, Cumberland County's neonatal death rate was:

- 14.5% higher than Durham County
- 39.6% lower than Forsyth County
- 21.6% lower than Guilford County
- 26.1% higher than Mecklenburg County
- 13.9% lower than Wake County

Other Race (Non-Hispanic):

Cumberland County's other race (Non-Hispanic) neonatal death rate of 0.7 was 85.1% lower than Cumberland County's White neonatal death rate and 81.6% lower than the State's neonatal death rate. When comparing peer counties, Cumberland County's other race (non-Hispanic) neonatal death rate was:

- 66.6% lower than Durham County
- 78.1% lower than Forsyth County
- 65.0% lower than Guilford County
- 73.1% lower than Mecklenburg County
- 66.7% lower than Wake County

Hispanic:

Cumberland County's Hispanic neonatal death rate of 4.4 was 6.4% lower than Cumberland County's White neonatal death rate and 4.8% higher than the State's neonatal death rate. When comparing peer counties, Cumberland County's neonatal death rate was:

- 29.4% higher than Durham County
- 4.8% higher than Forsyth County
- 34.3% lower than Guilford County
- 18.9% higher than Mecklenburg County
- 12.8% higher than Wake County

See Chart below.

NEONATAL (<28 DAYS) DEATH RATES PER 1,000 LIVE BIRTHS, 2007-2011

Residence	Total	Rate	White	Rate	African Am.	Rate	Other Race	Rate	Hispanic	Rate
North Carolina	3,298	5.2	1,294	3.7	1,464	9.8	116	3.8	424	4.2
Cumberland	173	5.9	67	4.7	89	8.7	1	0.7	16	4.4
Durham	99	4.5	22	2.8	57	7.6	3	2.1	17	3.4
Forsyth	169	6.9	46	4.1	96	14.4	2	3.2	25	4.2
Guilford	218	7.1	54	4.2	132	11.1	4	2.0	28	6.7
Mecklenburg	281	3.9	61	2.0	154	6.9	13	2.6	53	3.7
Wake	305	4.7	107	3.1	143	10.1	10	2.1	45	3.9

Conclusions:

The decline in the neonatal death rate since the 2010 CHA may be attributed to expanded education to women on preconception health, including the consumption of folic acid.

Preconception health education is conducted in high schools as well as colleges/universities. These programs include education on folic acid, obesity prevention, annual medical exams, and alcohol/drug prevention.

**FACTS ABOUT
POST NEONATAL DEATH:**

- ◆ **Post neonatal death is death occurring between 28 days and the first year of life.**
- ◆ **Post neonatal death includes death due to:**
 - **SIDS**
 - **Accidents**
 - **Homicides**

The total post neonatal death rate was 6.1% lower in 2007-2011 (3.1%) than from 2004-2008 (3.3%)

**Data: NC State Center for Health
Statistics**

Post Neonatal Deaths

Key Findings:

During the period of 2007-2011, Cumberland County's post neonatal death rate of 3.1 was 19.2% higher than the State's post neonatal death rate of 2.6. When compared to peer counties, Cumberland County's post neonatal death rate was:

- 40.9% higher than Durham County
- 6.1% lower than Forsyth County
- 34.8% higher than Guilford County
- 40.9% higher than Mecklenburg County
- 55.0% higher than Wake County

Race/Ethnicity:

White:

Cumberland County's White post neonatal death rate of 2.3 was 54.0% lower than Cumberland County's African American post neonatal death rate and 15.0% higher than the State's post neonatal death rate. When comparing peer counties, Cumberland County's White post neonatal death rate was:

- 64.3% higher than Durham County
- 14.8% lower than Forsyth County
- 64.3% higher than Guilford County
- 109.1% higher than Mecklenburg County
- 64.3% higher than Wake County

African American:

Cumberland County's African American post neonatal death rate of 5.0 was 117.4% higher than Cumberland County's White post neonatal death rate and 11.1% higher than the State's post neonatal death rate of 4.5. When comparing peer counties, Cumberland County's African American post neonatal death rate was:

- 22.0% higher than Durham County
- 15.3% lower than Forsyth County
- 38.9% higher than Guilford County
- 16.3% higher than Mecklenburg County
- 16.3% higher than Wake County

Other race (Non-Hispanic):

Cumberland County's other race (non-Hispanic) post neonatal death rate of 2.8 was 21.7% higher than Cumberland County's White post neonatal death rate and 16.7% higher than the State's post neonatal death rate. When comparing peer counties, Cumberland County's other race post neonatal death rate was:

- 30.0% higher than Durham County
- 0% rate for Forsyth County
- 7.7% higher than Guilford County
- 55.6% higher than Mecklenburg County
- 154.5% higher than Wake County

Hispanic:

Cumberland County's Hispanic post neonatal death rate of 1.4 is lower than Cumberland County's White post neonatal death rate and 12.5% lower than the State's post neonatal death rate. When comparing peer counties, Cumberland County's Hispanic post neonatal death rate was:

- 40.0% higher than Durham County
- 17.6% lower than Forsyth County
- Same as Guilford County
- 12.5% lower than Mecklenburg County
- 12.5% lower than Wake County

See Chart below

POST NEONATAL (28 DAYS- 1 YEAR) DEATH RATES, 2007-2011

Residence	Total	Rate	White	Rate	African Am.	Rate	Other Race	Rate	Hispanic	Rate
North Carolina	1,601	2.6	707	2.0	665	4.5	72	2.4	157	1.6
Cumberland	92	3.1	33	2.3	50	5.0	4	2.8	5	1.4
Durham	47	2.2	11	1.4	30	4.1	1	0.7	5	1.0
Forsyth	79	3.3	30	2.7	39	5.9	0	0	10	1.7
Guilford	71	2.3	18	1.4	42	3.6	5	2.6	6	1.4
Mecklenburg	159	2.2	33	1.1	94	4.3	9	1.8	23	1.6
Wake	132	2.0	48	1.4	61	4.3	5	1.1	18	1.6

Conclusions:

Increased outreach efforts focused on improving preconception health, including the consumption of folic acid, could improve Cumberland County's rates.

Increasing awareness and understanding of SIDS and safe sleep practices could also contribute to improving Cumberland County's rates.

Increasing the proper usage of child passenger restraints through existing partnerships with the Fayetteville and Fort Bragg Fire Departments and community coalitions, such as Safe KIDS Cumberland County, could improve Cumberland County's rates. One of the goals of these organizations is to educate the community on proper child restraint use.

Infant Death

Facts about Infant Death:

Infant death is death occurring within the first year of life.

Contributing factors to infant death include:

- Preterm Birth
- Low Birth weight
- Late access to prenatal care
- Teen Pregnancy
- Tobacco and Drug use.

The total infant death rate was 16.7% lower in 2007-2011 (9.0%) than from 2004-2008 (10.8%)-2010 CHA.

The total infant death rate was 4.4% lower in 2008-2012 (8.6%) than from 2007-2011 (9.0).

During the period of 2007-2011, Cumberland County's total infant death rate of 9.0 was 15.4% higher than the State's total infant death rate. When comparing peer counties, Cumberland County's total infant death rate was:

- 34.3% higher than Durham County
- 11.8% lower than Forsyth County
- 4.3% lower than Guilford County
- 47.5% higher than Mecklenburg County
- 34.3% higher than Wake County

Race/Ethnicity:

White:

Cumberland County's White infant death rate of 7.0 was 48.9% lower than Cumberland County's African American death rate and 22.8% higher than the State's White infant death rates. When comparing peer counties, Cumberland County's White infant death rate was:

- 70.7% higher than Durham County
- 2.9% higher than Forsyth County
- 25.6% higher than Guilford County
- 125.8% higher than Mecklenburg County
- 55.6% higher than Wake County

African American:

Cumberland County's African American infant death rate of 13.7 was 95.7% higher than Cumberland County's White infant death rate and 4.2% lower than the State's infant death rate. When comparing peer counties, Cumberland County's African American infant death rate was:

- 17.1% higher than Durham County
- 32.2% lower than Forsyth County
- 6.2% lower than Guilford County
- 23.4% higher than Mecklenburg County
- 4.9% lower than Wake County

Other Race (Non-Hispanic):

Cumberland County's other race (non-Hispanic) infant death rate of 3.5 was 100% lower than Cumberland County's White infant death and 43.5% lower than the State's infant death rate. When comparing peer counties, Cumberland County's infant death rate was:

- 25.0% higher than Durham County
- 9.4% higher than Forsyth County
- 23.9% lower than Guilford county
- 22.2% lower than Mecklenburg County
- 9.4% higher than Wake County

Hispanic:

Cumberland County's Hispanic infant death rate of 5.8 was 20.7% lower than Cumberland County's White infant death rate and the rate was the same for the State's infant death rate. When comparing peer counties, Cumberland County's infant death rate was:

- 34.9% higher than Durham County
- 1.7% lower than Forsyth County
- 28.4% lower than Guilford County
- 9.4% higher than Mecklenburg County
- 5.5% higher than Wake County

See Chart below.

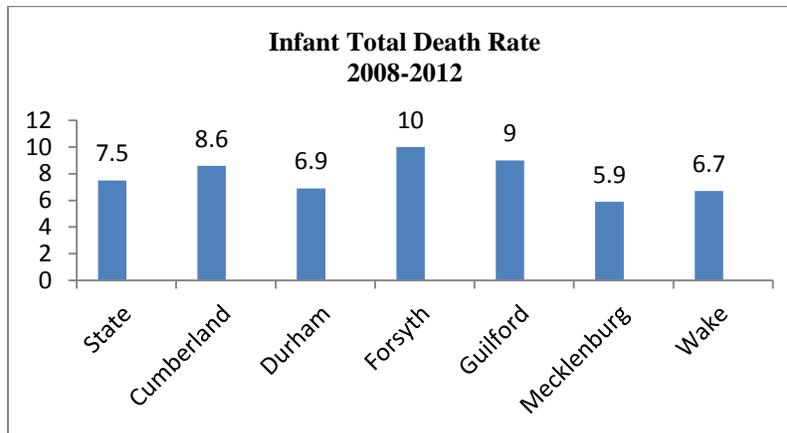
INFANT (<1 YEAR) DEATH RATES PER 1,000 LIVE BIRTHS, 2007-2011

Residence	Total	Rate	White	Rate	African Am.	Rate	Other Race	Rate	Hispanic	Rate
North Carolina	4,899	7.8	2,001	5.7	2,129	14.3	188	6.2	581	5.8
Cumberland	265	9.0	100	7.0	139	13.7	5	3.5	21	5.8
Durham	146	6.7	33	4.1	87	11.7	4	2.8	22	4.3
Forsyth	248	10.2	76	6.8	135	20.2	2	3.2	35	5.9
Guilford	289	9.4	72	5.6	174	14.6	9	4.6	34	8.1
Mecklenburg	440	6.1	94	3.1	248	11.1	22	4.5	76	5.3
Wake	437	6.7	155	4.5	204	14.4	15	3.2	63	5.5

Infant Total Death Rate 2008-2012

During the period of 2008-2012, Cumberland County's total infant death rate of 8.6 was 14.7% higher than the State's total infant death rate. When comparing peer counties, Cumberland County's total infant death rate was:

- 24.6% higher than Durham County
- 14.0% lower than Forsyth County
- 4.4% lower than Guilford County
- 45.8% higher than Mecklenburg County
- 28.4% higher than Wake County



Race/Ethnicity:

White:

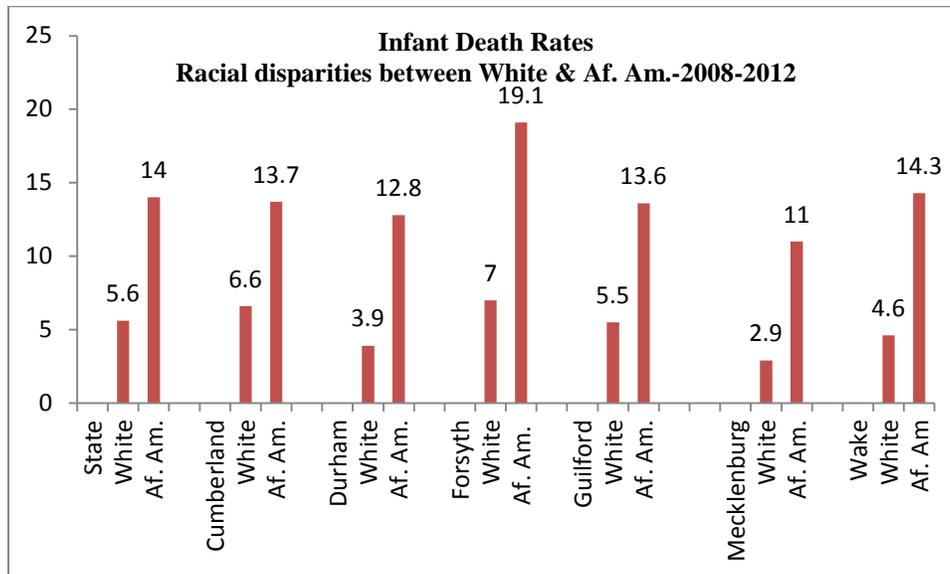
Cumberland County's White infant death rate of 6.6 was 51.8% lower than Cumberland County's African American death rate and 17.9% higher than the State's White infant death rates. When comparing peer counties, Cumberland County's White infant death rate was:

- 69.2% higher than Durham County
- 5.7% lower than Forsyth County
- 20.0% higher than Guilford County
- 127.6% higher than Mecklenburg County
- 43.5% higher than Wake County

African American:

Cumberland County's African American infant death rate of 13.7 was 107.6% higher than Cumberland County's White infant death rate and 2.1% lower than the State's infant death rate. When comparing peer counties, Cumberland County's African American infant death rate was:

- 7.0% higher than Durham County
- 28.3% lower than Forsyth County
- 0.7% higher than Guilford County
- 24.5% higher than Mecklenburg County
- 4.2% lower than Wake County



Racial disparity ratio between Whites and African Americans:

Residence	White Rate	Af. Am. Rate	Disparity Ratio
North Carolina	5.6	14.0	2.50
Cumberland	6.6	13.7	2.08
Durham	3.9	12.8	3.28
Forsyth	7.0	19.1	2.73
Guilford	5.5	13.6	2.47
Mecklenburg	2.9	11.0	3.79
Wake	4.6	14.3	1.38

The African American infant death rate was more than twice the rate of Whites. Some contributing factors for the disparity are low socio-economic status and delayed prenatal care services.

Conclusions:

Infant mortality is one of the most important indicators of the health of a nation, as it is associated with a variety of factors such as maternal health, quality and access to medical care, socioeconomic conditions, and public health practices.

NC Healthy 2020 Objectives

1. Reduce the infant mortality racial disparity between Whites and African Americans to 1.92%

During the period 2008-2012, Cumberland County's infant mortality disparity between White and African Americans was 2.08 disparity ratios. Cumberland's ratio of 2.08 does not meet the 2020 target.

2. Reduce the infant mortality rate (per 1,000 live births) to 6.3.

During the period 2008-2012, Cumberland County's total infant mortality rate was 8.6%. Cumberland's rate of 8.6% does not meet the 2020 target.

Source for Infant Mortality data: www.schs.state.nc.us/schs click on infant mortality

Breastfeeding

FACTS ABOUT BREASTFEEDING FOR BABIES:

- ◆ Breast milk changes as your baby grows to provide specific nutrition needs.
- ◆ Breast milk is easy for babies to digest.
- ◆ Breast milk helps to protect babies from illnesses.
- ◆ Breastfeeding reduces the risk of Sudden Infant Death Syndrome (SIDS).

Facts about Breastfeeding for Mothers:

- ◆ Reduces the risk of Breast and Ovarian Cancer, Type 2 Diabetes, and Post-Partum Depression.

Data: US Dept. of Health and Human Services Office of Women's Health

HOW HAS CUMBERLAND CHANGED?

The total percentage of women who initiate breastfeeding has declined from the 2004-2006 survey of 67.7% reporting yes. However, there was an increase in the percentage of women who continued to breastfeed 4 and 8 weeks after delivery where the percentages were 51.4% and 41.1%, respectively in the previous survey.

Source: 2006-2008 PRAMS Survey

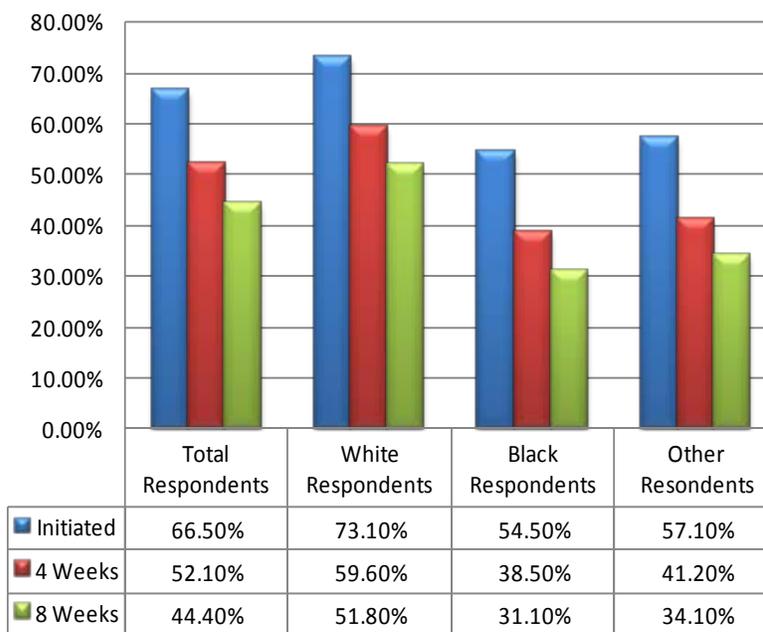
Observations on Breastfeeding:

Of the total respondents, 66.5% of women in the Southeast region reported initiating breastfeeding in the Pregnancy Risk Assessment Monitoring Surveillance (PRAMS) Survey.

Among the total PRAMS Survey respondents for the State, 73.7% of women reported initiating breastfeeding.

White respondents reported higher rates of breastfeeding and reported to breastfeed longer than other groups in the Southeast region as well as the State.

Southeast Region Breastfeeding Practices 2006 - 2008



FACTS ABOUT SLEEPING POSITIONS:

- ◆ Placing infants on their backs to sleep reduces the risk of Sudden Infant Death Syndrome (SIDS).
- ◆ Healthy babies who are placed on their backs are not at risk for choking on spit-up or saliva.
- ◆ Placing baby on their stomach during play/awake time, will reduce the chance of flat spots on the baby's head.

Data: National Institute of Child Health and Human Development

HOW HAS CUMBERLAND CHANGED?

A lesser percentage of women surveyed responded to placing their babies on their stomachs to sleep than in the 2004-2006 survey. There was a slight decline in the percentage of women who reported placing their babies on their back to sleep.

Source: 2006-2008 PRAMS Survey

Infant Sleep position

Observations on Infant Sleep Position:

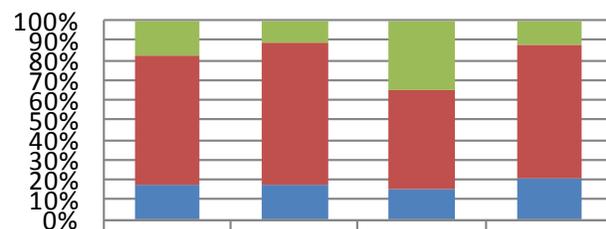
In the 2006 – 2008 Pregnancy Risk Assessment Monitoring Surveillance (PRAMS) Survey, 65.3% of total respondents in the Southeast region reported placing their infant on their back to sleep.

- 68.6% of total State respondents reported placing their infants on their back to sleep.
- 17.7% of total respondents reported placing their infants on their stomachs to sleep, while 17.1% reported placing their infants on their sides to sleep.

Among the State's respondents, 15.3% reported placing their infants on their sides to sleep, and 16.1% reported placing their infants on their stomachs to sleep.

Among respondents in the Southeast region and the State, White respondents reported higher rates of placing infants on their back to sleep.

Southeast Region Sleeping Practices 2006 - 2008



	Total Respondents	White Respondents	Black Respondents	Other Respondents
■ Stomach Sleeping Position	17.7	11.2	35.4	12.1
■ Back Sleeping Position	65.3	71.7	48.9	67.3
■ Side Sleeping Position	17	17.1	15.7	20.5

Maternal & Child Health: Childhood Obesity Ages 2-18

FACTS ABOUT OVERWEIGHT AND OBESITY:

- ✚ **Obese children and adolescents are more at risk for health problems as adults.**
- ✚ **Obese children and adolescents often have risk factors associated with cardiovascular disease such as:**
 - **High Blood Pressure**
 - **High Cholesterol**
 - **Type 2 Diabetes**
- ✚ **Overweight children are more at risk to become obese adults.**

Data: Centers for Disease Control

HOW HAS CUMBERLAND CHANGED?

Cumberland has improved since 2010 CHA when 11.0% of the county's children ages 2-18 were overweight and 8.4% were obese.

Note: data was based on children seen in North Carolina Public Health Sponsored WIC and Child Health clinics and some School Based health Centers

Observations:

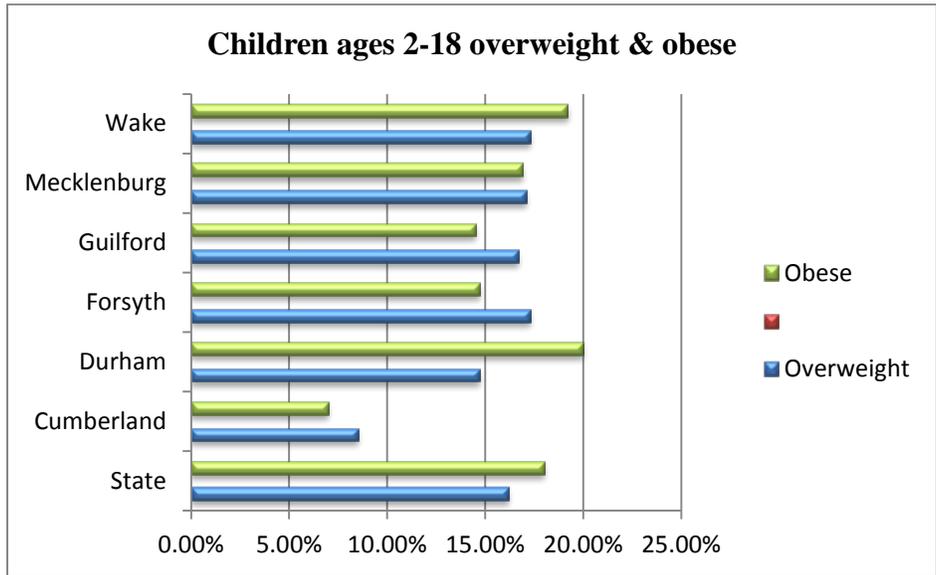
During the period 2009, 8.5% of Cumberland County's children ages 2-18 years of age were overweight. When comparing peer counties and the State, Cumberland County had lower percentages of overweight children ages 2-18 years of age. During the period 2009, Cumberland County's percentage of children ages 2-18 years of age overweight was:

- ✚ 47.5% lower than the State.
- ✚ 42.2% lower than Durham County
- ✚ 50.9% lower than Forsyth County
- ✚ 49.1% lower than Guilford County
- ✚ 50.3% lower than Mecklenburg County
- ✚ 50.9% lower than Wake County

During the period 2009, 7.0% of Cumberland County's children ages 2-18 years of age were obese. When comparing peer counties and the State, Cumberland County had lower percentages of obese children ages 2-18 years of age. Cumberland County percentage of children ages 2-18 years of age obese was:

- ✚ 61.1% lower than the State.
- ✚ 65.0% lower than Durham County
- ✚ 52.4% lower than Forsyth County
- ✚ 51.7% lower than Guilford County
- ✚ 58.6% lower than Mecklenburg County
- ✚ 63.5% lower than Wake County

See graph and chart below



Health Department	Overweight	Obese
Statewide	16.2%	18.0%
Cumberland	8.5%	7.0%
Durham	14.7%	20.0%
Forsyth	17.3%	14.7%
Guilford	16.7%	14.5%
Mecklenburg	17.1%	16.9%
Wake	17.3%	19.2%

Source: (NC-NPASS), 2009

The NC Healthy Objectives 2020 is to increase the percentage of high school students who are neither overweight nor obese by 79.2%.

FACTS ABOUT MEDICAID:

- ◆ Medicaid is a health insurance program for individuals and families who cannot afford the cost of health care.
- ◆ Medicaid serves low-income parents, children, seniors, and people with disabilities.

FACTS ABOUT NC HEALTH CHOICE FOR CHILDREN:

- ◆ NC Health Choice is a free or reduced price comprehensive health care program for children.
- ◆ Parents who make too much money for Medicaid, but still cannot afford the costs of private insurance may qualify for NC Health Choice.

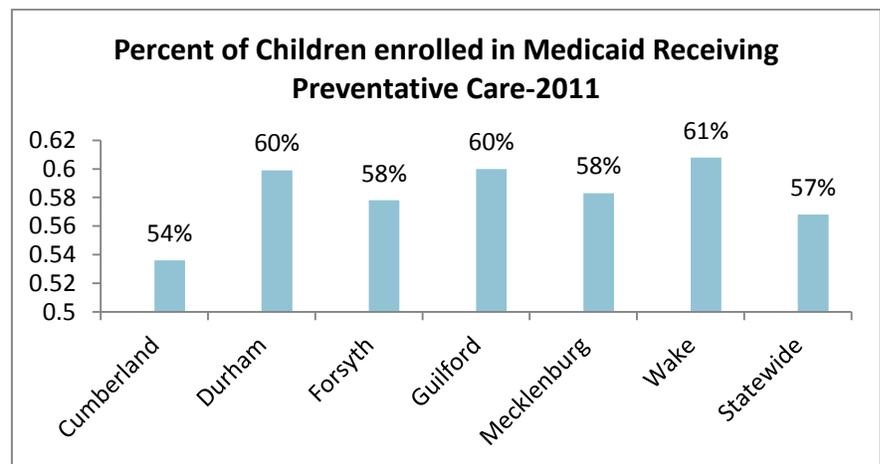
Data: NC Health and Human Services Division of Medical Assistance

Maternal & Child Health

Children's Annual Preventative Health Check

Key Observations:

During the period 2011, 54% of children living in Cumberland County enrolled in Medicaid received preventative care, whereas, 57% of children statewide enrolled in Medicaid received preventative care. Cumberland County had a lower percentage of children enrolled in Medicaid who received preventative care.

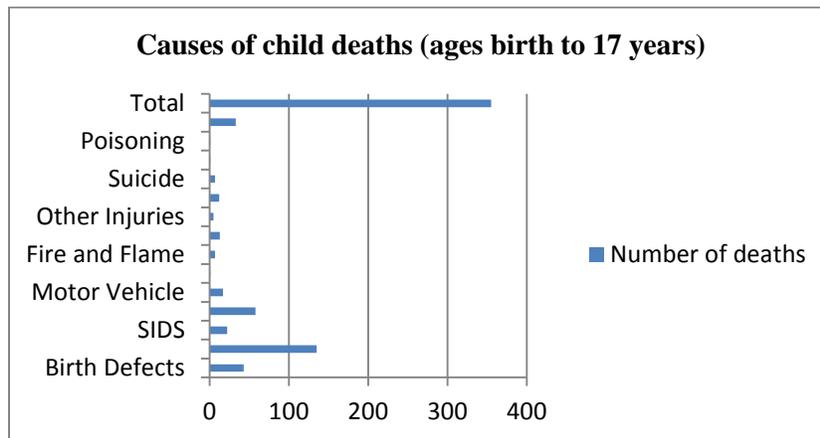


Source: kidscount.org/data/tables, click on NC, click on county

Cumberland County Child Deaths (By Causes) 2008-2012

During the period, 2008-2012, there were 355 deaths in children ages birth to 17 years. 135 of the deaths were due to perinatal conditions. See Chart below.

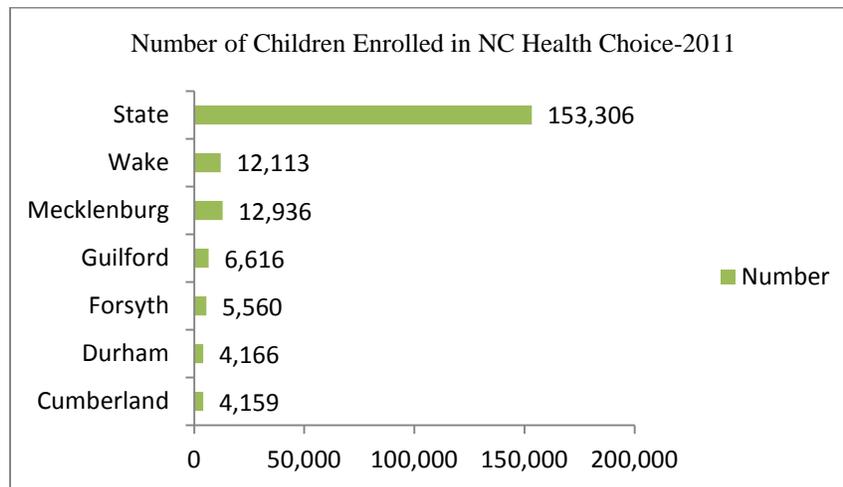
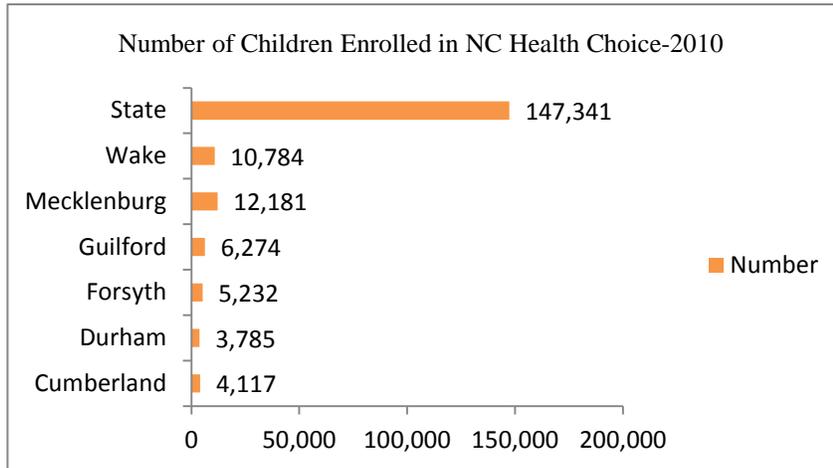
Cause of Death	Number of deaths
Birth Defects	43
Perinatal Conditions	135
SIDS	22
Illnesses	58
Motor Vehicle	17
Bicycle	1
Fire and Flame	7
Drowning	13
Other Injuries	5
Homicide	12
Suicide	7
Falls	1
Poisoning	1
All Others	33
Total	355



Children enrolled in NC Health Choice

Key Observation:

The number of children enrolled in NC Health Choice increased for Cumberland County, peer counties and the State from 2010 to 2011.

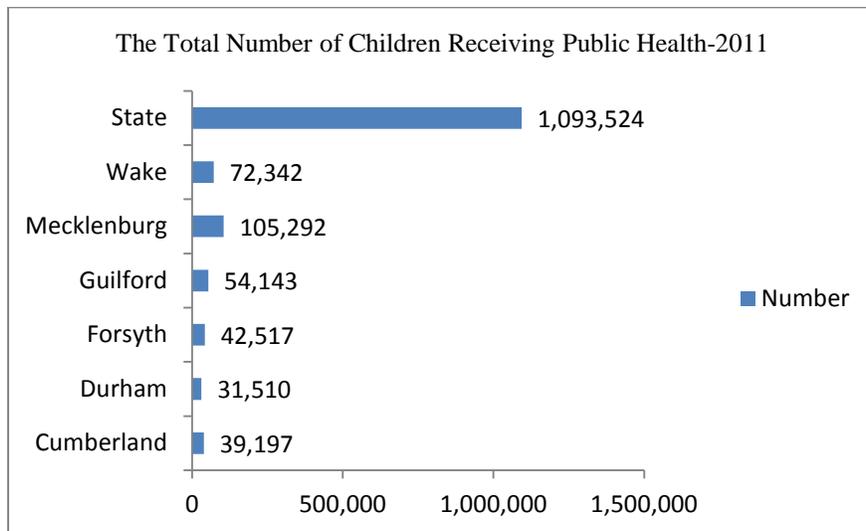
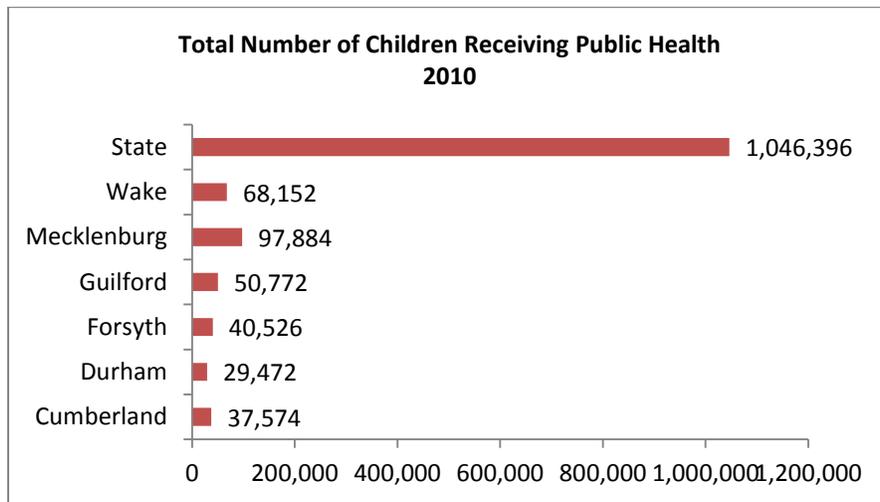


Source: kidscount.org/data/tables, click on NC, click on county

Children Receiving Public Health

Key Observations:

From 2010 to 2011, Cumberland County, peer counties and the State saw an increase in the number of children receiving Public Health.



Source: kidscount.org/data/tables, click on NC, click on county

FACTS ABOUT DENTAL AND ORAL HEALTH:

- ✚ Healthy teeth make it easier to speak clearly and chew foods well.
- ✚ Natural teeth can be kept for a lifetime, if properly taken care of.
- ✚ Good oral health is important for good overall health.

FACTS ABOUT DENTAL DECAY:

- ✚ Dental decay is caused by acid produced by bacteria living in the mouth.
- ✚ Dental decay causes cavities and gum disease.

Data: NC Health and Human Services Oral Health Division

HOW HAS CUMBERLAND CHANGED?

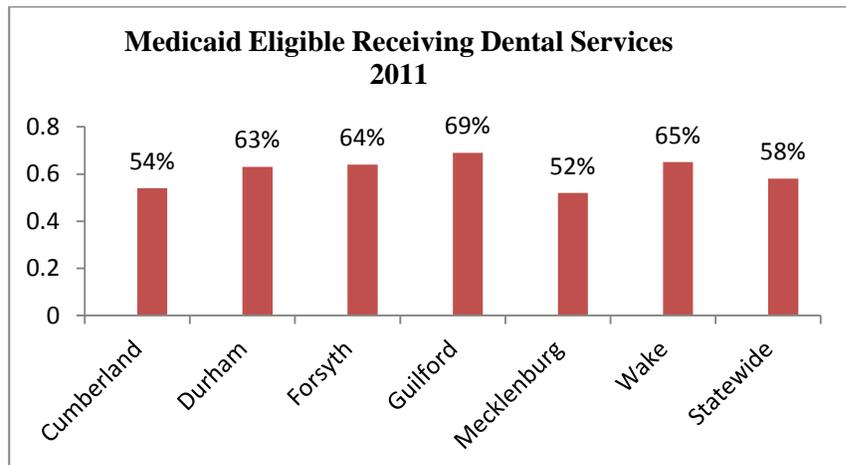
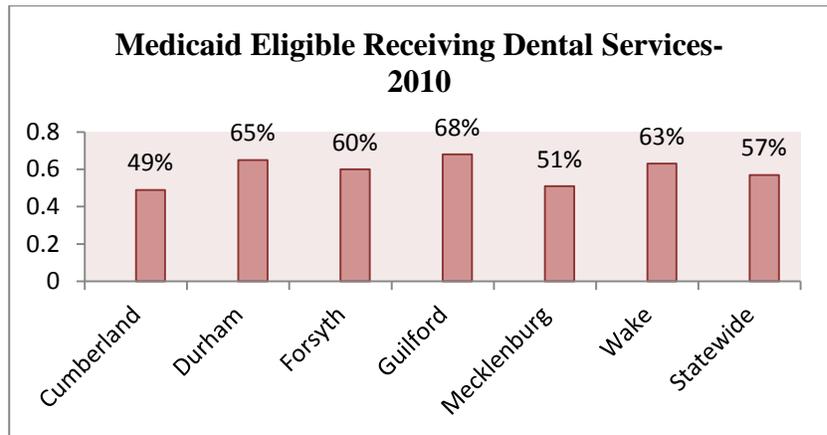
THE PERCENT OF MEDICAID ELIGIBLE CHILDREN RECEIVING DENTAL SERVICES INCREASED FROM 2010 TO 2011 FOR CHILDREN IN CUMBERLAND COUNTY

Source: kidscount.org

Dental Health

Medicaid Eligible Receiving Dental Services

The percent of Medicaid eligible children (ages 1-20) receiving dental services increased from 2010 to 2011 for Cumberland County, Statewide, and for peer counties Forsyth, Guilford, Mecklenburg, and Wake. The percent of Medicaid eligible children receiving dental services decrease from 2010 to 2011 for Durham County.



Lead Screening

FACTS ABOUT LEAD:

- ❖ Prolonged exposure to lead can be harmful to the developing brain of young children.
- ❖ An elevated blood lead levels is **10 – 15 µg/dL.**
Data: Centers for Disease Control

WHERE CAN LEAD BE FOUND?

- ❖ In the paint of homes built before 1978
- ❖ Plastic/vinyl mini-blinds
- ❖ Water that comes through lead-soldered pipes
- ❖ Soil contaminated with lead
- ❖ Recalled toys
- ❖ Workplaces that use lead
Data: NC Dept. of Environmental & Natural Resources Children's Environmental Health Branch

Key Observations:

- ❖ According to data source, 31.4% of Cumberland County children ages 1 and 2 received a blood lead test compared to 51.3% of the State's 1 and 2 year olds.
- ❖ Peer counties and the State had higher percentages of children ages 1 and 2 who received a blood lead test than Cumberland County.
- ❖ According to the data source, 0.5% of Cumberland County's children ages 1 and 2 tested for lead had blood lead levels greater than 10 micrograms per deciliter compared to 0.4% of the State's children ages 1 and 2.

County	Target population*	Number Tested	Percent Tested	Tested Among Medicaid**	Lead ≥ 10	Percent ≥ 10
Cumberland	11,898	3,732	31.4	76.1	18	0.5
Durham	9,047	4,071	45.0	83.0	14	0.3
Forsyth	9,930	6,146	61.9	88.5	37	0.6
Guilford	12,531	9,009	71.9	91.2	31	0.3
Mecklenburg	29,355	9,618	32.8	67.0	24	0.2
Wake	26,552	10,441	39.3	78.9	27	0.3
NC	257,543	132,014	51.3	81.1	519	0.4



Mortality

Chronic diseases, such as heart disease, stroke, cancer, and diabetes, are leading causes of death and are among the most common, costly, and preventable of all health problems in the U.S., North Carolina, and Cumberland County. Chronic diseases create a heavy burden on health and healthcare. According to recent trends:

- The rate of obesity in adults has doubled in the last 20 years. It has almost tripled in kids ages 2-11 years, and has more than tripled in children ages 12-9 years.
- Without big changes, 1 in 3 babies born today will develop diabetes in their lifetime.
- The average healthcare costs for someone who has one or more chronic conditions is 5 times greater than for someone without chronic conditions.
- Chronic diseases account for \$3 of every \$4 spent on healthcare. That's nearly \$7,900 for every American with a chronic disease.
- Chronic diseases cause 7 out of every 10 deaths.
- Heart disease and stroke drive the healthcare costs to a whopping \$432 billion/year.
- Diabetes costs about \$174 billion/year.
- Lung disease costs about \$154 billion/year.

Four modifiable health risk behaviors—lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption—are responsible for much of the illness, suffering, and early death related to chronic diseases. We must recognize that the human costs for chronic diseases can impact the availability of affordable health care when it's needed most.

www.cdc.gov/nccdphp/overview.htm , www.forahealthieramerica.com/ds/impact-of-chronic-disease.html .

Leading Causes of Death

Age-Adjusted Death Rates (per 100,000 Populations)

2007-2011

In 2007-2011, Cumberland County's **total death rate** of 890.6 was 10.16 % higher than the State's **total death rate** of 808.4. The five leading causes of deaths in Cumberland County were heart disease, cancer (all sites), chronic lower respiratory diseases, stroke and diabetes, the same as in 2010 Community Health Assessment (for years 2004-2008). Cumberland County's death rates for heart disease, cancer (all sites), chronic lower respiratory diseases, and diabetes were higher than the State rates. The State's death rate for stroke was slightly higher than Cumberland

Residence	Total deaths (all causes)		Diseases of the Heart		Total Cancer		Chronic Lower Respiratory Diseases		Stroke		Diabetes	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Cumberland	10,889	890.6	2,405	206.0	2,462	193.4	600	51.8	513	45.8	402	32.4
Durham	8,663	756.5	1,655	146.1	2,074	184.5	360	33.3	471	41.9	243	21.5
Forsyth	14,520	768.9	2,682	140.8	3,430	180.7	913	48.8	856	45.2	382	20.0
Guilford	18,737	758.5	3,932	157.8	4,141	167.3	925	38.1	1,068	43.3	387	15.6
Mecklenburg	25,250	716.7	4,901	142.6	5,927	166.0	1,138	34.9	1,376	40.6	632	17.5
Wake	20,950	648.8	4,295	137.5	5,247	157.3	934	31.6	1,308	43.6	582	18.1
State	388,092	808.4	86,099	179.3	88,518	179.7	22,274	46.6	21,774	46.0	10,733	22.0

County's stroke death rate.

www.schs.state.nc.us/SCHS/data/databook: click on mortality

In 2007-2011, the leading causes of death in Cumberland County were Heart Disease, Cancer (all sites), Chronic Lower Respiratory Disease, Stroke and Diabetes.

Although the five leading causes of deaths did not change from the 2010 CHA to the 2013 CHA, there was a change in percentage differences when comparing one five year period (2004-2008) to another five year period (2007-2011). CHA- (Community Health Assessment) for example:

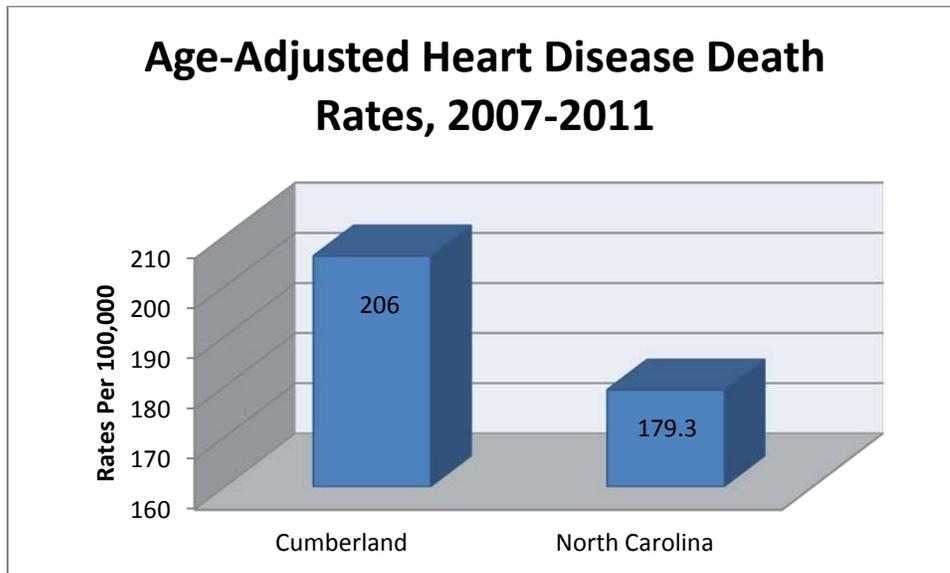
- The heart disease death rate for Cumberland County was 9.8 % lower from 2007-2011 than from 2004-2008.
- The total cancer death rate for Cumberland County was 5.0 % lower from 2007-2011 than from 2004-2008.
- The chronic lower respiratory disease death rate for Cumberland County was 6.1 % lower from 2007-2011 than from 2004-2008.
- The stroke death rate for Cumberland County was 11.0 % lower from 2007-2011 than from 2004-2008.
- The diabetes death rate for Cumberland County was 16.9% lower from 2007-2011 than from 2004-2008. (See chart)

Leading Cause of Death	Cumberland		% differences
	2004-2008	2007-2011	
Heart Disease death rate	228.5	206.0	-9.8%
Cancer-(all sites) death rate	203.7	193.4	-5.0 %
Chronic Lower Respiratory Disease death rate	55.2	51.8	-6.1 %
Stroke death rate	51.5	45.8	-11.0 %
Diabetes Mellitus death rate	39.0	32.4	-16.9 %

The death rates for the leading causes of deaths in Cumberland County are decreasing. Cumberland County is making improvements.

Heart Disease

Heart Disease remains the leading cause of death in Cumberland County with a death rate of 206.0 (2,405 deaths).



The County's heart disease death rate is 14.9 % greater than the State's heart disease death rate.

- ▶ During the period 2007-2011, Cumberland County's total heart disease death rate was higher than the State's rate.

According to the 2012 BRFSS (Behavioral Risk Factor Surveillance Survey) when Cumberland County residents were asked "has a doctor, nurse, or other health professional ever told you that you had a heart attack (also called a myocardial infarction)?" According to the survey results, 6.7% (30) responded "yes" and 93.3% (415) responded "no". When asked had they "ever been told they had angina or coronary heart disease?" According to the survey results, 4.6% (23) responded "yes" and 95.4% (265) responded "no".

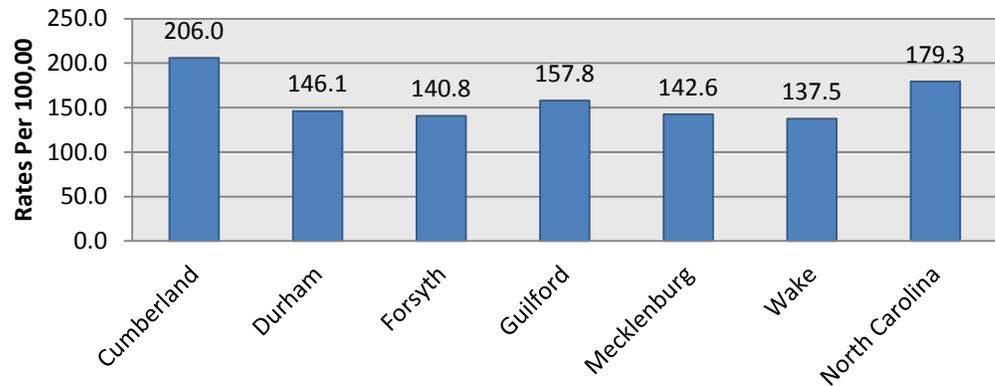
When asked in the community health assessment opinion survey, "What do most people die from in your community?" According to the survey, 56.5 % of the respondents stated heart disease/stroke.

When compared with its peer counties and the State, Cumberland's heart disease death rate was 41% higher than Durham's heart disease death rate, 46.3% higher than Forsyth's heart disease death rate, 30.5% higher than Guilford's heart disease death rate, 44.5% higher than Mecklenburg's heart disease death rate, 49.8% higher than Wake's heart disease death rate, and 14.9% higher than the State's heart disease death rate.

What influences Heart Disease?

- High Blood Pressure
- High blood cholesterol
- Diabetes
- Tobacco use
- Physical inactivity
- Poor nutrition
- Obesity

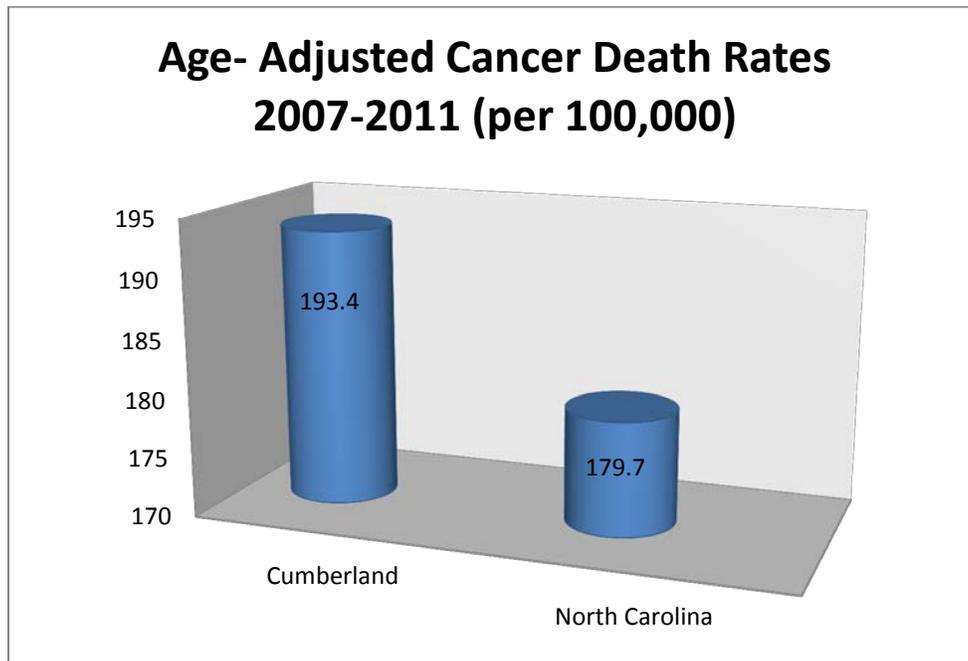
Overall Death Rates From Heart Disease from 2007-2011, By County and State



NC 2020 Healthy Objectives is to reduce the cardiovascular disease mortality rate (per 100,000 populations) of 161.5%.

Cancer

Cancer (all sites) is the second leading cause of death in Cumberland County, with a cancer death rate of 193.4 (2,462 deaths).



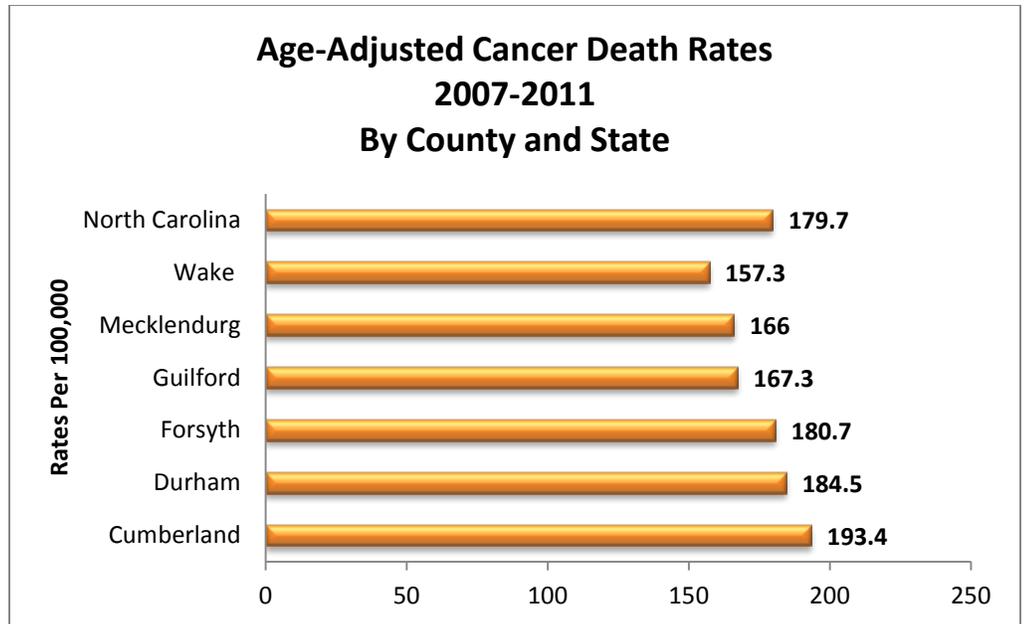
What influences Cancer?

- Environmental carcinogens
- Tobacco
- Diet
- Obesity
- Sedentary lifestyle
- Family history

During the period of 2007-2011, Cumberland County's total cancer death rate of 193.4% was 7.6% higher than the State's total cancer death rate of 179.7%.

When comparing peer counties, Cumberland County's total cancer death rate was:

- 4.8% higher than Durham County
- 7.0% higher than Forsyth County
- 15.6% higher than Mecklenburg County
- 22.9% higher than Wake County

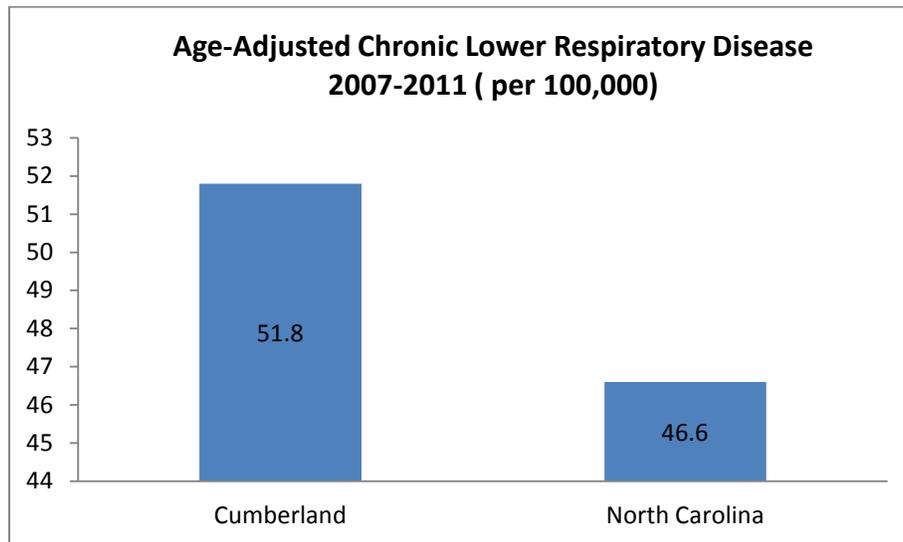


Cumberland County residents were asked “Has a doctor, nurse, or other health professional ever told you that you had any type of cancer?” According to the survey results, 4.6% (31) responded “yes” and 95.4% (415) responded “no” (2012 BRFSS).

When asked “What is the top health issue in the community?” According to the respondents, 0.3% stated that cancer was a top health issue (2013 Community Health Assessment).

Chronic Lower Respiratory Disease

Chronic Lower Respiratory Disease was the third leading cause of death in Cumberland County with a total death rate of 51.8 (600 deaths).



Cumberland County's Chronic Lower Respiratory Disease death rate was 11.2% higher than the State

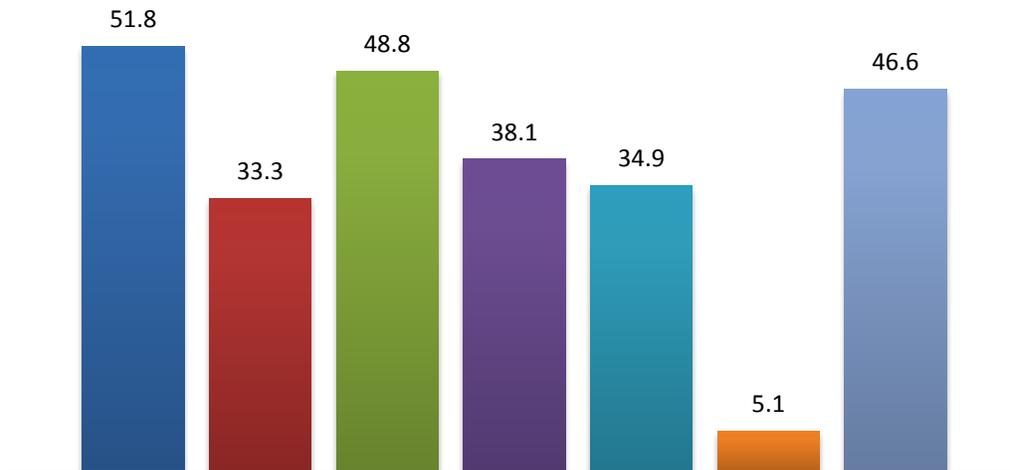
When Cumberland County residents were asked “Has a doctor, nurse or other health professional ever told you that you have COPD (Chronic Obstructive Pulmonary Disease), emphysema, or chronic bronchitis?” According to the survey results, 6.1% (35) responded “yes” and 93.9% (410) responded “no”. (2012 BRFSS)

What influences chronic lower respiratory disease?

- Tobacco Smoke
- Second-hand tobacco smoke
- Other in-door air pollutants
- Out-door air pollutants
- Occupational agents

**Age-Adjusted Chronic Lower Respiratory Disease Death Rates
2007-2011 (per 100,000)
By County and State**

■ Cumberland ■ Durham ■ Forsyth ■ Guilford ■ Mecklenburg ■ Wake ■ North Carolina



When comparing Cumberland County's chronic lower respiratory disease death rate to peer counties, Cumberland County was:

- ✚ 55.6% higher than Durham County
- ✚ 6.1% higher than Forsyth County
- ✚ 36.0% higher than Guilford County
- ✚ 48.4% higher than Mecklenburg County

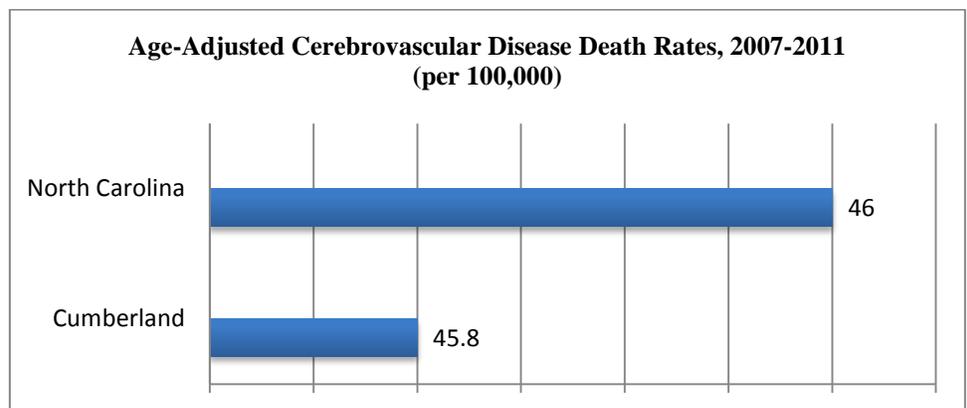
Cerebrovascular Disease

Cerebrovascular Disease (Stroke) was the fourth leading cause of death in Cumberland County with a total stroke death rate of 45.8 (513 deaths).

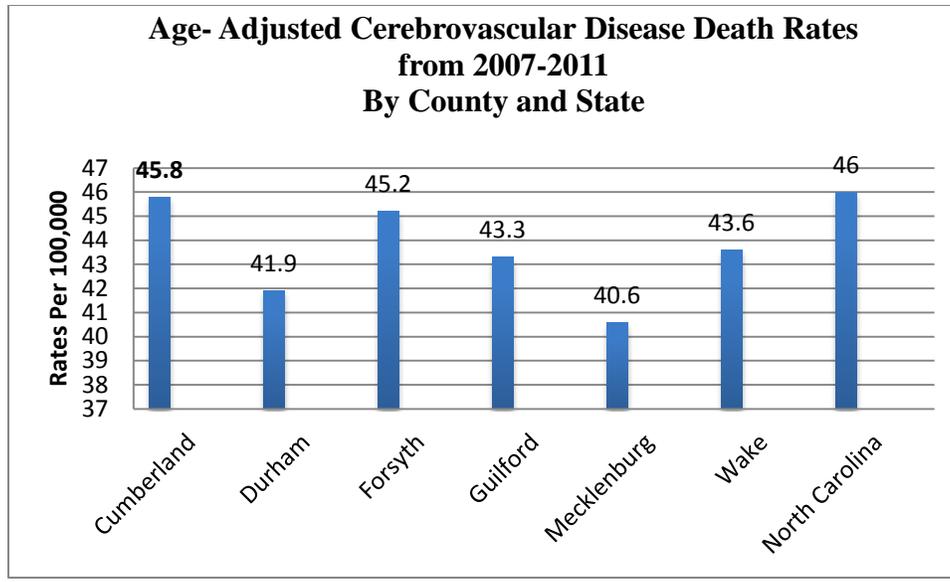
Cumberland County's total stroke death rate of 45.8 was 0.4% lower than the State.

What Influences a stroke?

- High Cholesterol
- High Blood Pressure
- Heart Disease



When Cumberland County residents were asked? “Has a doctor, nurse or other health professionals ever told you that you had a stroke?” According to the survey results, 2.1% (11) responded “yes” and 97.9% (270) responded “no”. (2012 BRFSS)



The County's stroke death rate of 45.8 was slightly lower than the State's stroke death rate of 46.

Key Findings:

When comparing peer counties, Cumberland County's total stroke death rate of 45.8 was:

- ❖ 9.3% higher than Durham County
- ❖ 1.3% higher than Forsyth County
- ❖ 5.8% higher than Guilford County
- ❖ 12.8% higher than Mecklenburg County
- ❖ 5.0% higher than Wake County

Cumberland County's total diabetes death rate of 32.4 was 47.3% higher than the State.

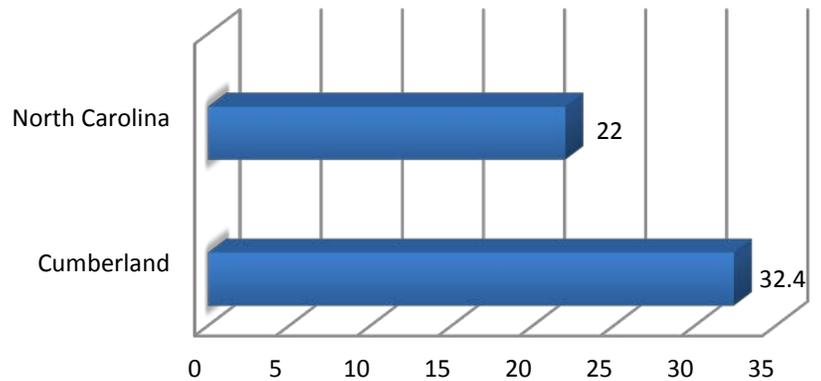
What Influences Diabetes?

- ❖ People who are overweight or Obese
- ❖ Genetic Susceptibility
- ❖ Physical Inactivity
- ❖ Metabolic Syndrome

Diabetes

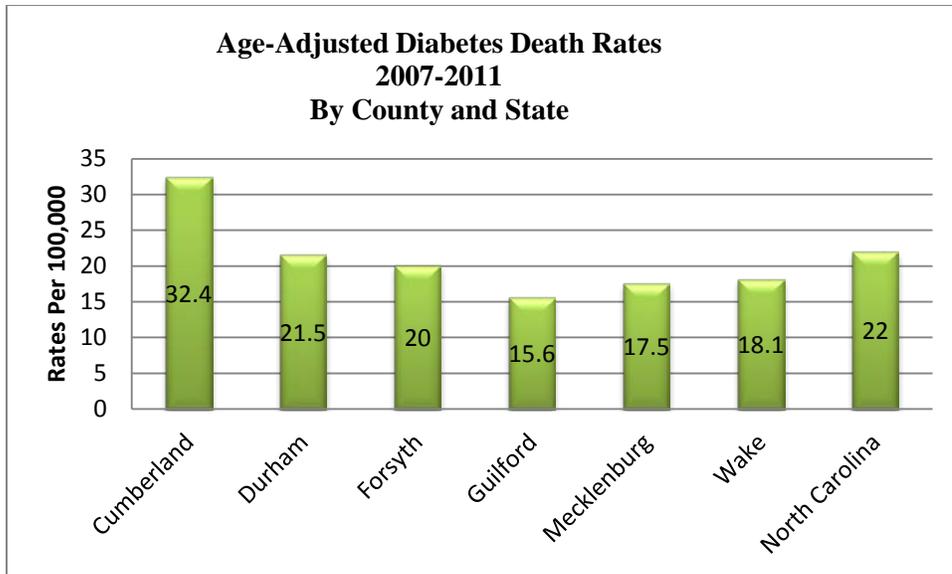
Diabetes was the fifth leading cause of death with a total diabetes death rate of 32.4 (429).

Age-Adjusted Diabetes Death Rates 2007-2011 (per 100,000)



When Cumberland County residents were asked “Has a doctor, nurse, or other health professional ever told you that you have diabetes?” According to survey results, 12.1% (64) responded “yes” and 86.6% (373) responded “no”. (2012 BRFSS)

The NC 2020 Healthy People objective is to decrease the percentage of adults with diabetes to 8.6%



Key Findings:

When comparing peer counties, Cumberland County's total diabetes death rate of 32.4 was:

- ❖ 50.7% higher than Durham County
- ❖ 62.0% higher than Forsyth County
- ❖ 107.7% higher than Guilford County
- ❖ 85.1% higher than Mecklenburg County
- ❖ 79.0% higher than Wake County



Health Risk Factors:

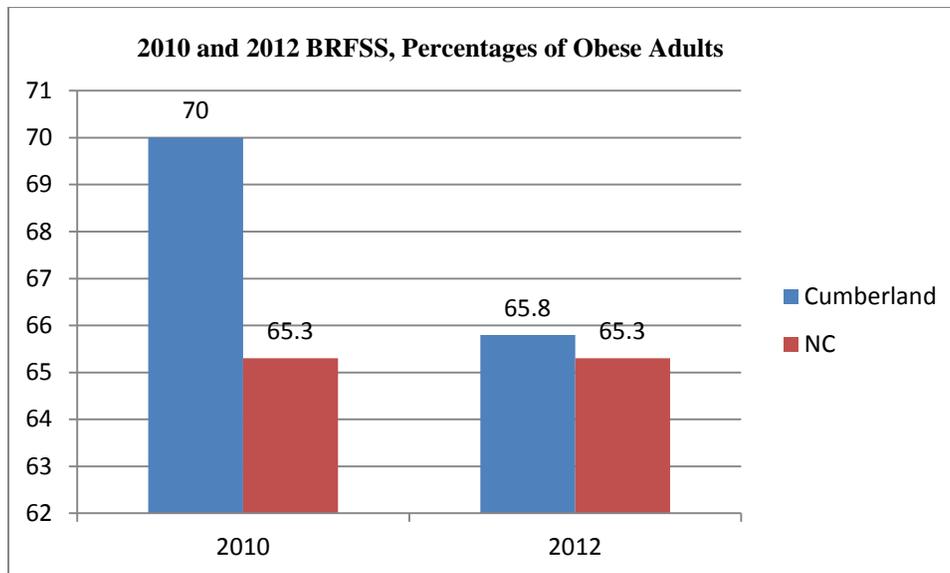
Most of the leading causes of preventable deaths in Cumberland County involve unhealthy lifestyles. Contributing factors to the leading causes of preventable death are being obese, unhealthy diet, physical inactivity, and tobacco use.

Obesity:

Overweight and obesity are associated with increased risks of numerous diseases and health conditions such as type 2 diabetes, heart disease, stroke, and certain types of cancers.

The measurement of overweight and obesity are based on Body Mass index (BMI), which is a ratio of weight to height.

- According to the 2012 BRFSS, 65.8% of respondents in Cumberland County were overweight or obese. For the State, 65.3% of respondents were overweight or obese.
- Between 2010 and 2012, the rate for overweight and obesity declined from 70.0 % to 65.8 % in Cumberland County and the State rates were about the same, 65.3 %.



2010 and 2012 NC BRFSS

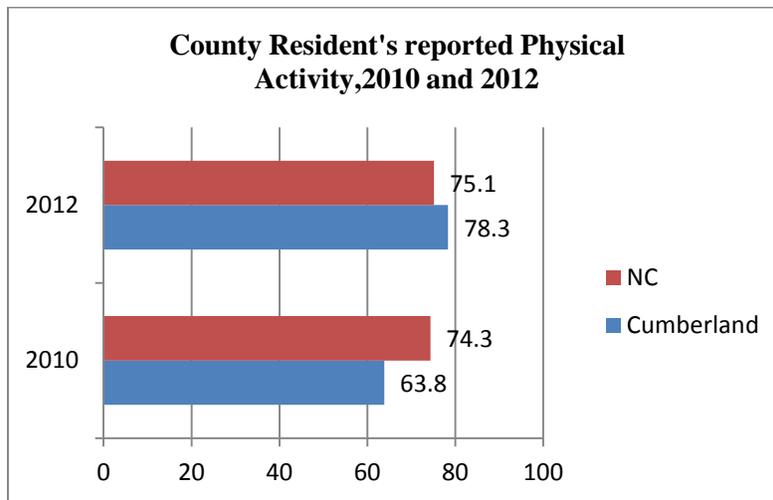
- Healthy NC 2020 objective is to increase the percentage of high school students who are neither overweight nor obese by 79.2%.

According to the 2008 BRFSS 69.4% of Cumberland County residents were overweight or obese (2010 CHA). In the 2012 SOTCH Report, obesity was listed as one of the priorities to be address.

According to the 2012 BRFSS, 65.8% of Cumberland residents reported that they were overweight or obese, compared to the 2010 CHA, the percentage was slightly lower in the 2012 BRFSS.

Exercise/Physical Activity:

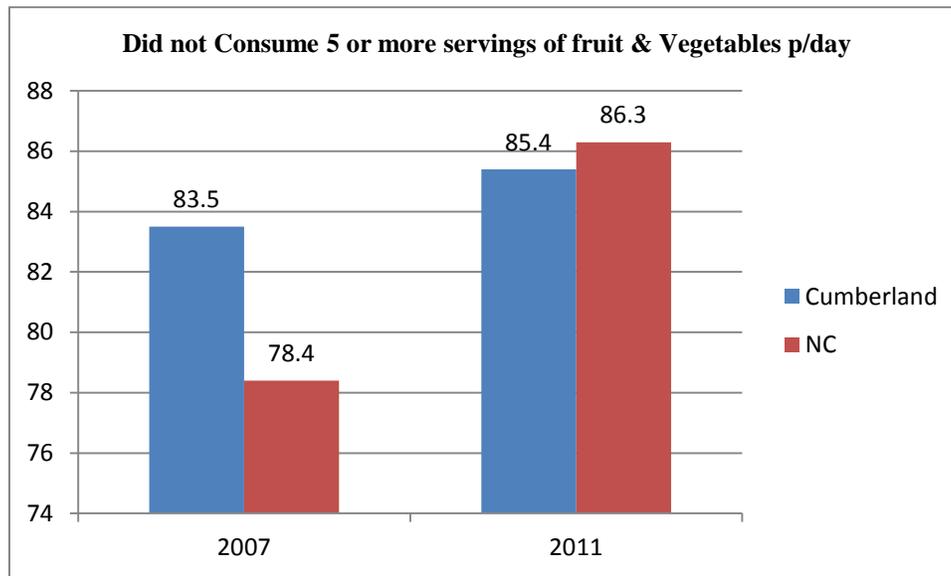
- According to the 2012 BRFSS, 78.3% of Cumberland County residents reported participating in physical activities or exercises such as running, calisthenics, golf, gardening, or walking. According to the survey results, 75.1% of State respondents reported participating in physical activities or exercises such as running, calisthenics, golf, gardening, or walking.
- Between 2010 and 2012, the rate for exercise increased from 63.8% to 78.3% in Cumberland County and slightly increase from 74.3% to 75.1%



Healthy NC 2020 Objective is to increase the percentage of adults getting the recommended amount of physical activity by 60.6%. In 2012 BRFSS, 78.3% of County residents reported that they participated in physical activities or exercise.

Nutrition:

- According to the 2011 BRFSS, 85.4% of respondents in Cumberland County reported not consuming five or more servings of fruits and vegetables per day. Eating fruits and vegetables is a key element in weight management/weight loss, and preventing chronic conditions. According to the survey results, 86.3% of the State respondents reported not consuming five or more servings of fruits and vegetables per day.
- Between 2007 and 2011, the rate for not consuming five or more servings of fruits and vegetables per day increased from 83.5% to 85.4% for Cumberland County residents.



Healthy NC 2020 objective is to increase the percentage of adults who consume five or more servings of fruits and vegetables by 29.3%. In 2011, 14.6% of Cumberland residents reported consuming five or more servings of fruits or vegetables. Cumberland County has not met the target.

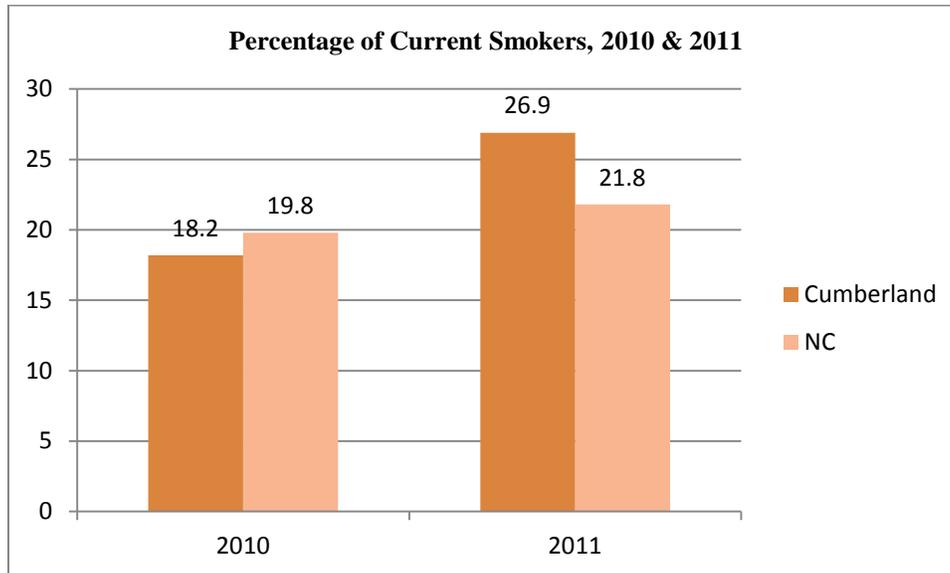
Smoking:

Smoking tobacco harms nearly every organ of the body, causes many diseases and reduces the health of the smoker. Quitting smoking lowers your risk for smoking-related diseases and add years to your life.

www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm

According to the 2012 BRFSS, 18.9% Cumberland County residents reported that they were a current smoker and 20.9% of State respondents reported they were current smokers.

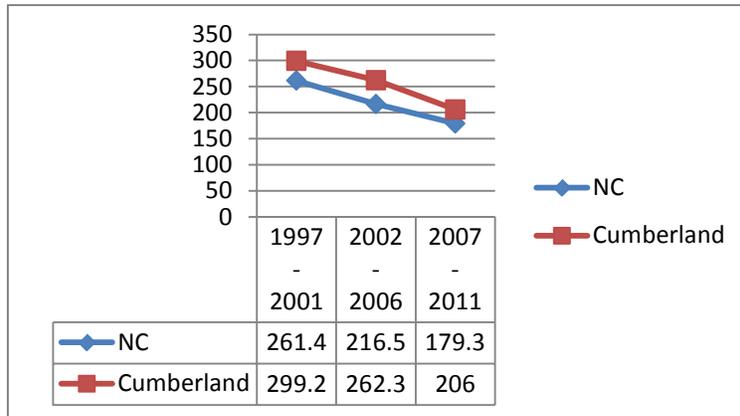
- Between 2010 and 2011, the rate for current smokers increased from 18.2% to 26.9% for Cumberland County residents and from 19.8% to 21.8% for statewide residents.



Healthy NC 2020 objective is to decrease the percentage of adults who are current smokers by 13.0%. According to the 2012 BRFSS, Cumberland Co. rate of 18.9% did not meet the target.

Trends

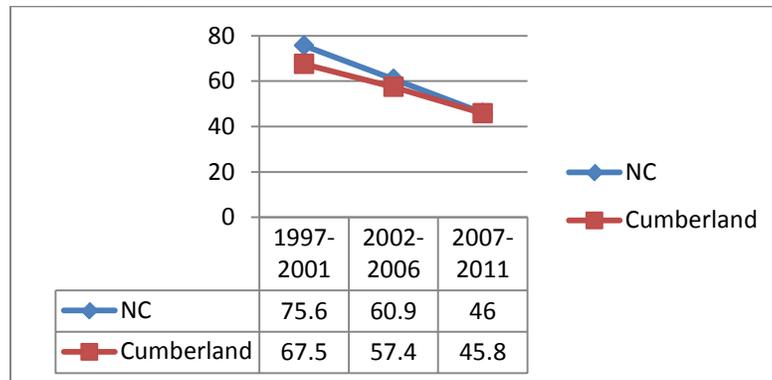
Age-Adjusted Heart Disease Death Rates per 100,000 Residents



Observations:

- The heart disease death rate for Cumberland County was 31.1% lower from 2007-2011 than from 1997-2001.
- Although Cumberland County rates are declining, they continue to exceed the State heart disease death rate.

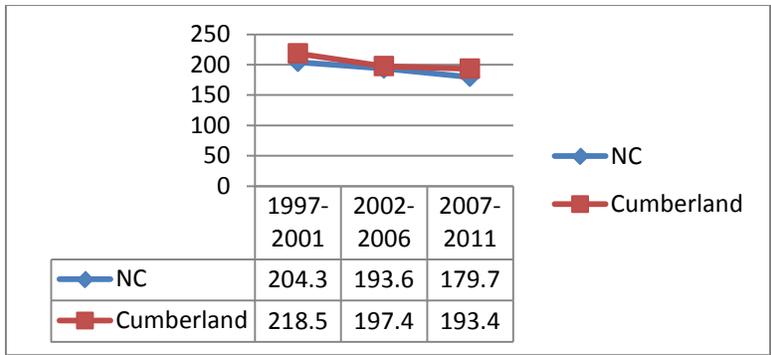
Age-Adjusted Stroke Death Rates per 100,000 Residents



Observations:

- The stroke death rate for Cumberland County was 32.1% lower from 2007-2011 than from 1997-2001.
- The State's Stroke death rate was slightly higher than Cumberland County's during the period 2007-2011.

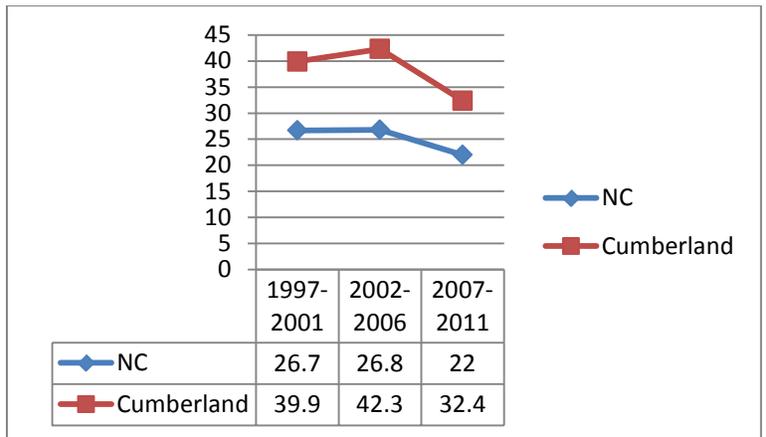
Age-Adjusted Total Cancer Death rates per 100,000 Residents



Observations:

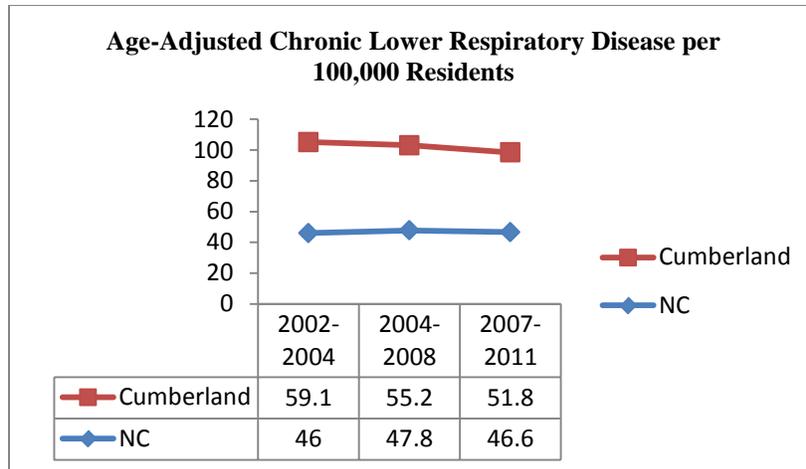
- The total cancer (all sites) death rate for Cumberland County was 11.5% lower from 2007-2011 than from 1997-2001.
- Cumberland County’s total cancer death rate is declining, but continues to exceed the State’s total cancer death rate.

Age-Adjusted Diabetes Death Rates per 100,000 Residents



Observations:

- The total diabetes death rate for Cumberland County was 18.8% lower from 2007-2011 than from 1997-2001.
- Over the past 15 years (1997-2011) Cumberland County’s diabetes death rate has exceeded the State’s diabetes death rate.



Observations:

- The chronic lower respiratory disease death rate for Cumberland County was 12.4% lower from 2007-2011 than from 2002-2004.
- Overall, Cumberland County's chronic lower respiratory disease death rates are declining, however; Cumberland County's rates continue to exceed the State's chronic lower respiratory disease death rates.

Health Disparities:

During the period 2007-2011, heart disease, cancer, chronic lower respiratory disease, stroke and diabetes were the leading causes of death in Cumberland County. Differences in death rates by race and gender have been observed for many years. Among the race – gender groups:

Race:

- There were higher death rates for White males due to heart disease and chronic lower respiratory disease.
- There were higher death rates for African-American males due to cancer (all sites) and diabetes.
- There were higher death rates for African American females due to stroke.
- White females had a higher death rate due to cancer (all sites) and chronic lower respiratory disease than African American females.
- African American females had higher death rates due to heart disease, stroke and diabetes than White females.

2010 Community Health Assessment (CHA): Race

- White males had a higher heart disease death rate than minority males.
- Minorities had a higher stroke death rate than Whites.

Gender: 2007-2011

- There were higher death rates for males due to heart disease, cancer-(all sites), chronic lower respiratory disease and diabetes.

2010 CHA: Gender

- Males had higher heart disease death rates than females.
- Males had a higher cancer death rate than minority males.
- Males in the county had a higher diabetes death rate than females.

Cumberland County	Diseases of the Heart		Total Cancer		Chronic Lower Respiratory Diseases		Stroke		Diabetes	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
W M	791	276.3	782	245.1	188	64.7	117	43.6	109	36.2
W F	685	159.5	728	170.5	262	60.9	163	38.3	86	20.1
AA M	448	271.0	436	261.2	71	53.5	78	53.7	95	52.7
AA F	403	187.1	405	166.0	55	25.3	135	62.6	103	45.0
O M	27	173.9	25	137.3	10	N/A	6	N/A	1	N/A
O F	22	81.6	46	110.4	9	N/A	8	N/A	3	N/A
HM	15	N/A	16	N/A	3	N/A	2	N/A	2	N/A
H F	14	N/A	24	87.0	2	N/A	4	N/A	3	N/A

Source: www.schs.state.nc.us/SCHS/data/databook , 2013-click on mortality

Abbreviations:

WM-White males, WF-White females, AAm-African American male, AAF-African American female, O/R M- Other Races-Non-Hispanic, O/R F-Other Races-Non-Hispanic female, HM-Hispanic male, HF-Hispanic female. N/A-rates based on fewer than 20 cases are unstable and have been suppressed.

**Changes in data that guided the selection of health priorities selected in the 2010 CHA
Corrective Action (2012 SOTCH Report)**

1. Heart Disease:

- ✚ The 2010 CHA reported that Cumberland County's heart disease death rate was 228.5, when reviewing the data Cumberland County's heart disease death rate had declined to 212.8 during the period 2006-2010.

2. Obesity:

- ✚ The 2010 CHA reported that 69.4 % of Cumberland County residents were overweight or obese (2007 BRFSS). According to the 2012 BRFSS, 65.3 % of Cumberland County residents reported being overweight or obese. The percentage decline slightly.

3. Teen Pregnancy: (Ages 15-19 years old)

- ✚ The 2010 CHA reported that Cumberland County's teen pregnancy rate was 74.5. In 2011, Cumberland County's teen pregnancy rate declined to 61.8, a major decrease.

4. Cancer:

- ✚ The 2010 CHA reported that Cumberland County's cancer death rate was 203.7. During the period 2006-2010, Cumberland County's cancer death rate declined to 195.9.

5. Diabetes:

- ✚ The 2010 CHA reported that Cumberland County's diabetes death rate was 39.0. During the period 2006-2010, Cumberland County's diabetes death rate declined to 35.1.

Cumberland County has made some progress since the 2010 Community Health Assessment (CHA).

Built Environments

The term built environment has been defined as “the human-made space in which people live, work, and recreate on a day-to-day basis”. Public Health research has expanded the definition to include healthy food access, community gardens, walkability, and bikeability. (Wikipedia.org). There is growing evidence that built environment plays a major role in shaping our health. The lay-out and design of a community can affect patterns of behaviors that in turn, influence our health. For example, inaccessible or nonexistent sidewalks and bicycle, or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some types of cancer. (www.cdc.gov/healthyplaces/)

There are several programs in Cumberland County that address the built environment and its efforts to improve the health of the residents and/or communities.

Physical Activity Initiatives:

Bicycle/Pedestrian Program

The Fayetteville Area Metropolitan Planning Organization (FAMPO) created a framework for a Bicycle/Pedestrian program in Fayetteville area. The plan presents a guideline for Cumberland County to provide a safe and attractive environment needed to promote bicycling and walking as a transportation mode. Also, bicycle and walking paths can lead to increased physical activity which will address obesity, heart disease and diabetes. Having sidewalks in neighborhoods and urban areas can influence a person’s level of physical activity. The City of Fayetteville now allows bikers to use the sidewalks and there have been numerous subdivisions built in the area with sidewalks. (fampo.org).

Walking Trails

Fayetteville and Cumberland County have a number of walking paths within their parks throughout the community. A comprehensive list of parks with walking trails can be found in the Parks and Recreation section under amenities.

Smoke-Free/Tobacco-Free Initiatives:

Smoke-Free Restaurants and Bars

On January 2, 2010, the State enacted the Smoke-Free Restaurants and Bars Law, which bans smoking in almost all restaurants, bars, and in at least 80% of guest rooms in lodging establishments.

Tobacco-Free Communities:

Cumberland County Department of Public Health distributed signage to all the county schools promoting Tobacco Free and Healthy Environments. Banners were donated by First Health of the Carolinas and Healthy Kids Healthy Communities on behalf of the Region 6 Strategic Planning Committee.

The Town of Spring Lake adopted a tobacco-free policy for government buildings, vehicles and out-doors public places, such as playgrounds and parks.

Cumberland County approved a policy prohibiting smoking on the grounds of the Department of Social Services (DSS), the grounds of any county building where the Department of Public Health services are provided, and county buildings where library services are provided. The policy becomes effective January 2014. (Community Transformation Grant (CTG) Newsletter, Vol.1. pg. 4)

Healthy Eating Initiatives:

The Healthy Communities Program

The Cumberland County Department of Public Health implemented the “Healthy Communities” program, a state-funded program that addresses the risk factors of physical inactivity and poor nutrition. According to research, implementing policy, systems, and environmental changes can influence positive behavior changes that improve health outcomes.

[\(cdc.gov/healthycommunitiesprogram/\)](http://cdc.gov/healthycommunitiesprogram/)

For example, one strategy used to bring affordable, healthy food options to our communities is to utilize farmers markets in urban and low-income areas. The Department of Public Health conducted an assessment of farmers markets in the county and identified ten markets. Each market had unique characteristics to attract shoppers. For instance, some may accept food assistance programs like WIC and/or the Supplement Nutrition Assistance Program (SNAP).

When asked on a survey, “What is a major problem in your community?” According to 23.3% respondents, poor eating habits are a major problem.

Morbidity

Chronic Health Conditions:

Heart Disease:

According to the 2012 N.C. Behavioral Risk Factor surveillance System (BRFSS) Survey, 4.6% (26 residents) stated that they had been told that they have angina or coronary heart disease and 95.2% (274 residents) stated that that had not been told that they have angina or coronary heart disease. When asked the same question in the 2010 BRFFS, 4.8% (21 residents) stated that they had been told that they have angina or coronary heart disease and 95.2% (274 residents) stated that they had not been told that they have angina or coronary heart disease.

2012		2010	
Yes	No	Yes	No
4.6% (26 residents)	95.2% (274 residents)	4.8% (21 residents)	95.2% (274 residents)

Cardiovascular Disease:

According to the 2012 N.C. Behavioral Risk Factor surveillance System (BRFSS) Survey, 10.8% (53 residents) stated that they had been told that they have a history of cardiovascular disease and 89.2% (391 residents) stated that that had not been told that they have a history of cardiovascular disease. When asked the same question in the 2010 BRFFS, 9.9% (40 residents) stated that they had been told that they have a history of cardiovascular disease and 90.1% (254 residents) stated that they had not been told that they have a history of cardiovascular disease.

2012		2010	
Yes	No	Yes	No
10.8% (53 residents)	89.2% (391 residents)	9.9% (40 residents)	90.1% (254 residents)

Diabetes:

According to the 2012 N.C. Behavioral Risk Factor surveillance System (BRFSS) Survey, 12.1% (64 residents) stated that they had been told that they have diabetes and 87.8% (373 residents) stated that that had not been told that they have diabetes. When asked the same question in the 2010 BRFFS, 10.7% (50 residents) stated that they had been told that they have diabetes and 86.7% (241 residents) stated that they had not been told that they have diabetes.

2012		2010	
Yes	No	Yes	No
12.1% (64 residents)	87.8% (373 residents)	10.7% (50 residents)	86.7% (241 residents)

Communicable Diseases:

Cumberland County Department of Public Health reports diagnosis of certain communicable diseases, including sexually transmitted diseases (STDs) to the State. The State reports and provides statewide statistics about disease trends. Based on data and trends, Cumberland County continues to battle against sexually transmitted and other diseases.

The Department of Public Health's DIS (Disease Intervention Specialist) staff collaborates with the HIV/STD Health Educator on intervention strategies to prevent/reduce HIV/STDs.

The Health Department offers confidential HIV antibody testing and makes referrals to local HIV case managers. Resources for HIV patients are limited in this county. The Department of Public Health currently collaborates with other community-based AIDS service organizations to promote HIV/STD prevention/risk reduction education as well as enhancing more accessible testing at the community level.

Syphilis:

During the period 2006-2010, Cumberland County's total syphilis (primary and secondary) rate of 4.4 cases p/ 100,000 was higher than the State's total syphilis rate of 4.1 cases p/100,000.

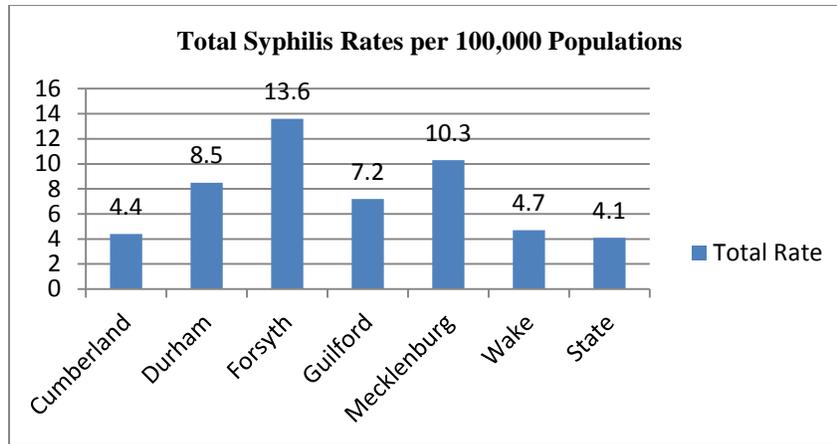
When comparing Cumberland County to peer counties, Cumberland County's total syphilis rate was:

- 48.2% lower than Durham County
- 67.6% lower than Forsyth County
- 38.9% lower than Guilford County
- 57.3% lower than Mecklenburg County
- 6.4% lower than Wake County

Total Syphilis Rates per 100,000 Populations, 2006-2010

Residence	Total Rate	White Rate	Afr. Am. Rate	Other	Hispanic
Cumberland	4.4	1.4	9.5	1.5	0.9
Durham	8.5	4.7	16.1	3.1	1.3
Forsyth	13.6	3.3	43.2	0.0	4.9
Guilford	7.2	2.0	18.2	4.1	1.3
Mecklenburg	10.3	3.2	27.5	0.5	3.4
Wake	4.7	2.2	14.5	0.0	2.7
State	4.1	1.4	13.8	1.1	1.9

Source: www.schs.state.nc.us/schs/data/databook/2013 click on morbidity-syphilis

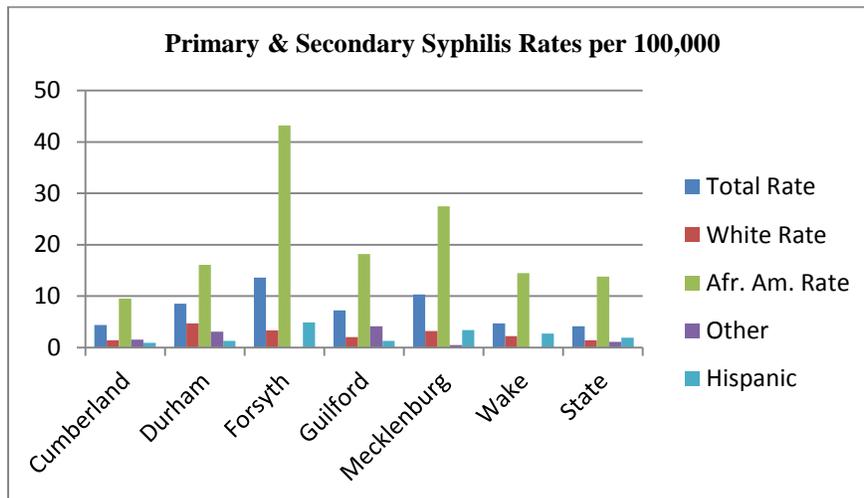


Race:

During the period 2006-2010, Cumberland County’s African American syphilis rate of 9.5 was lower than the State’s African American syphilis rate of 13.8. When comparing Cumberland County’s African American syphilis rate to peer counties, Cumberland County was:

- 41.0% lower than Durham County
- 78.0% lower than Forsyth County
- 47.8% lower than Guilford County
- 65.5% lower than Mecklenburg County
- 34.5% lower than Wake County

When comparing Cumberland County’s African American syphilis rate of 9.5 to Cumberland County’s White syphilis rate of 1.4, the African American syphilis rate was 578.6% greater than the White rate.



Gonorrhea:

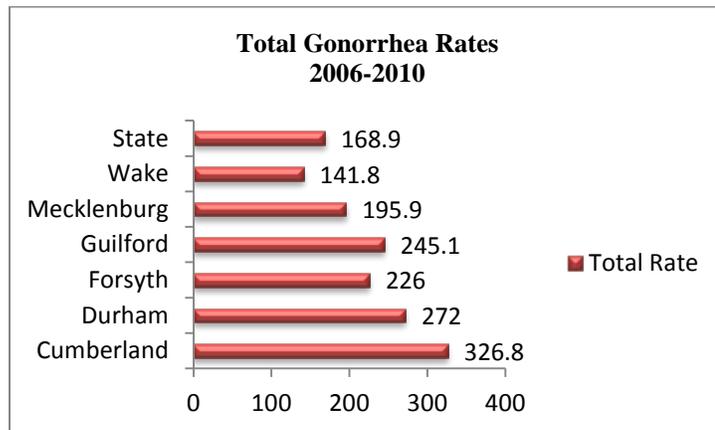
During the period 2006-2010, Cumberland County’s total gonorrhea rate of 326.8 cases p/100,000 was substantially higher than the State’s total gonorrhea rate of 168.9 cases. When comparing Cumberland County to peer counties, Cumberland County was:

- 20.1% higher than Durham County
- 44.6% higher than Forsyth County
- 33.3% higher than Guilford County
- 66.8% higher than Mecklenburg County
- 130.5% higher than Wake County

Gonorrhea Rates per 100,000 Populations, 2006-2010

Residence	Total Rate	White Rate	Afr. Am. Rate	Other	Hispanic
Cumberland	326.8	157.6	626.4	152.7	80.7
Durham	272.0	80.0	601.0	51.6	59.7
Forsyth	226.0	68.9	686.3	79.7	57.3
Guilford	245.1	64.4	629.9	65.6	75.7
Mecklenburg	195.9	53.8	541.7	32.0	38.4
Wake	141.8	36.5	537.3	33.3	65.1
State	168.9	52.9	581.6	96.7	54.2

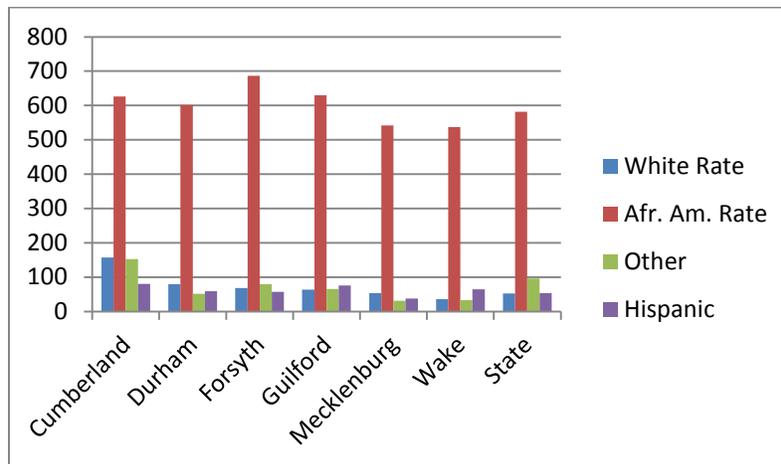
Source: www.schs.state.nc.us/schs/data/databook/2013.click on morbidity-gonorrhea



During the period of 2006-2010, Cumberland County's African American gonorrhea rate of 626.4 cases was higher than the State's African American gonorrhea rate of 581.6. When comparing Cumberland County to peer counties, Cumberland County was:

- 4.2% higher than Durham County
- 8.7% lower than Forsyth County
- 8.7% lower than Guilford County
- 15.6% higher than Mecklenburg County
- 16.6% higher than Wake County.

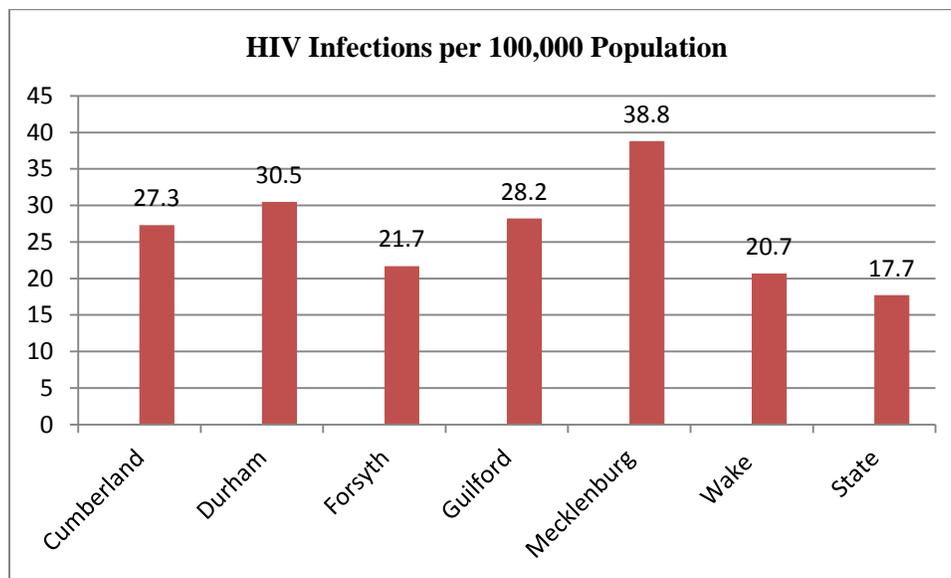
When comparing Cumberland County's African American gonorrhea rate of 626.4 to Cumberland County's White gonorrhea rate of 157.6, the African American gonorrhea rate was 297.5% greater than the White rate.



New HIV Infection Diagnoses, 2007-2011

During the period 2007-2011, Cumberland County's HIV infection rate of 27.3 was higher than the State's HIV infection rate of 17.7. When comparing Cumberland County to peer counties, Cumberland County's HIV infection rate was:

- 10.5% lower than Durham County
- 25.8% higher than Forsyth County
- 3.2% lower than Guilford County
- 29.6% lower than Mecklenburg County
- 31.9% higher than Wake County

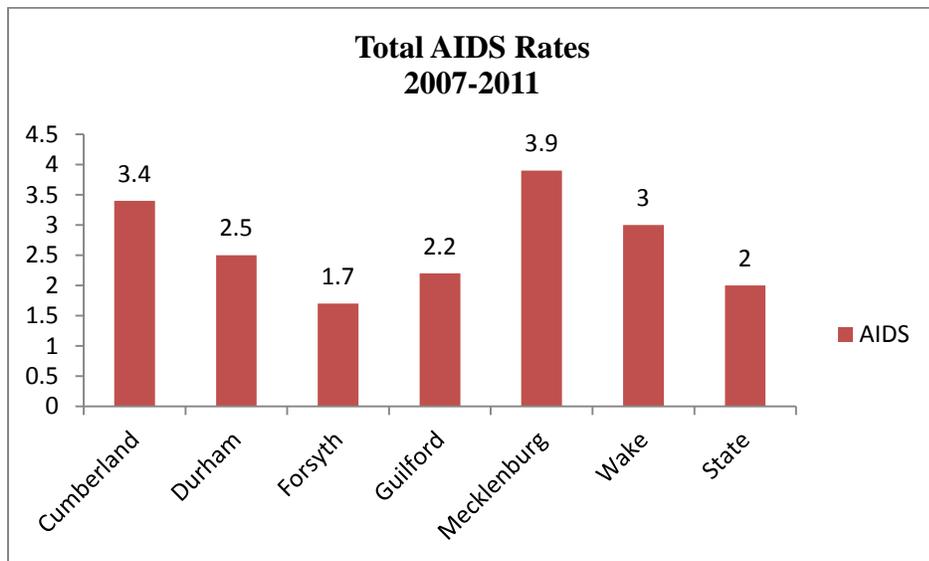


Source: www.healthstats.publichealth.nc.gov/indicator

AIDS:

During the period 2007-2011, Cumberland County’s total AIDS rate of 3.4 p/100,000 populations was higher than the State’s total AIDS rate of 2.0 p/100,000. When comparing Cumberland County to peer counties, Cumberland County’s total AIDS rate of 3.4 was:

- 36.0% higher than Durham County
- 100.0% higher than Forsyth County
- 54.5% higher than Guilford County
- 12.8% lower than Mecklenburg County
- 13.3% higher than Wake County



Source: NC Pocket guide 2011

Healthy NC 2020 objectives is to reduce the rate of new HIV infection diagnoses (per 100,000 population) to 22.2%

Chlamydia:

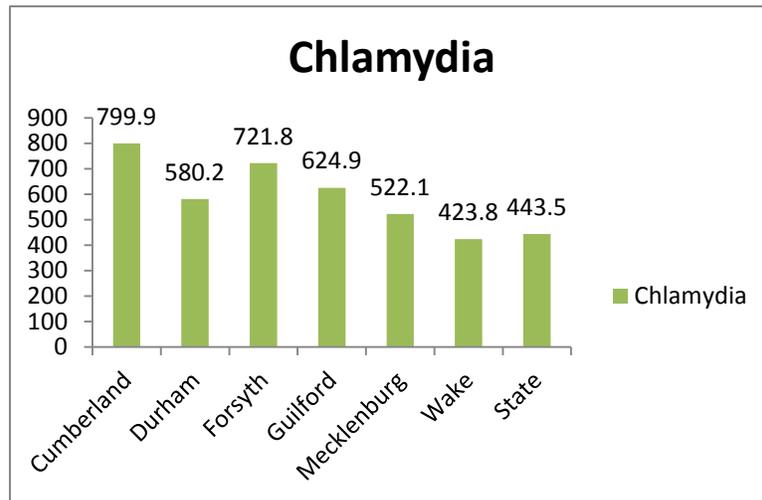
During the period 2007-2011, Cumberland County's total Chlamydia rate of 799.9 cases p/100,000 was significantly higher than the State's total Chlamydia rate of 443.5 cases, when comparing Cumberland County to peer counties, Cumberland County's total chlamydia rate of 799.9 was:

- 37.9% higher than Durham County
- 10.8% higher than Forsyth County
- 28.0% higher than Guilford County
- 53.2% higher than Mecklenburg County
- 88.7% higher than Wake County

Total Chlamydia Rates per 100,000 Populations, 2007-2011

Residence	Chlamydia
Cumberland	799.9
Durham	580.2
Forsyth	721.8
Guilford	624.9
Mecklenburg	522.1
Wake	423.8
State	443.5

Healthy NC 2020 Objectives is to reduce the percentage of positive results among individuals aged 15 to 24 tested for chlamydia to 8.7%.



Source: Pocket Guidebook, 2011, clicks on morbidity

Cancer:

Cancer is a significant burden to any community in terms of morbidity, years of life lost, and economic cost. Research indicates that the incidence of cancer can be prevented or reduced by developing and implementing appropriate interventions. Some factors contributed to cancer are (1) exposure to tobacco and other carcinogenic substances, (2) diet/nutrition, and (3) biological factors.

Key Observations:

During the period 2005-2009, Cumberland County's total cancer incidence rate of 497.8 was lower than the State's total cancer incidence rate of 500.1. When comparing Cumberland County to peer counties, Cumberland County's total cancer incidence rate of 497.8 was:

- ❖ 0.6% lower than Durham County
- ❖ 1.5% lower than Forsyth County
- ❖ 9.6% lower than Guilford County
- ❖ 0.7% higher than Mecklenburg County
- ❖ 2.8% lower than Wake County

During the period 2005-2009, Cumberland County's breast cancer incidence rate of 156.4 was higher than the State's breast cancer incidence rate of 154.5. When comparing Cumberland County to peer counties, Cumberland County's breast cancer incidence rate of 156.4 was:

- 3.3% lower than Durham County
- 2.4% lower than Forsyth County
- 5.4% lower than Guilford County
- 8.0% lower than Mecklenburg County
- 9.3% lower than Wake County

During the period 2005-2009, Cumberland County's prostate cancer incidence rate of 141.0 was lower than the State's prostate cancer incidence rate of 158.3 when comparing Cumberland County to peer counties, Cumberland County's prostate cancer incidence rate of 141.0 was:

- 20.9% lower than Durham County
- 14.9% lower than Forsyth County
- 30.8% lower than Guilford County
- 18.8% lower than Mecklenburg County
- 25.5% lower than Wake County

During the period 2005-2009, Cumberland County's lung cancer incidence rate of 81.8 was higher than the State's lung cancer incidence rate 75.9. When comparing Cumberland County to peer counties, Cumberland County's lung cancer incidence rate of 81.8 was:

- 10.1% higher than Durham County
- 10.5% higher than Forsyth County
- 2.6% higher than Guilford County
- 28.0% higher than Mecklenburg County
- 29.0% higher than Wake County.

During the period 2005-2009, Cumberland County's colon cancer incidence rate of 46.3 was 1.8 higher than the State's colon cancer incidence rate. When comparing Cumberland County to peer counties, Cumberland County's colon cancer incidence rate of 46.3 was:

- 13.8% higher than Durham County
- 20.6% higher than Forsyth County
- 3.1% higher than Guilford County
- 7.4% higher than Mecklenburg County
- 11.0% higher than Wake County

Residence	Total Cancer		Breast Cancer		Prostate Cancer		Lung Cancer		Colon Cancer	
	Cases	Rate	Case	Rate	Cases	Rate	Case	Rate	Cases	Rate
North Carolina	236,301	500.1	39,779	154.5	34,120	158.3	35,748	75.9	21,383	45.5
Cumberland	6,408	497.8	1,148	156.4	789	141.0	1,024	81.8	581	46.3
Durham	5,568	500.7	1,009	161.7	857	178.3	784	74.3	444	40.7
Forsyth	9,295	505.6	1,626	160.3	1,357	165.6	1,365	74.0	707	38.4
Guilford	13,070	550.8	2,169	165.4	2,130	203.9	1,809	79.7	1,129	47.8
Mecklenburg	17,679	494.5	3,452	170.0	2,788	173.7	2,089	63.6	1501	43.1
Wake	17,150	512.2	3,303	172.5	2,848	189.2	1,912	63.4	1335	41.7

Source: 2005-2009 Cancer Incidence Rates-North Carolina Central Cancer Registry, 01/2012

Asthma Hospital Discharges (Total & Ages 0-14) Per 100,000 Populations

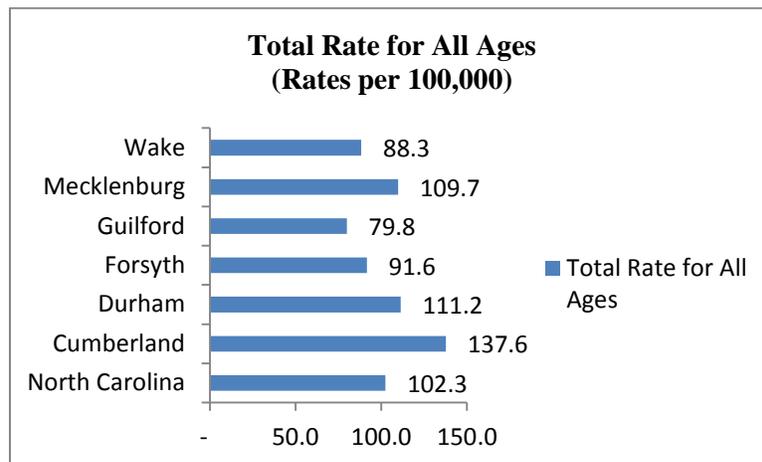
2011

Asthma is a chronic breathing disorder and a common health problem amid children according to the Centers for Disease Control. Children often experience recurrent episodes of coughing, wheezing, and shortness of breath, which could be life threatening. Realizing the importance of administering medication to a child in need as prescribed by a physician, Cumberland County's School System adopted a policy to allow school personnel to administer asthma medications during instruction time as needed. The School Health Advisory Council hosts An Annual Asthma Campaign supported by the Medical Community targeting children 0-14 years of age.

Key Findings:

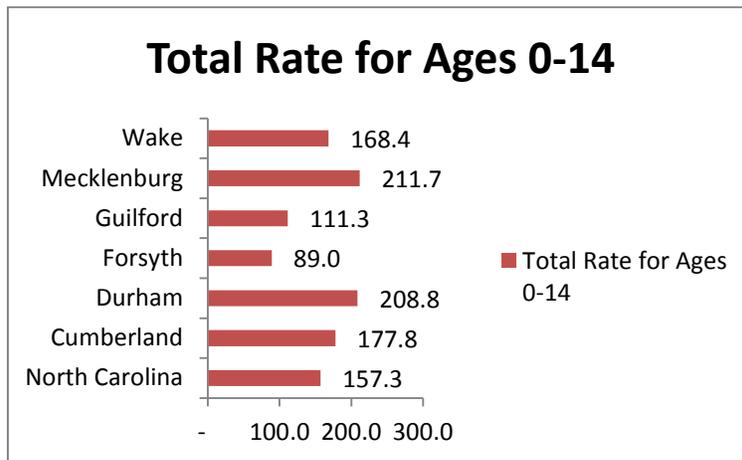
During the period of 2011, Cumberland County's total asthma rate of 137.6 was higher than the State's total asthma rate of 102.3. When comparing Cumberland County to peer counties Cumberland County's total asthma rate of 137.6 was:

- ✚ 23.7% higher than Durham County
- ✚ 50.2% higher than Forsyth County
- ✚ 72.4% higher than Guilford County
- ✚ 25.4% higher than Mecklenburg County
- ✚ 55.8% higher than Wake County



During the period 2011, Cumberland County’s asthma rate of 177.8 for ages 0-14 was higher than the State’s asthma rate of 157.3 for ages 0-14. When comparing Cumberland County to peer counties Cumberland County’s asthma rate of 177.8 for ages 0-14 was:

- ✚ 14.8% lower than Durham County
- ✚ 99.8% higher than Forsyth County
- ✚ 59.7% higher than Guilford County
- ✚ 16.0% lower than Mecklenburg County
- ✚ 5.6% higher than Wake County



2011 ASTHMA HOSPITAL DISCHARGES (Total and for ages 0-14)

Residence	TOTAL RATE	RATE AGES 0-14
Cumberland	137.6	177.8
Durham	111.2	208.8
Forsyth	91.6	89.0
Guilford	79.8	111.3
Mecklenburg	109.7	211.7
Wake	88.3	168.4
State	102.3	157.3

Source: www.schs.state.nc.us/schs/data/databook/2013

2011 INPATIENT HOSPITAL DISCHARGE RATE PER 1,000 POPULATIONS

DIAGNOSTIC CATEGORY	TOTAL CASES	DISCHARGE RATE (PER 1,000 POP)	AVERAGE DAYS STAY	DAYS STAY RATE (PER 1,000 POP)	TOTAL CHARGES	AVERAGE CHARGE PER DAY	AVERAGE CHARGE PER CASE
INFECTIOUS & PARASITIC DISEASES	2,190	6.7	10.8	72.5	\$146,325,443	\$6,215	\$66,846
-- Septicemia	1,712	5.3	12.0	63.2	\$130,186,492	\$6,339	\$76,044
-- AIDS	58	0.2	13.8	2.5	\$4,456,401	\$5,571	\$76,835
MALIGNANT NEOPLASMS	832	2.6	8.3	21.2	\$47,643,938	\$6,913	\$57,333
-- Colon, Rectum, Anus	91	0.3	8.5	2.4	\$5,138,710	\$6,648	\$56,469
-- Trachea, Bronchus, Lung	146	0.4	8.7	3.9	\$8,560,116	\$6,730	\$58,631
-- Female Breast	38	0.1	7.8	0.9	\$1,772,400	\$5,988	\$46,642
-- Prostate	65	0.2	3.0	0.6	\$2,325,843	\$11,927	\$35,782
BENIGN, UNCERTAIN & OTHER NEOPLASMS	265	0.8	4.0	3.3	\$9,059,238	\$8,530	\$34,186
ENDOCRINE, METABOLIC & NUTRIT. DISEASES	1,591	4.9	5.4	26.5	\$49,512,353	\$5,747	\$31,159
-- Diabetes	867	2.7	6.5	17.4	\$30,798,165	\$5,464	\$35,564
BLOOD & HEMOPOETIC TISSUE DISEASES	511	1.6	4.8	7.5	\$15,183,518	\$6,254	\$29,772
NERVOUS SYSTEM & SENSE ORGAN DISEASES	616	1.9	5.0	9.6	\$18,883,051	\$6,085	\$30,654
CARDIOVASCULAR & CIRCULATORY DISEASES	5,427	16.7	5.5	92.5	\$264,961,863	\$8,821	\$48,823
-- Heart Disease	3,436	10.6	5.7	60.3	\$186,005,328	\$9,496	\$54,134
-- Cerebrovascular Disease	980	3.0	5.4	16.2	\$39,110,914	\$7,423	\$39,909
RESPIRATORY DISEASES	2,863	8.8	7.9	69.8	\$121,386,470	\$5,354	\$42,398
-- Pneumonia/Influenza	800	2.5	5.8	14.2	\$25,880,459	\$5,608	\$32,351
-- Chronic Obstructive Pulmonary Disease	1,135	3.5	4.2	14.8	\$29,336,024	\$6,099	\$25,847
DIGESTIVE SYSTEM DISEASES	2,686	8.3	5.1	42.1	\$85,776,017	\$6,266	\$31,934
-- Chronic Liver Disease/Cirrhosis	69	0.2	7.1	1.5	\$3,071,525	\$6,281	\$44,515
GENITOURINARY DISEASES	1,498	4.6	5.0	23.3	\$40,819,152	\$5,398	\$27,249
-- Nephritis, Nephrosis, Nephrotic Synd.	639	2.0	6.2	12.2	\$20,811,425	\$5,245	\$32,569
PREGNANCY & CHILDBIRTH	4,196	12.9	2.8	36.6	\$58,859,196	\$4,956	\$14,027
SKIN & SUBCUTANEOUS TISSUE DISEASES	512	1.6	8.0	12.6	\$17,444,249	\$4,257	\$34,071
MUSCULOSKELETAL SYSTEM DISEASES	1,517	4.7	4.5	21.2	\$73,641,727	\$10,684	\$48,544
-- Arthropathies and Related Disorders	815	2.5	3.6	8.9	\$36,660,221	\$12,646	\$44,982
CONGENITAL MALFORMATIONS	115	0.4	8.7	3.1	\$7,697,326	\$7,705	\$66,933
PERINATAL COMPLICATIONS	131	0.4	8.9	3.6	\$5,619,864	\$4,816	\$42,900
SYMPTOMS, SIGNS & ILL-DEFINED CONDITIONS	1,222	3.8	3.5	13.1	\$29,963,216	\$7,063	\$24,520
INJURIES & POISONING	2,344	7.2	6.5	46.8	\$113,527,808	\$7,469	\$48,578
OTHER DIAGNOSES (INCL. MENTAL DISORDERS)	2,572	7.9	9.3	73.4	\$68,919,046	\$2,890	\$26,796
ALL CONDITIONS	31,088	95.7	6.0	578.5	\$1,175,223,473	\$6,254	\$37,818

www.schs.state.nc.us/SCHS/data/databook -2013

The County's total inpatient hospital days stay rate of 578.5 was higher than the state rate of 489.8.

The County's total inpatient hospital discharge rate of 95.7 was slightly lower than the state rate of 100.3.

The County's total inpatient hospital average charge of \$37,818 per case was higher than the state average charge of \$27,683.

Changes since the 2010 CHA

- The total gonorrhea rate was 3.8% lower from 2006-2010 than from 2004-2008 (2010 Community Health Assessment [CHA]).
- The total syphilis rate was 15.8% higher from 2006-2010 than from 2004-2008 (2010 CHA).
- The total AIDS rate was 75.4% lower from 2007-2011 than from 2005-2009 (2010 CHA).
- The total cancer incidence rate was 5.7% higher from 2005-2009 than from 2002-2006 (2010 Cha).
- The breast cancer incidence rate was 8.3% higher from 2005-2009 than from 2002-2006 (2010 CHA).
- The prostate cancer incidence rate was 7.9% lower from 2005-2009 than from 2002-2006 (2010 CHA).
- The lung cancer incidence rate was 5.4% higher from 2005-2009 than from 2002-2006 (2010 CHA).
- The colon cancer incidence rate was 13.6% % lower from 2005-2009 than from 2002-2006 (2010 CHA).
- The total asthma hospital rate was 9.0% higher from 2011 than from 2008 (2010 CHA).
- The asthma rate for ages 0-14 was 34.60% higher from 2011 than from 2008 (2010 CHA).

Health Indicator	2010 CHA	2013 CHA
Total Gonorrhea Rate	339.6	326.8
Total Syphilis Rate	3.8	4.4
Total AIDS Rate	13.8	3.4
Total Cancer Rate	470.9	497.8
Breast Cancer	144.4	156.4
Prostate Cancer	153.1	141.0
Lung Cancer	77.6	81.8
Colon Cancer	53.6	46.3
Total Asthma Hospital Rate	126.2	137.6
Asthma Rate ages 0-14	132.1	177.8

There appears to be a fluctuation in the sexually transmitted infection (STI) rates and in the cancer incidence rates. The STI rates may be increasing because Cumberland County is a very transient county and a young county. The median age is 31 years. Youth are more likely to become sexually active. Also, some STI rates may be decreasing because the agency started marketing the clinic services for HIV/AIDS and STIs on the community channel. The more people know about the availability and accessibility of clinical services, the more likely they are to come in for screening and testing. The increase in cancer incidence rates may be linked to shrinking state and federal funds for cancer screenings.

Influenza

Influenza (the flu) is a contagious respiratory illness caused by influenza viruses. It can cause mild to severe illness, and at times can lead to death. The safest, most effective way to prevent the flu is to get vaccinated. The Centers for Disease Control recommends that everyone 6 months and older get their yearly flu vaccine.

In addition to vaccination, you can prevent flu and other illness by:

- Covering coughs and sneezes with a tissue and then discarding the tissue promptly
- Washing hands frequently with soap and water. If they are not available, use an approved hand sanitizer.
- Staying home when you are sick. www.epi.publichealth.nc.gov/cd/diseases/flu.htm/

According to the 2012 Behavioral Risk Factor Surveillance Survey (BRFSS), when asked “during the past 12 months have you had either a seasonal flu shot or flu vaccine spray” 44.0% of Cumberland County residents reported receiving the flu shot/spray, and 56.0 % reported they did not receive the flu shot/spray. According to the survey results, 41.9% of respondents statewide responded yes and 58.1% responded no.

Residence	Total Respond	% Responded Yes	% Responded No
State	11,642	41.9	58.1
Cumberland	440	44.0	56.0

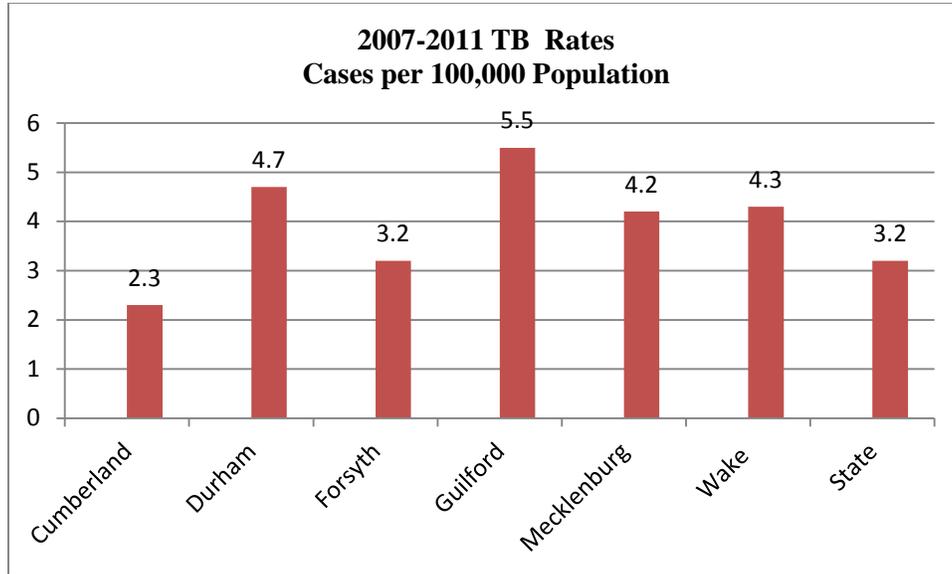
Tuberculosis (TB) Rates-2007-2011

Tuberculosis (TB) is a disease caused by bacteria that can damage the lungs or other parts of the body like the spine, lymph nodes or kidneys. If not treated properly, TB disease can be fatal.

TB is spread through the air from one person to another when a person with active TB disease of the lungs or throat coughs, sneezes, speaks or sings. People nearby may breathe in these bacteria and become infected. www.epi.publichealth.nc.gov/cd/diseases/tb.html

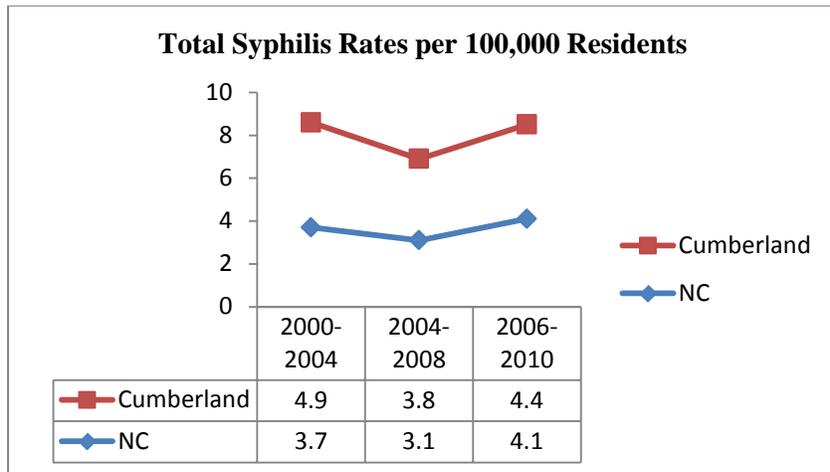
During the period, 2007-2011, Cumberland County’s TB rate of 2.3 cases per 100,000 was slightly lower than the State’s TB rate of 3.2 cases. When comparing Cumberland County to peer counties, Cumberland County’s TB rate of 2.3 was lower than all peer counties. See chart.

TB Rates, 2007-2011, per 100,000 cases



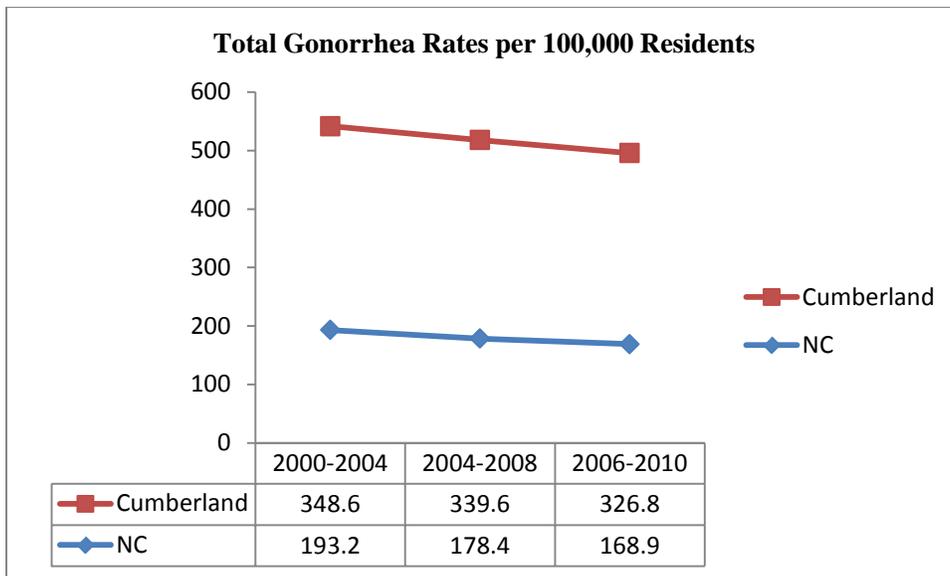
Source: www.healthstats.publichealth.nc.gov/indicator

Trends



Observations:

- Over a fifteen year period, Cumberland County’s syphilis rate continues to exceed the State syphilis rate. For a ten year period, Cumberland County’s syphilis rate declined, but increased from 2006-2010. The State had a similar trend.



Observations:

- Over a fifteen year period, Cumberland County’s gonorrhea rates have declined, but continue to surpass the State’s gonorrhea rates.

Health Disparities: Race

Syphilis:

Cumberland County's African American syphilis rate was significantly higher than the White syphilis rate and Hispanic syphilis rate.

Cumberland County's African American syphilis rate was lower than the State's African American syphilis rate.

Residence	Total Rate	White Rate	Afr. Am. Rate	Other	Hispanic
Cumberland	4.4	1.4	9.5	1.5	0.9
State	4.1	1.4	13.8	1.1	1.9

Gonorrhea:

Cumberland County's African American gonorrhea rate is extremely higher than the White gonorrhea rate and the State's gonorrhea rate.

Cumberland County's Hispanic gonorrhea rate is lower than the White gonorrhea and African American gonorrhea rate.

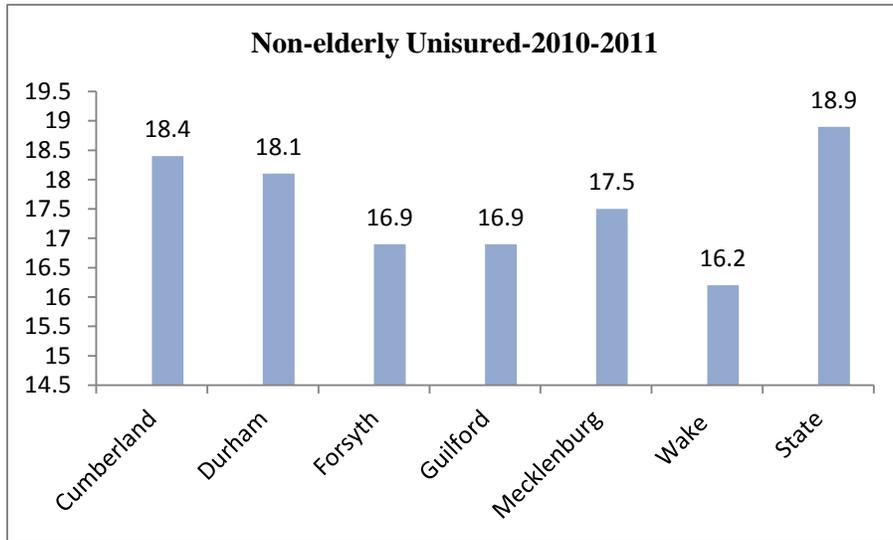
Residence	Total Rate	White Rate	Afr. Am. Rate	Other	Hispanic
Cumberland	326.8	157.6	626.4	152.7	80.7
State	168.9	52.9	581.6	96.7	54.2

**Population without Insurance
Uninsured Estimates 2010-2011**

It's more difficult to get health care without health insurance. Lack of insurance usually means either delayed health care or no health care, which basically means that the health condition worsens by the time an uninsured person receives health care for their illness or health condition. The percentage of Cumberland County residents under age sixty-five (0-64 years) who did not have health insurance was 18.4% (58,000 residents). For ages 0-18 years, 8.6 % (9,000 residents) did not have health insurance and 22.8% (50,000) of Cumberland County residents ages 19-64 years did not have health insurance.

Total Uninsured (ages 0-64)		Children (ages 0-18)		Adult (ages-19-64)	
Number	Rate	Number	Rate	Number	Rate
58,000	18.4%	9,000	8.6%	50,000	22.8%

Cumberland County Uninsured compared the state and peer counties:



www.nciom.org

Key Findings:

During the period 2010-2011, 18.4% of Cumberland County residents were uninsured compare to 18.9% of the State. There was not a big difference in Cumberland County's rate and peer counties.

Ninety-four percent of Community Health Assessment (CHA) respondents had some form of health insurance.

Seventy-one percent of CHA respondents reported having insurance in the 2010 CHA survey.

**Health Care
Health Care Resources
(2011 Active Health Professionals)**

Cumberland County reported 544 non-federal physicians, 203 federal physicians, 2,895 registered nurses, 136 dentists and 189 dental hygienists that were active in their profession. There were 16.6 physicians per 10,000 populations.

Physicians-Non-Federal	Physicians-Federal	Registered Nurses	Dentists	Dental Hygienists
544	203	2,895	136	189

Source: 2011 UNC Sheps Center for Health Services Research

**2008-(2010 CHA)
Active Health Professionals**

Cumberland County reported 510 non-federal physicians, 175 federal physicians, 2,500 registered nurses, 118 dentists and 175 dental hygienists that were active in their profession. There were 16.1 physicians per 10,000 populations.

Physicians-Non-Federal	Physicians-Federal	Registered Nurses	Dentists	Dental Hygienists
510	175	2,500	118	175

Cumberland saw an increase in health professional in 2011 compared to 2008. In 2011 there were 16.6 Physicians per 10,000 populations whereas in 2008 there were 16.1 Physicians per 10,000 populations.

According to 84.8% of CHA survey respondents had a primary care physician.

According to 77.7% of CHA survey respondents had been seen by their primary care physician in the last year.

According to the 2012 BRFSS, 80% county residents reported that they have at least one health care provider.

According to the 2012 BRFSS, 74.9% of county residents reported visiting their doctor for a routine check-up in the past year.

Health Care Services

Anderson Creek Dental Clinic

**6720 Overhills Road
Spring Lake, NC 28390
910-436-3194**

<http://www.firstchoicechc.org/AndersonCreekDental.htm>

Better Health of Cumberland County

**1422 Bragg Blvd
Fayetteville, NC 28301
910-483-7534**

<http://www.betterhealthcc.org>

CARE Clinic

**239 Robeson Street
Fayetteville, NC 28301
910-485-0555**

<http://www.thecareclinic.org>

Carolina Collaborative Community Care, Inc. (4Cs)

**225 Green Street
Fayetteville, NC 28301
910-223-3015**

<http://www.carolinacc.com>

Community Health Interventions and Sickle Cell Agency, Inc.

**2409 Murchison Road
Fayetteville, NC 28301
910-488-6118**

<http://www.communityhealthinterventions.org>

Cumberland County Department of Public Health (Health Department)

**1235 Ramsey Street
Fayetteville, NC 28301 910-433-3600**

<http://www.co.cumberland.nc.us/health>

Cumberland HealthNET

**1235 Ramsey Street
Fayetteville, NC 28301
910-321-7180**

<http://www.cumberlandhealthnet.org>

Stedman Family Dental Center
6540 Clinton Road
Stedman, NC 28391
910-483-3150
<http://www.swhs-nc.org>

Southern Regional Area Health Education Center (SR-AHEC)
1601 Owen Drive
Fayetteville, NC 28304
910-323-1152
<http://southernregionalahec.org>

Vision Resource Center
(located inside the Dorothy Gilmore Recreation Center)
1600 Purdue Drive
Fayetteville, NC 28304
910-483-2719
<http://www.visionresourcecentercc.org>

Wade Family Medical Center
7118 Main Street
Wade, NC 28395
910-483-6694
<http://www.swhs-nc.org>

Cumberland County Department of Social Services (DSS)
1225 Ramsey Street
Fayetteville, NC 28301
910-323-1540
<http://www.dss.co.cumberland.nc.us/>

Cape Fear Valley Health Systems
1638 Owen Drive
Fayetteville, NC 28304
910-615-4000
www.capefearvalley.com

Womack Army Medical Center
Building 4-2817 Reilly Road
Ft. Bragg, NC 28307
910-907-6000
www.wamc.amedd.army.mil

Source: Cumberland County Public Library, July 2012

Community Resources

Utility Assistance:

Alms House
(910)425-0902
(Need picture ID)

Salvation Army
(910) 307-0359

Meal Assistance:

Abney Chapel of Community Service Center
(910) 483-4384

City Rescue Mission
(910) 323-0446

Hands that help Ministry
(910) 237-3390

Salvation Army
(910) 307-0359

Housing Assistance:

Green's shelter for Women
(910) 717-7009

City rescue Mission
(910) 323-0446

Cumberland Interfaith Hospitality Network, Inc.
(910) 826-2454 Ext.22

Fayetteville Metropolitan Housing Authority
(910) 483-6980

Robin's Meadow Apartments
(910) 485-8026

The Salvation Army
(910) 485-8026

Center for Economic Empowerment and Development (CEED)

www.ncceed.org

(910) 323-3377

Crisis Intervention:

Care Family Violet Center

(910) 677-2532

Operation Blessings Crisis Pregnancy Center

(910) 483-1119

Rape Crisis Center

(910) 485-7273

Save the Babies House of Refuge

(910) 486-0057

Drug addiction/Recovery:

Hope Harbor Christian Mission

(910) 424-8800

Myover Reese Fellowship Homes

(910) 486-8718

The Oxford House for Men

(910) 822-1995

The Oxford House for Women

(910) 433-9123

Social Determinants of Health

Social determinants of health are economic and social conditions that influence the health of people and communities. These conditions are shaped by the amount of money, power, and resources that people have. All of which, are influenced by policy choices. Social determinants of health affect factors that are related to health outcomes. Factors related to health outcomes include:

- How a person develops during the first few years of life (early childhood development)
- How much education a person obtains
- Being able to get and keep a job
- What kind of work a person does
- Having food or being able to get food (food security)
- Having access to health services and the quality of those services
- Housing status
- How much money a person earns
- Discrimination and social support

What are determinants of health and how are they related to social determinants of health?

Determinants of health are factors that contribute to a person's current state of health. These factors may be biological, socioeconomic, psychosocial, behavioral, or social in nature. Scientists generally recognize five determinants of health of a population:

- Genes and biology: for example, sex and age
- Health behaviors: for example, alcohol use, injection drug use (needles), unprotected sex, and smoking
- Social environment or social characteristics: for example, discrimination, income, and gender
- Physical environment or total ecology: for example, where a person lives and crowding conditions
- Health services or medical care: for example, access to quality health care and having or not having insurance

Other factors that could be included are culture, social status, and healthy child development.

Addressing social determinants of health is a primary approach to achieving health equity. Health equity is "when everyone has the opportunity to 'attain their full health potential' and no one is 'disadvantaged from achieving this potential because of their social position or other socially determined circumstance'". (Centers for Disease Control and Prevention).

(www.cdc.gov/socialdeterminants/FAQ.html)

Chapter 5: Prevention and Health Promotion

We are currently dealing with an enormous economic downfall that's having a major impact on state and county government. Local and state agencies are asked to reduce or cut funds, which will impact health services provided to our communities further down the road.

Although budgetary constraints and depleting resources offers some challenges for Cumberland County, through collaborative efforts with partners and local agencies, Cumberland County continues to provide a quality service to the community.

The statewide health promotion funding was drastically reduced in 2009, which caused the North Carolina Department of Public Health (NCDPH) to broaden its community partnerships.

Currently the NCDPH partners with community-based organizations to provide diabetes education, HIV/AIDS prevention education, teen pregnancy prevention, nutrition/physical activity programs, and tobacco cessation programs.

Additional funding is need to purchase HIV screening kits, incentives to encourage community participation, evidence-based curriculums, and education materials.

The funding was also a challenge when the 2010 CHA was conducted.

Chapter 6: Community Concerns/Priorities:

Health Priorities:

After the CHA work and advisory groups reviewed and discussed the data obtained from the surveys, local and state data eight health problems were identified: obesity, heart disease, chronic disease, teen pregnancy, lack of physical activity, diabetes, infant mortality, and sexually transmitted diseases. To start the prioritizing process, a brief summary of the assessment findings was presented to the advisory and work groups and community members. Participants were given a list of the eight health concerns identified, and asked to rank them as to what problem they wanted to see changed first, second, etc. Participants were given a health problem work sheet with a short summary of the data findings and the criteria for the rating the health problems: (1) Magnitude, (2) Seriousness of the Consequences, (3) Feasibility of Correcting, (4) Community and Financial Resources and (5) Existing Partnerships. The participants were asked to score each problem one to ten with ten being the highest. The scores were tallied and the health problem with the highest number was selected by descending order. The following health problems were selected:

- Reduce the Burden of Chronic Diseases
- Lack of Physical Activity
- Reduce Sexually Transmitted Infections
- Teen Pregnancy Prevention

Next Steps:

Distribution Plan

A final copy of the CHA document will be forwarded to the NC Community Health Assessment, Local Technical Assistance and Training Branch. Copies of the final CHA report will be distributed to the following:

Health Director and Senior Management Team

The Board of Health

County Manager

Advisory Committee

CHA Work Group

Cumberland County Main Library

Internet (the complete CHA report will be posted on the Cumberland County Health Department website)

Media (A press release of the CHA findings will be sent to the local media, and the website will be listed to get a copy of the full CHA report)

Early in 2014, the CHA work group will begin work on action plans to address health problems that were selected.

APPENDIX

Cumberland County Health Department Community Survey

According to the 2010 Census conducted by the U.S. Census Bureau, the population of Cumberland County is 319,431 with a median age of 31 years. Females make up about 52% of this population. The racial composition of this county is comprised of Whites at 51.4%; blacks at 36.7%; Native Americans at 1.6%; Asians at 2.2% and some other race at 3.1. The Hispanic population in Cumberland County stands at 9.5% as of 2010.

A community survey to assess the health of this population was conducted jointly by the Cumberland County Health Department and the Cape Fear Valley Health System. These agencies collaborated with several community agencies and organizations to complete the 2013 Community Needs Health Assessment. The purpose of this assessment was to gather information about the health and quality of the community. The information from these surveys will be used to develop a Community Health Needs Assessment Report that will be published and available for the community to review. This survey measures perceptions and attitudes of Cumberland County residents towards a variety of health and allied health issues that impact their lives.

Methodology

Primary data regarding community health and health perceptions was collected using web based surveys. The survey questionnaire was modeled after the Bladen County Survey Questionnaire for the Community Health Assessment conducted in Bladen County. Upon finalizing the survey questions to be included in the 2013 Community Health Assessment, the questions were entered into the web based survey software "Survey Monkey". The link to the survey was extensively distributed at the Cape Fear Valley Health System among the employees; to patients at the satellite clinics, to visitors and patients at the Cumberland County Health Department and staff at the Health Department. A target group list was developed to which the survey link would be distributed. This target included the following agencies:

1. Better Health for Cumberland County
2. Care Clinic
3. Carolina Collaborative Community Care (4C)
4. Cape Fear Valley Health System Clinic Patients & Employees
5. City of Fayetteville
6. County Emergency Services
7. Cumberland County Department of Health Clinics and Staff
8. Cumberland County Department of Social Services Staff
9. Cumberland County Government/Public Library/Schools/Sheriff's Office
10. Fayetteville City Police Department
11. Fayetteville Fire Department and Emergency Management

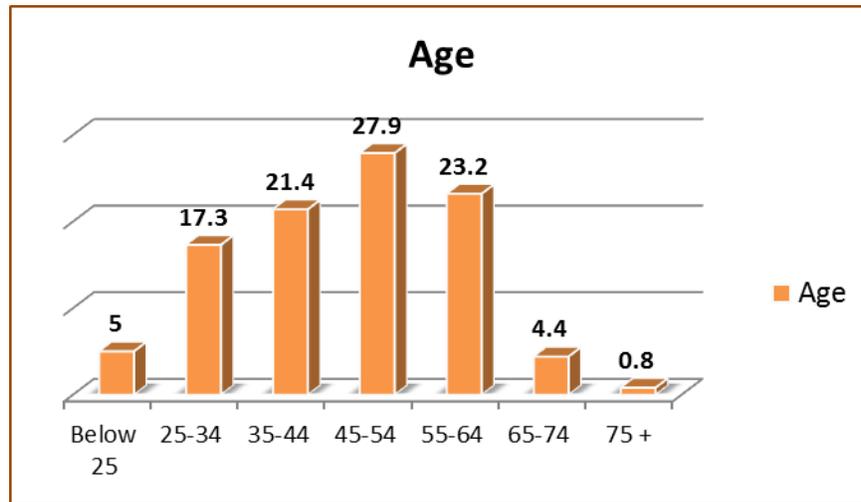
12. Fayetteville State University
13. Fayetteville Technical Community College Staff/Students
14. Fort Bragg Public Affairs Office
15. Methodist University
16. Public Works Commission (Fayetteville)
17. Southern Regional AHEC Family Medicine Center Patients
18. Staff Emergency Management
19. United Way
20. Veteran's Affairs Hospital, Fayetteville
21. Womack Army Medical Center

An email with a link to the survey was mailed out to the respondents and it contained the following information "The Cumberland County Department of Public Health and Cape Fear Valley Health System are currently collaborating with several other community agencies and organizations to complete the 2013 Community Needs Health Assessment. The purpose of the survey is to gather information about the health and quality of the Cumberland County community. The information will be used to identify needs, concerns and health problems per community opinion. A community health needs assessment report and action plans will be developed based on the survey data and additional data pulled from state databases. Please distribute the link within your organization and request survey participation by February 25, 2013."

In instances where web based surveys could not be used, Community Health Assessment Advisory group members circulated paper copies of the questionnaire and the responses were manually entered into the web based software. A total of 1751 respondents responded to the survey. The survey was kept available for approximately one month. After this period, the responses were downloaded in SPSS (Statistical Package for Social Sciences) and analyzed using this software. The major portion of the analysis included descriptive and bivariate analysis such as frequencies and cross tabulation. Results for all variables included are presented below.

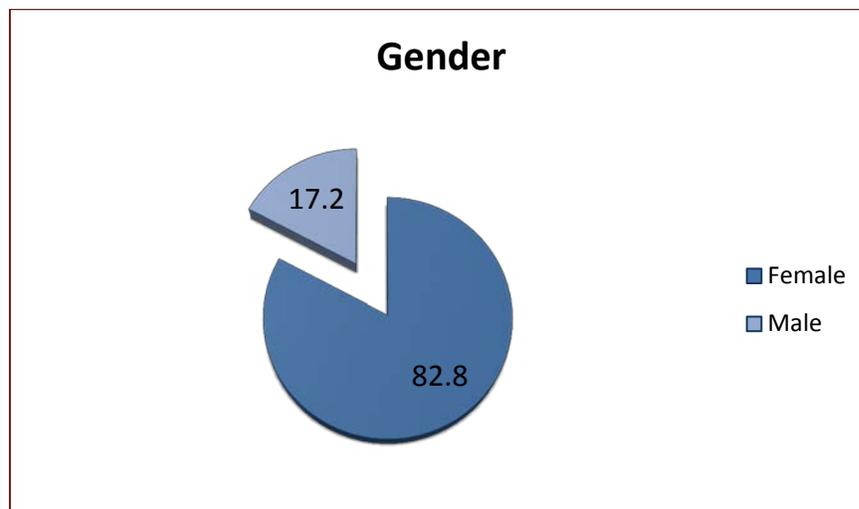
Demographic Information of Respondents

1. My Age is:



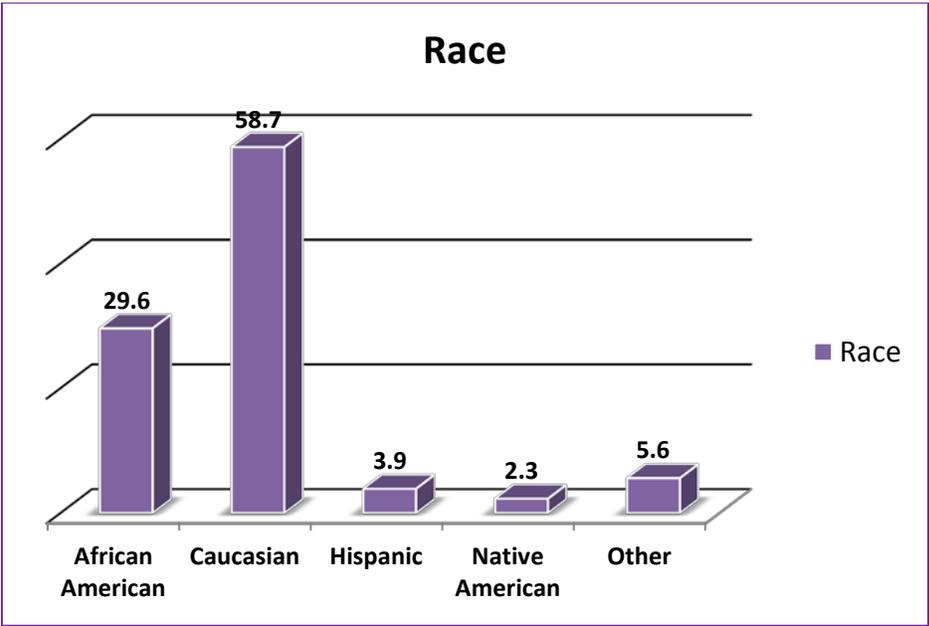
The majority, 28% of respondents were in the age group of 45-54 years followed by 23% respondents in the age group of 55-64 years. One percent (1%) of the group was made up of individuals 75 years of age or older.

2. Sex/Gender



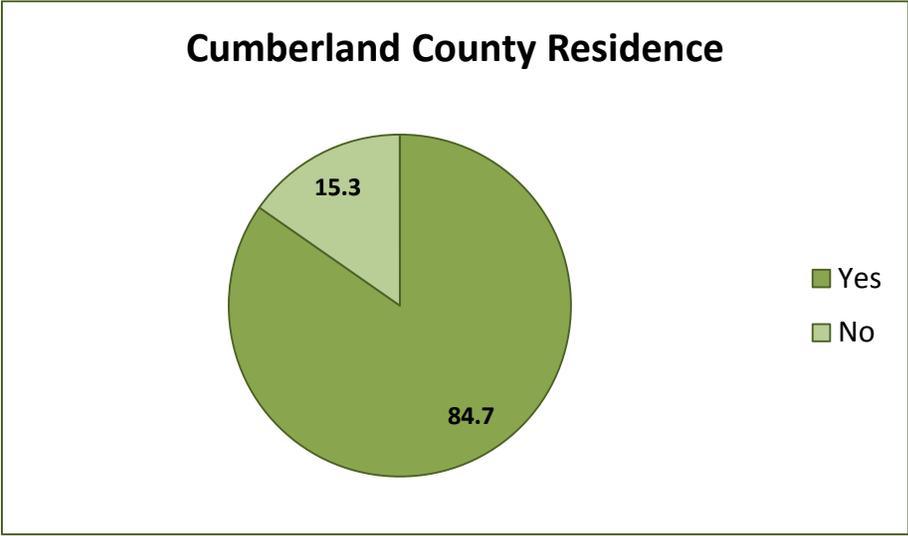
The majority of the respondents, about 83% were female; 17% of the sample was male respondents.

3. Race/Ethnicity



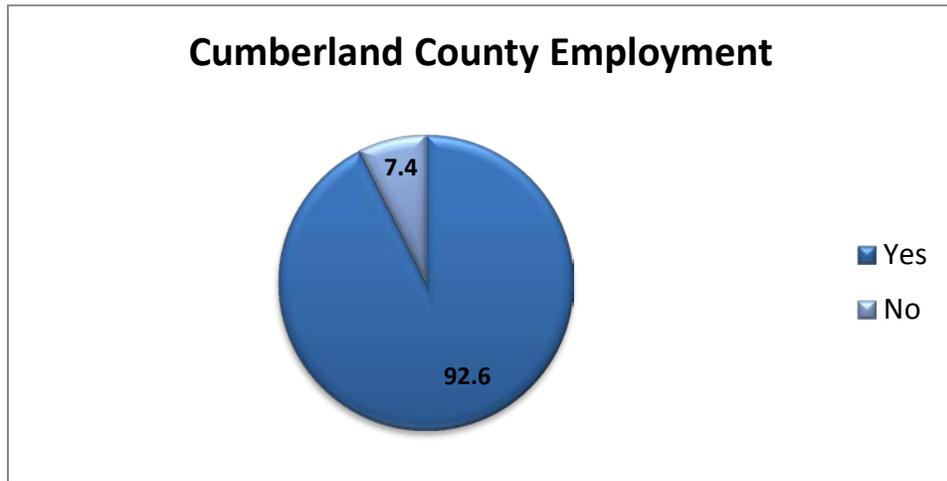
The largest racial group in this web based sample was that of the Caucasians (59%) followed by African American at 30%. Other racial categories were much smaller.

4. I live in Cumberland County



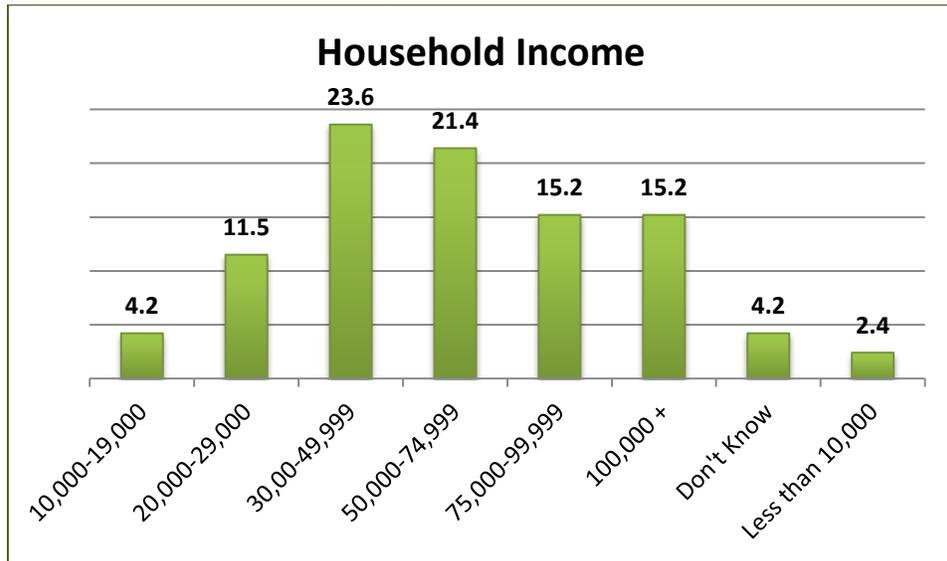
Eighty-five percent (85%) of the sample was residents of Cumberland County, North Carolina. About 15% were residents of counties other than Cumberland.

5. I work in Cumberland County



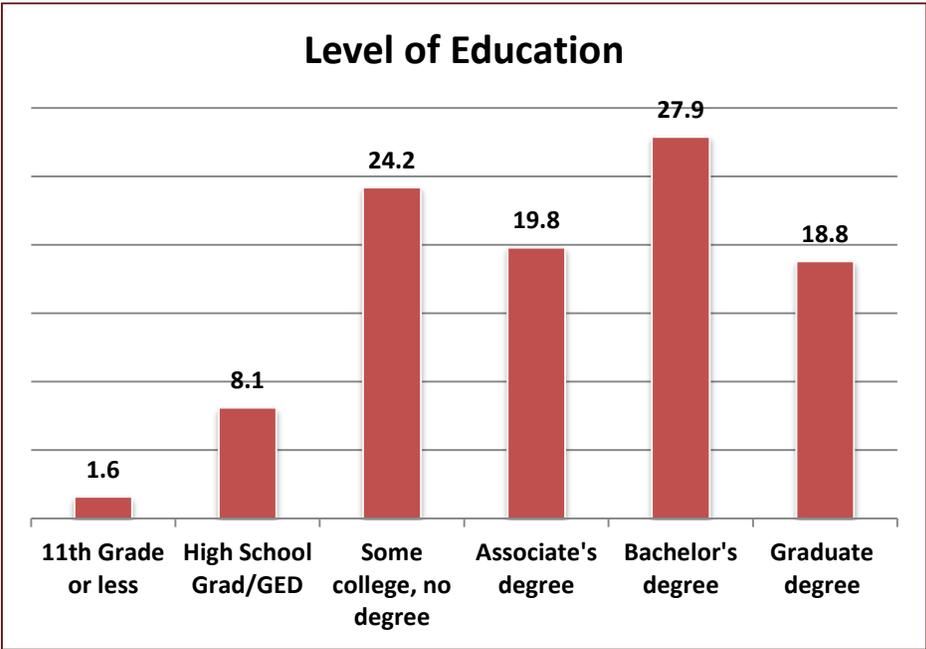
Most of the sample i.e. 93% was employed within Cumberland County. About 7% (residents and non-residents) of the sample had employment outside of the county.

6. My Household Income in last year was:



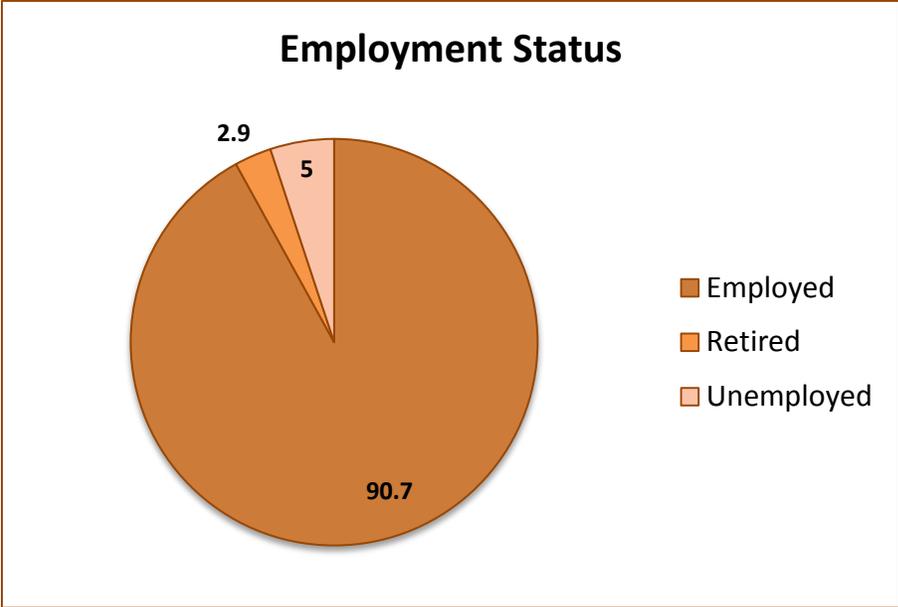
The income distribution among the sample was fairly well spread out. In this web based sample, the highest income category was families with annual income between \$30,000-49,999 per annum (24%); this was followed by families with income between \$50,000-74,999 (21%). 30% of families had income of \$75,000 or above.

7. The highest level of education that I have completed is:



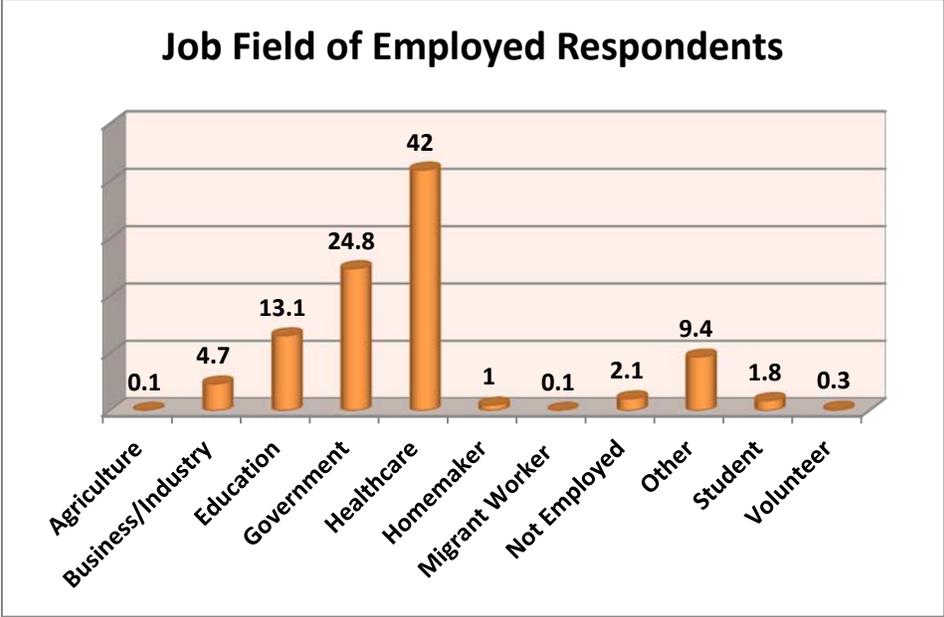
Thirty-seven percent (37%) of the sample consisted of individuals who had a High School Diploma or GED; 20% had an Associate’s degree and about 11% had less than a High School Diploma. Cross tabulation of education by gender showed very little variation. Levels of education for both males and females were similar.

8. Employment Status (I am?)



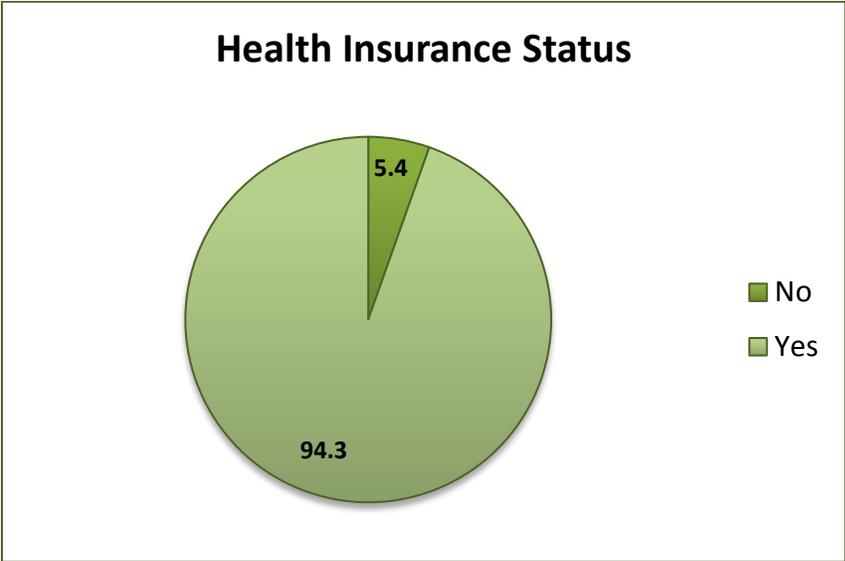
About 10% of the sample was either retired or unemployed.

9. My job field is best described as:



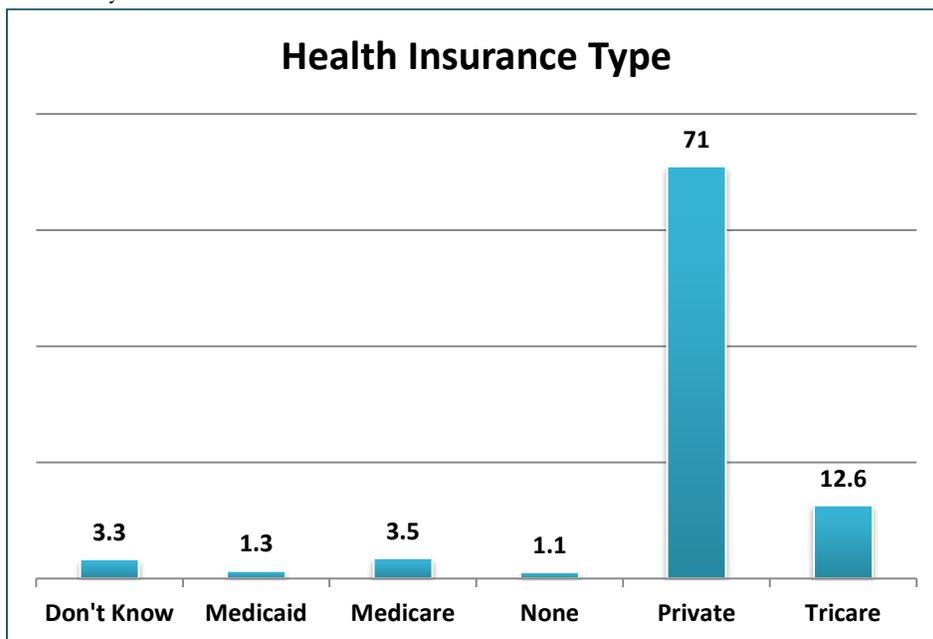
Most of the sample respondents were employed in the healthcare sector (42%) followed by government (25%).

10. Do you have Health Insurance?



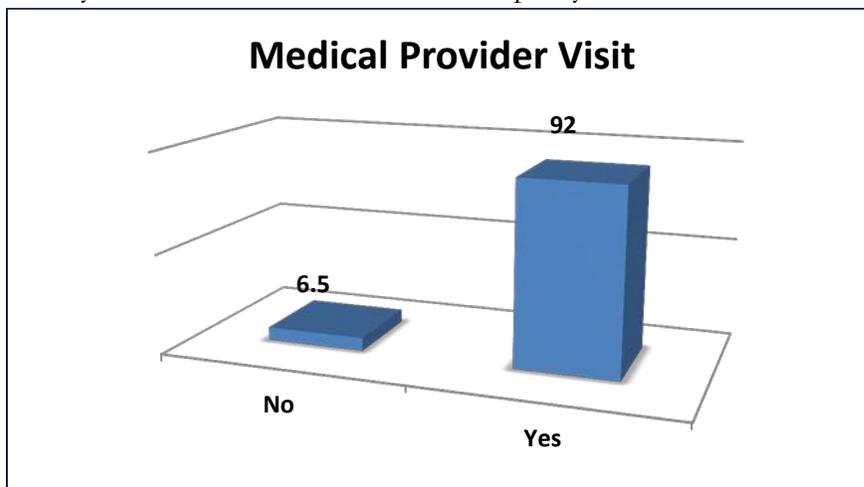
The majority of the sample (94%) had some form of health insurance. Cross tabulation showed that females had slightly higher (approx. 2%) rates of having health insurance as compared to males. (According to North Carolina Institute of Medicine (NCIOM) in 2011, 18% of the population in Cumberland County was uninsured http://www.nciom.org/wp-content/uploads/2010/08/County-Level_Estimates_10-11.pdf)

11. What is your Health Insurance?



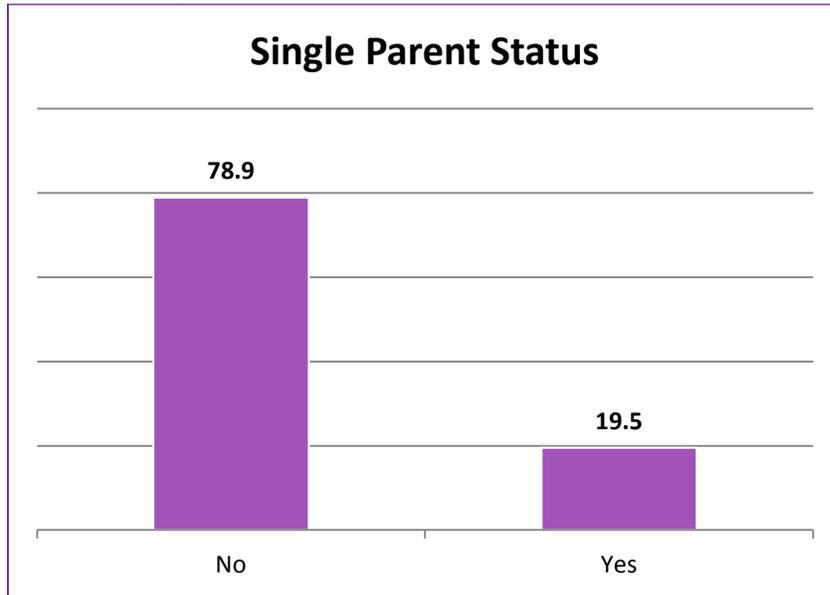
Of the insured sample, the largest proportion had private insurance; about 13% had Tricare.

12. Have you seen a Medical Provider in the past year?



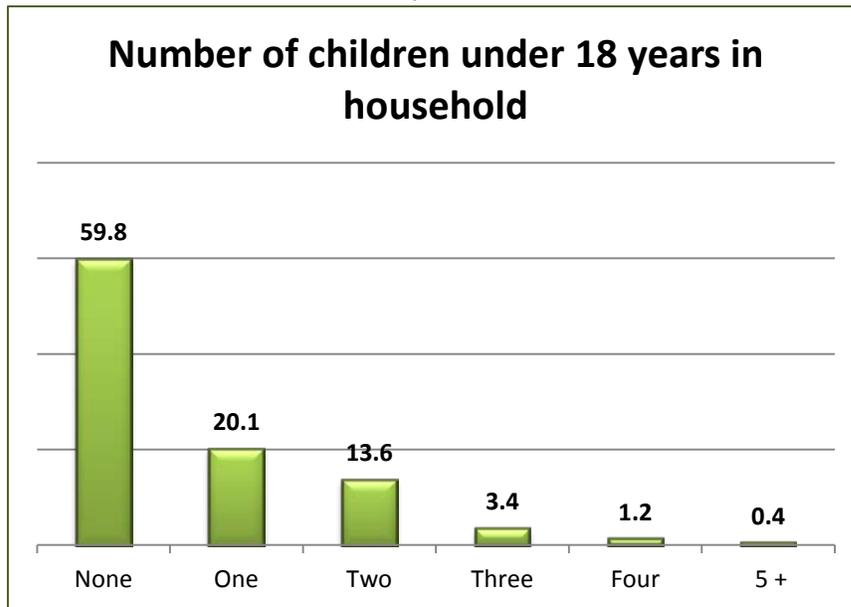
Ninety-two percent (92%) of respondents had seen a medical provider in the past year. Cross tabulation showed that a significantly higher number of females responded positively to this question. Ninety-three percent (93%) females had seen a medical provider in the past year compared to 86% males.

13. Are you a Single Parent?



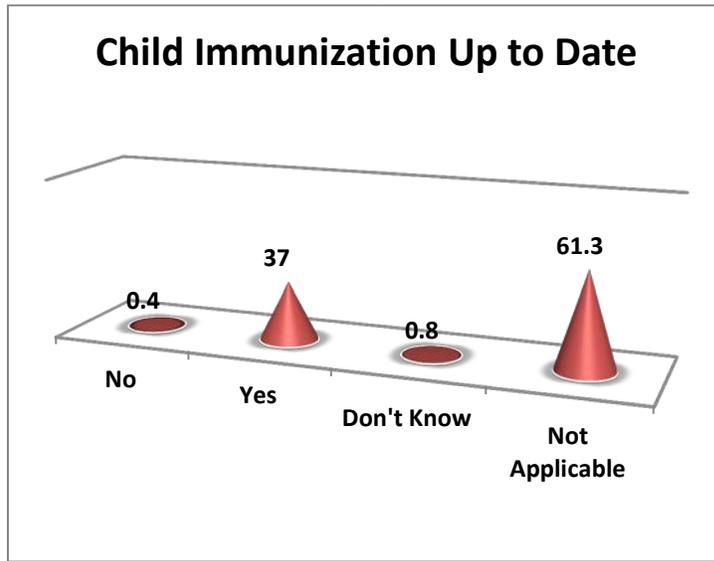
Twenty percent (20%) of the sample claimed single parent status. Cross tabulation results demonstrated that 22.4% females were single parents as compared to 6% males. Cross-tabulation with race showed that the highest percentage of single parents were within the category of African-American (32%), followed by Native American (25%).

14. Number of children under 18 in your household



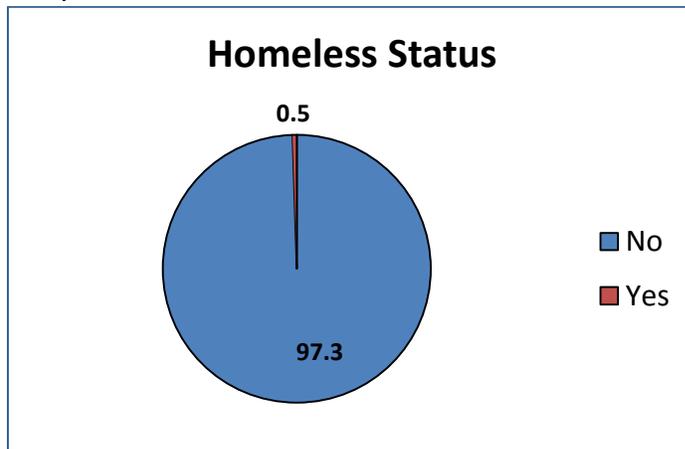
Almost 60% of sample did not have children under the age of 18 living in their household.

15. Are children immunizations up to date?



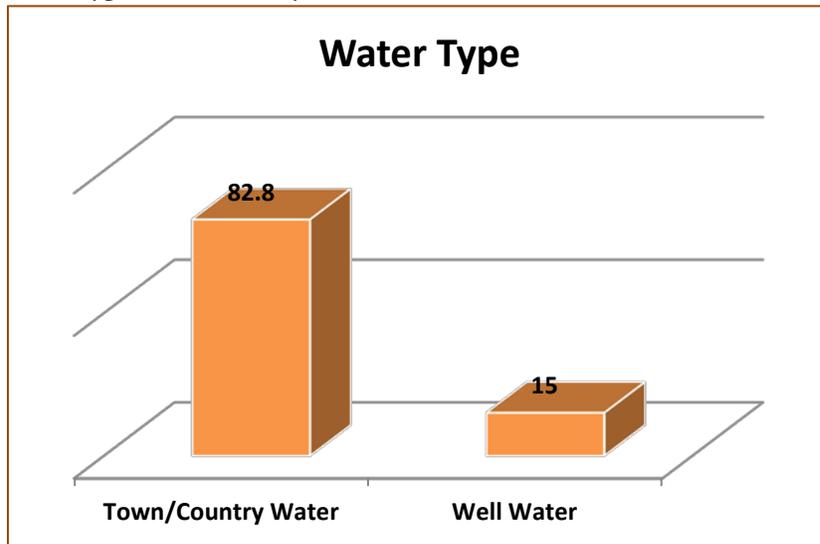
In the survey questionnaire, this was a contingent question based on responses to the previous question. As the majority of the sample did not have children under the age of 18, "Not Applicable" is the response for those individuals. Among those who did have children under the age of 18, the majority had immunizations up to date with about 1% not up to date. Cross tabulations showed that the Hispanic race category had the highest compliance with child immunizations at 61%.

16. Are you Homeless?



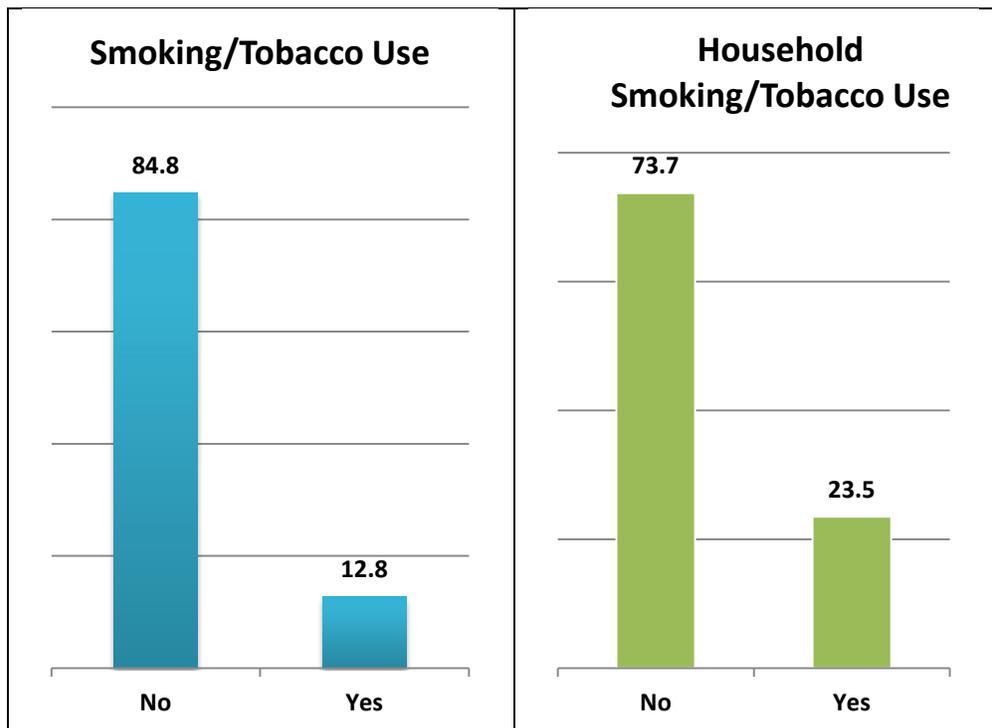
A very small proportion (0.5%) of the sample claimed homeless status.

17. What type of water do you have?



For the majority of respondents, the source of water supply was either town/country water.

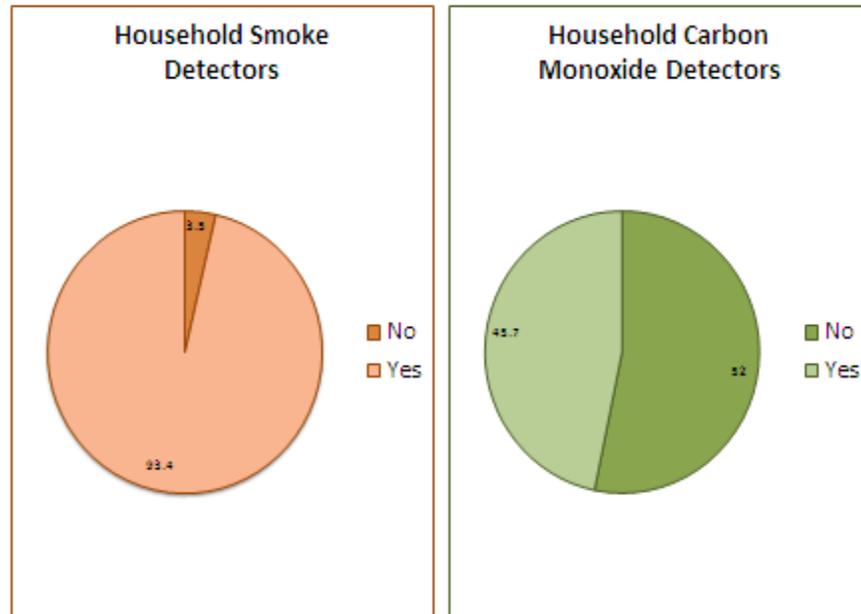
18. Do you/anyone in your household smoke or use tobacco products?



A larger proportion of the sample did not smoke or use tobacco products (85%). 13% smoked or used other tobacco products. About 24% of the responses indicated that there was tobacco use or smoking in the household. Cross tabulation demonstrated that a greater percentage of males (17%) smoked

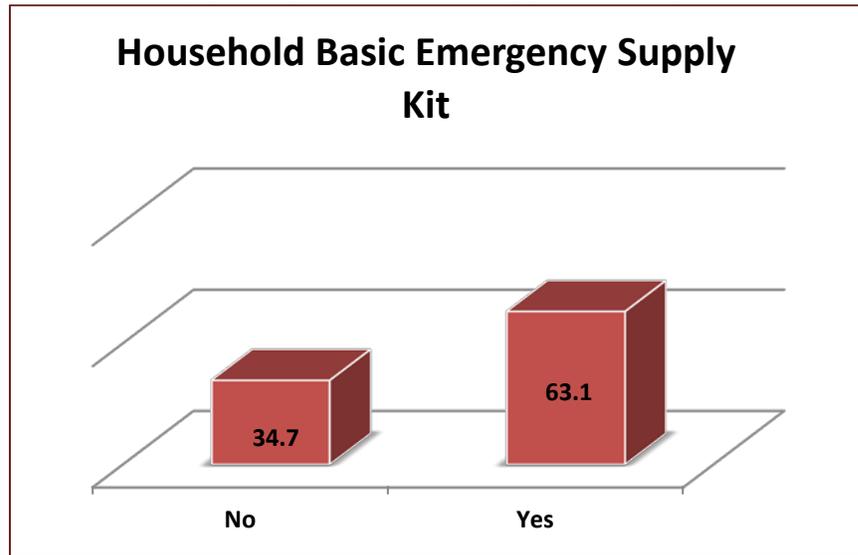
compared to females (12%). Among the age categories, the Under 25 year's category had the highest percentage of smokers at 18.2%. Among the races, Caucasians had the highest smoking rate at 16%, followed closely by the Native Americans at 15%; Hispanics were ranked lowest at 9%. Household tobacco use was highest among Native Americans at 28%, followed by Caucasians at 27%.

19. Does your household have working smoke detectors and working carbon monoxide detectors?



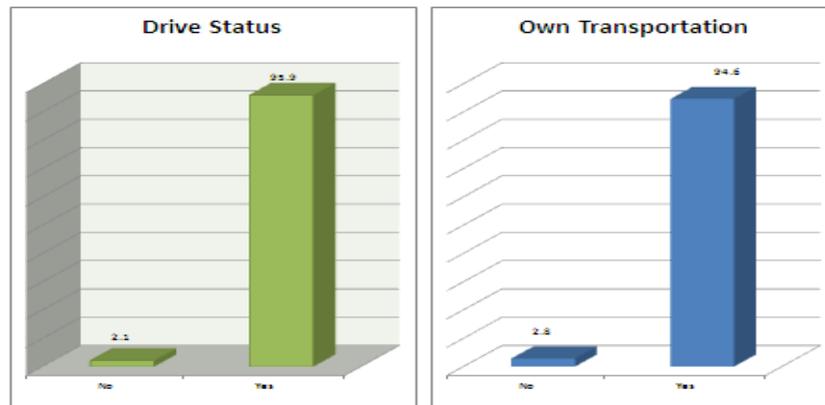
A larger percentage had smoke detectors (93.4%) compared to household carbon monoxide detectors (46%). Fifty-two percent (52%) of the sample did not have household carbon monoxide detectors.

20. Does your family have a basic emergency supply kit? i.e. (water, non-perishable food, necessary prescriptions, first aid supplies, flashlight/batteries etc.)



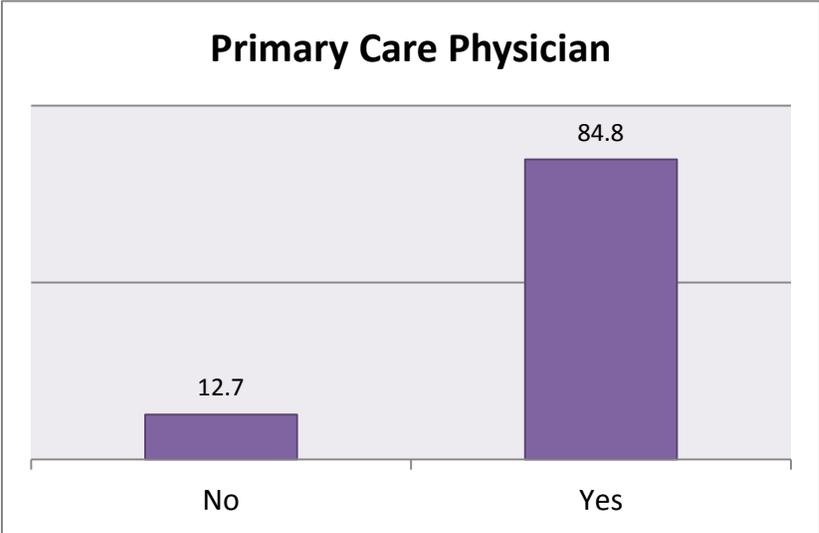
About 35% of respondents claimed that they did not have a household basic emergency supply kit.

21. Do you drive and Do you have your own transportation?



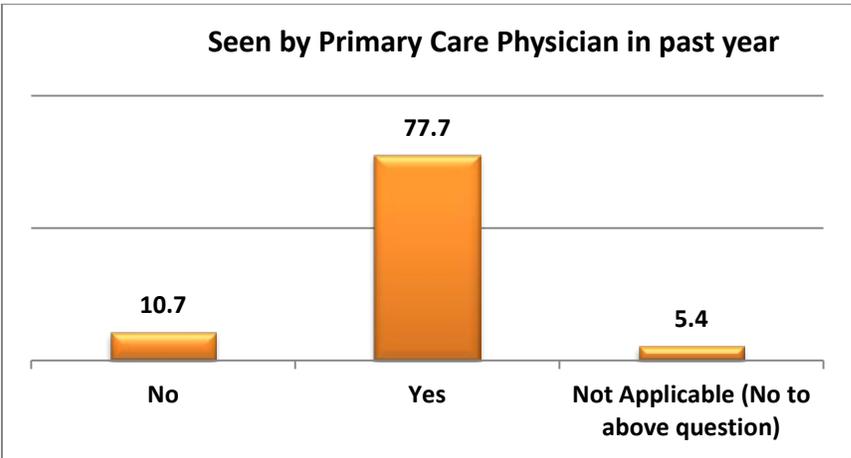
This chart depicts both the status of vehicle ownership and drive status. (Ninety-five percent (95%) of respondents owned their own means of transportation and 96% of respondents drove a vehicle. Cross tabulations demonstrated that 6% Hispanics did not drive followed by African Americans (4%). Rate of “not driving” was negligible among other races. Seven percent (7%) African Americans in the sample did not own transportation followed by Hispanics at 6%. More males (3.3%) did not own their own transportation compared to 2.7% females.

22. Do you have a Primary Care Physician?



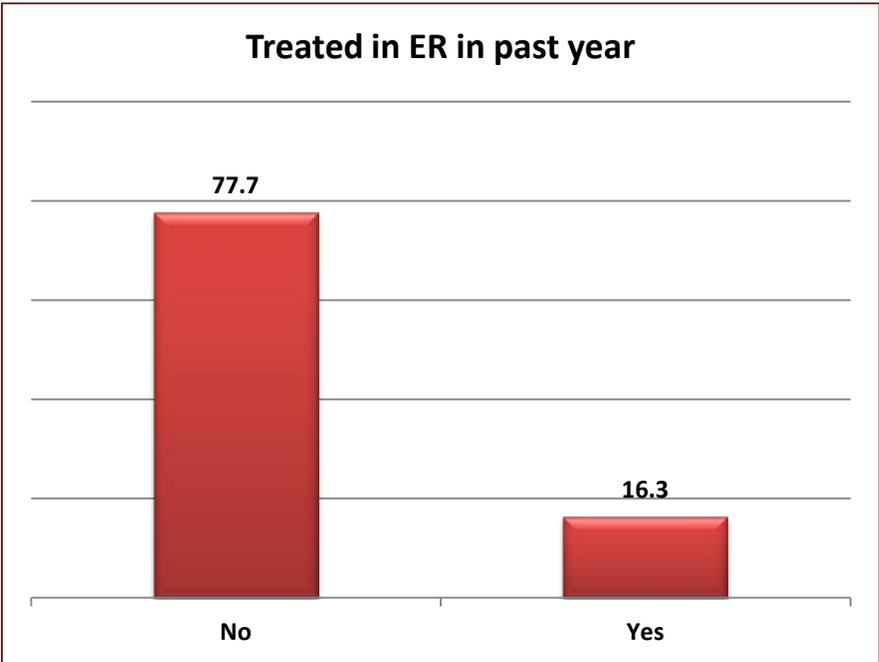
Eighty-five percent (85%) of the sample had a primary care physician. Cross tabulation showed that the highest percentages of category that do “Not have a Primary Care Physician” are Hispanic at 25.4% followed by African American at 15%. Among the age categories, the 25-34 year age category had the highest percentage of individuals that did not have a primary care physician (32%), followed by Under 25 at 30%.

23. Have you been seen by your Primary Care Physician in past year?



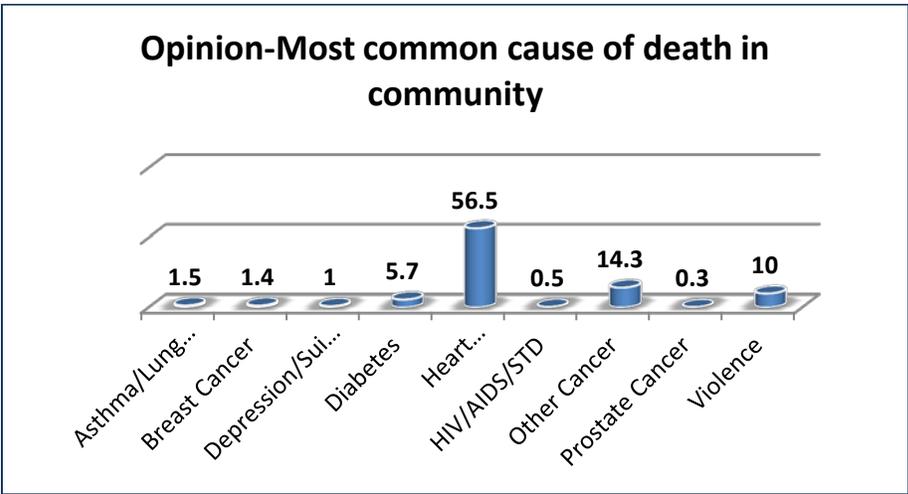
Seventy-eight percent (78%) respondents had been seen by their primary care physicians in the past year. Cross tabulation showed that 21% Hispanics had not been seen by their primary care physician in the past year followed by Native American’s at 17.5%. A higher percentage of females (79%) were seen by their primary care physician in the past year compared to (74%) males. Thirty-four percent (34%) of Under 25 had not been seen by a primary care physician within the last year followed by 25-34 year category (20%).

24. Have you been treated in Emergency Room in past year?



About 16% of the respondents were treated in the Emergency Room (ER) in the past year. Highest percentage of individuals being treated in Hospital ER in past year are African Americans (22%) followed by Hispanics (19%). In the age categories, the highest percentage of individuals treated in Hospital ER in past year is the Under 25 at 27% followed by 21% of 65-74 years category.

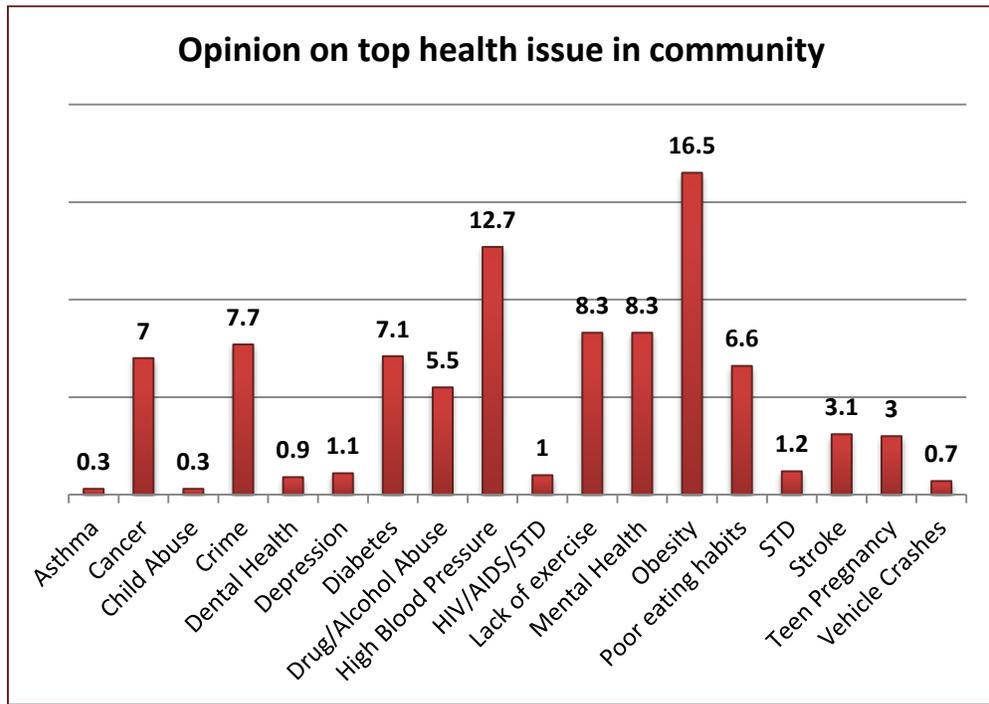
25. In your opinion, what do most people die from in your community? (Check one)



Categories	Frequency	%
Asthma/Lung Disease	26	1.5
Breast Cancer	24	1.4
Depression/Suicide	18	1.0
Diabetes	100	5.7
Heart Disease/Stroke	989	56.5
HIV/AIDS/STD	8	0.5
Other Cancer	250	14.3
Prostate Cancer	6	0.3
Violence	175	10.0
Missing	155	8.9
Total	1751	100

Based on the responses of the sample surveyed, the most common cause of death in the community was heart disease/stroke. For all races, the most commonly perceived cause of death is heart disease. Five percent (5%) Native Americans thought that most people in their community died of breast cancer; 7.5% Hispanics attributed that most deaths in their community were caused due to depression/suicide. Nineteen percent (19%) Hispanics felt that violence was a leading cause of death in their community.

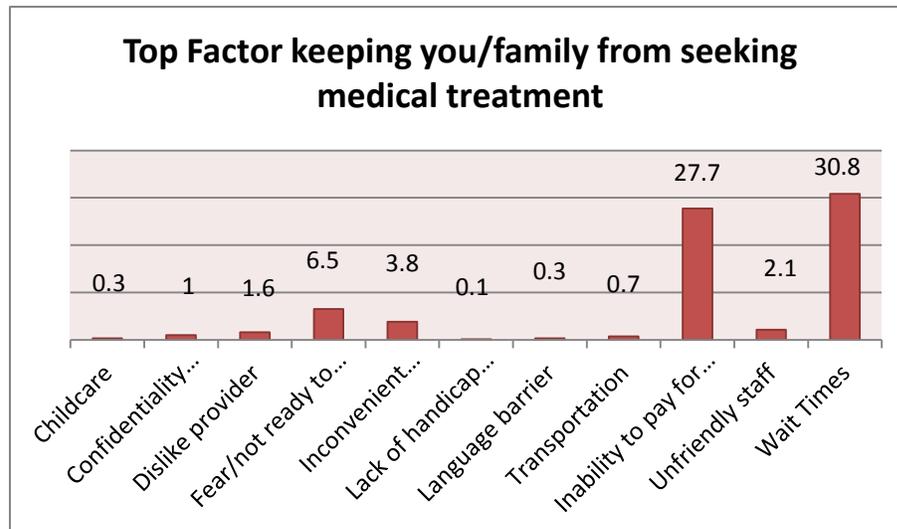
26. What is your opinion on the top health issue in the community?



Categories	Frequency	%
Asthma	6	0.3
Cancer	123	7.0
Child Abuse	5	0.3
Crime	134	7.7
Dental Health	16	0.9
Depression	20	1.1
Diabetes	124	7.1
Drug/Alcohol Abuse	96	5.5
High Blood Pressure	223	12.7
HIV/AIDS/STD	17	1.0
Lack of Exercise	146	8.3
Mental Health	146	8.3
Obesity	289	16.5
Poor eating habits	115	6.6
Sexually transmitted diseases	21	1.2
Stroke	55	3.1
Teen Pregnancy	52	3.0
Vehicle Crashes	13	0.7
Missing	155	8.9
Total	1751	100

Obesity is perceived to be the biggest problem in the community by respondents within the sample (17%) followed by high blood pressure (13%). There is not much variation in the perception of males and females regarding the top health issue in the community. Eighteen percent (18%) males and 17% females think that obesity is the top health issue followed by high blood pressure (11 and 13% respectively). African Americans perception of the top health issue in the community was high blood pressure (19%), followed by obesity (11%). Twenty-one percent (21%) Caucasians perceived obesity as the top health issue in the community; Among Hispanics majority (10%) and Native Americans (15%) the perception was that the top health issue in the community was drug/alcohol abuse followed by obesity.

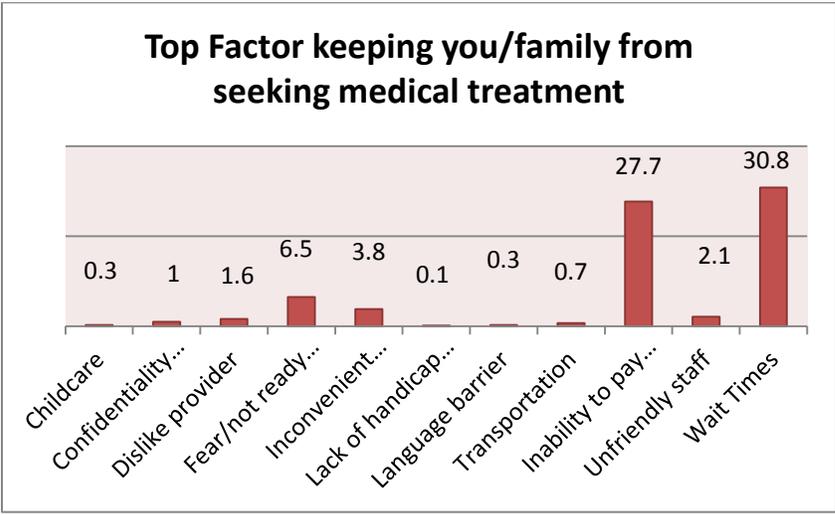
27. What is the top factor that keeps you or your family from seeking medical treatment?



Categories	Frequency	%
Childcare	6	0.3
Confidentiality concerns	18	1.0
Dislike provider	28	1.6
Fear/not ready to face problems	114	6.5
Inconvenient locations	66	3.8
Lack of handicap access	2	0.1
Language barrier	5	0.3
Transportation	13	0.7
Unable to pay for medical service	485	27.7
Unfriendly staff	37	2.1
Wait Times	539	30.8
Missing	438	25.0
Total	1751	100

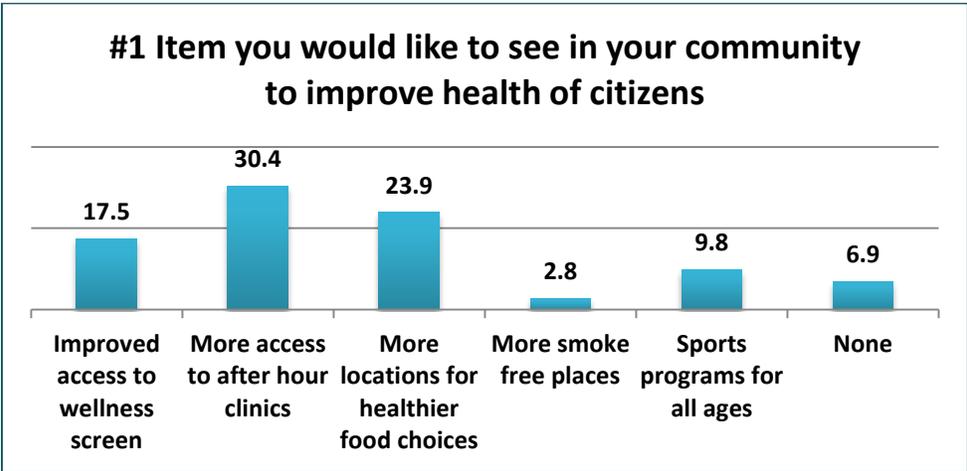
The top factor that kept respondents from seeking health care was “Wait Times” (31%), followed by, inability to pay for medical service (28%). For both males and females, the top factor that keeps them or their family from seeking medical treatment is the wait time (29% and 32% respectively). The second factor that prevents them from seeking medical treatment is their inability to pay for medical services (27% for both sexes). Inability to pay is also the top factor for African Americans (33%), and Hispanic (39%). Caucasian, Native American and Other attribute wait time (34%, 43% and 35% respectively) as the top preventive factor. Inability to pay and wait time also emerged as the top 2 factors for all age groups.

28. In your community, what is the top item that people lack funds for?



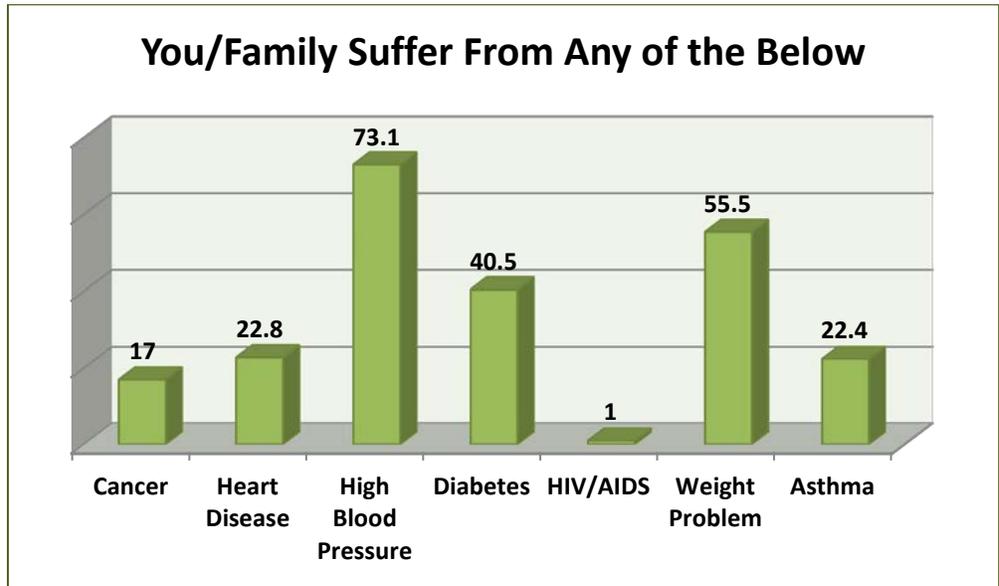
Among all racial, gender and age groups, the perception about the top factor that people lacked funds for was “Health Insurance”.

29. What is the number one item you would like to see in your community to improve the health of its citizens?



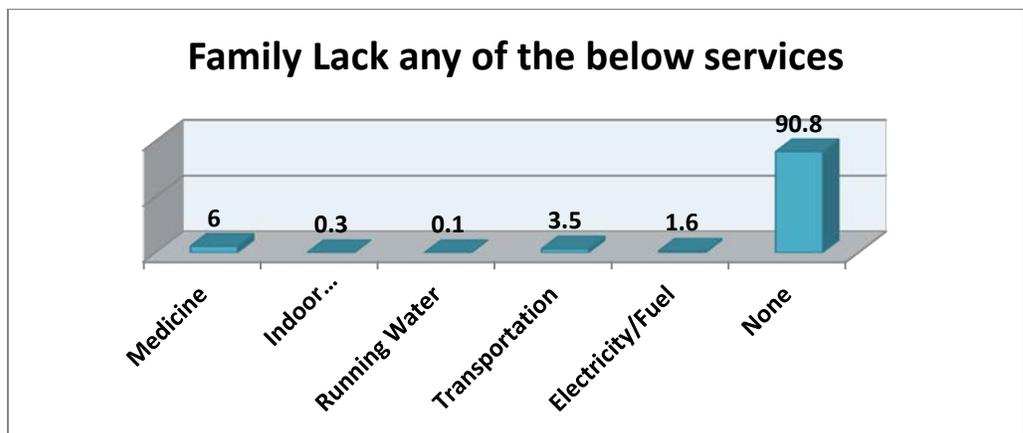
The top improvement that respondents would like to see added in their communities was “More access to after hour clinics” to improve the health of Cumberland County citizens (30%). Cross tabulation with demographic variables showed that this remained the top item across race, gender and age lines. This was followed closely by “More locations for healthier food choices” (24%) and “Improved access to wellness screens” (18%).

30. Do you or anyone in your family have the following health problems? (Check all that apply)



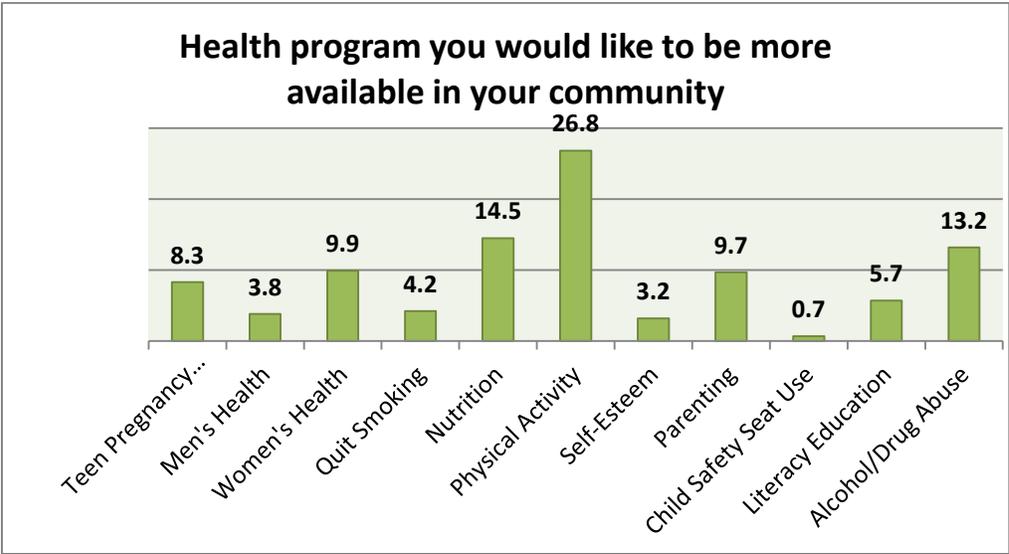
To this question, 73% respondents said that they/their family members suffered from High blood pressure; this was followed by 56% respondents or their family members suffering from weight problem. Bivariate analysis showed that diabetes was a condition that emerged as one of the top health problems among African Americans.

31. Does your family lack any of the following services? (Check all that apply)



With regard to basic services, most of the residents who responded to the survey did not lack any of the basic services. About 6% respondents claimed that they/family lacked in the area of medicine.

32. What health program would you like to be more available in your community?



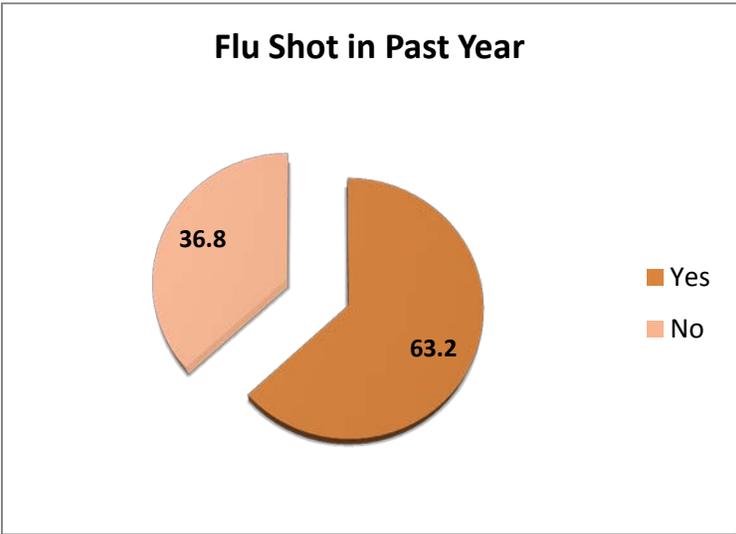
The most common response to the above question was more health programs for physical activity. Responses that followed closely were more programs for nutrition (15%) and alcohol/drug abuse (13%).

33. Which service do you have the most problem finding or having information about using?

Categories	Frequency	%
After school care	42	3.0
Home Health	18	1.3
Child Day Care	35	2.5
Hospice	12	0.9
Emergency Care	23	1.7
Hospital	13	0.9
Public Health	64	4.6
Adult Day Care	37	2.7
Transportation	30	2.2
Social Services	41	3.0
After Hours Urgent Care Clinics	180	13.0
Care for Pregnant Women	3	0.2
Dental Care	102	7.4
Mental Health Care/Counseling	215	15.5
Drug & Alcohol Treatment	63	4.6
Enrolling in Medicare/Medicaid	44	3.2
911 Emergency Services	9	0.7
Long Term Care Facilities	50	3.6
Immunizations	7	0.5
Pharmacy/Drug Stores	3	0.2
Food Assistance	36	2.6
Housing Assistance	61	4.4
Help with Utilities	72	5.2
Nutrition	223	16.1
Missing	368	21.0
Total	1751	100

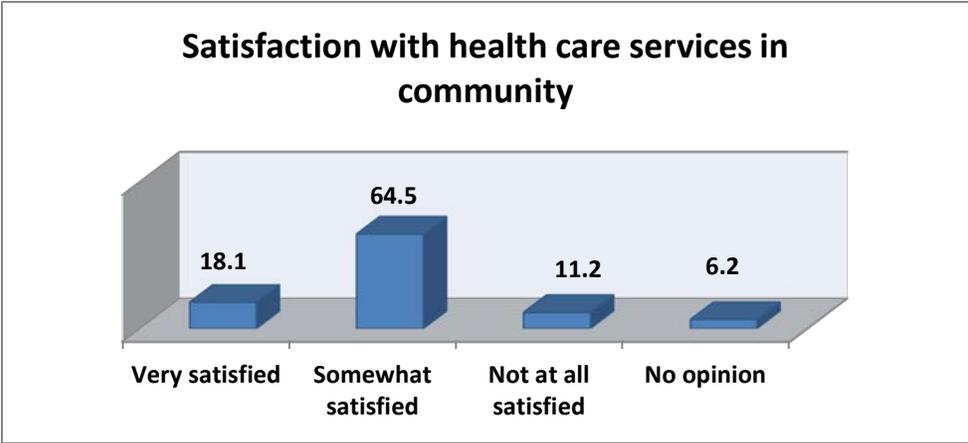
Majority respondents (16%) have problems finding services associated with nutrition and After hours Urgent Care Clinics (13%).

34. Did you receive a flu shot in the past year?



A large proportion of the sample, about 63% had a flu shot in the past year. Respondents from the Native American racial group had the highest percentage of individuals who had taken the flu shot (73%) followed by Caucasian at 64%. The lowest compliance was among the African Americans at 50%. A greater number of males in the sample (62%) had taken the flu shot compared to females (58%).

35. Are you satisfied with the health care services in your community?



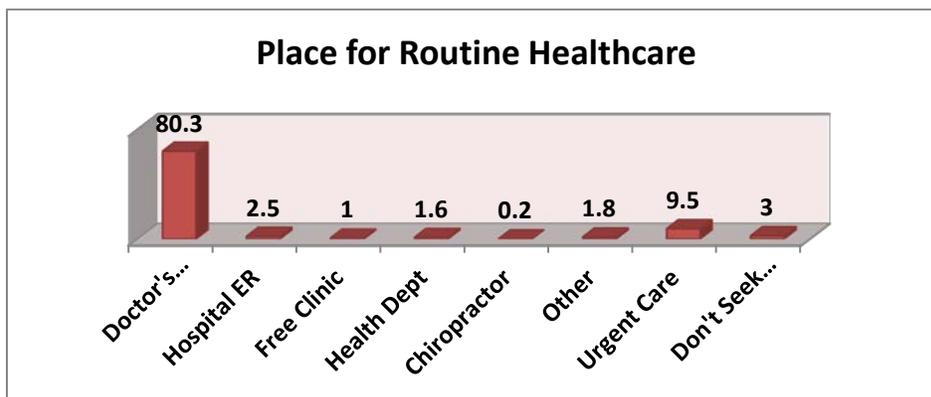
About 65% of respondents are "somewhat satisfied" with health care services in the community. About 18% are "very satisfied" and 11% are "not at all satisfied".

36. In your opinion, what is the top concern in your community?

Categories	Frequency	%
Traffic Safety	112	7.1
Employment opportunities	541	34.2
Recreational programs & facilities	85	5.4
Air quality	7	0.4
Animal Control	15	0.9
Public Transportation	50	3.2
Water supply & quality	23	1.5
Solid waste disposal	7	0.4
Crime	559	35.3
Affordable Housing	97	6.1
Emergency Preparedness	26	1.6
Legal Services	7	0.4
Racial/Ethnic discrimination	35	2.2
Food Safety	18	1.1
Missing	169	9.7
Total	1751	100

Crime was the most common concern among the respondents at 35%; followed by concerns about employment opportunities (34%).

37. Where do you go for routine healthcare when you are sick?



The doctor's office was the most common place for routine healthcare with 80% respondents using it followed by "urgent care" at 10%. Ten percent (10.4%) of Hispanic sample stated that they don't seek routine health care; the highest among the race categories. They had the lowest percentage of individuals seeking routine health care in the doctor's office (49%) and highest among categories seeking routine health care in Free Clinic, and Health Department. The highest category seeking health care in Hospital ER was African Americans. A higher

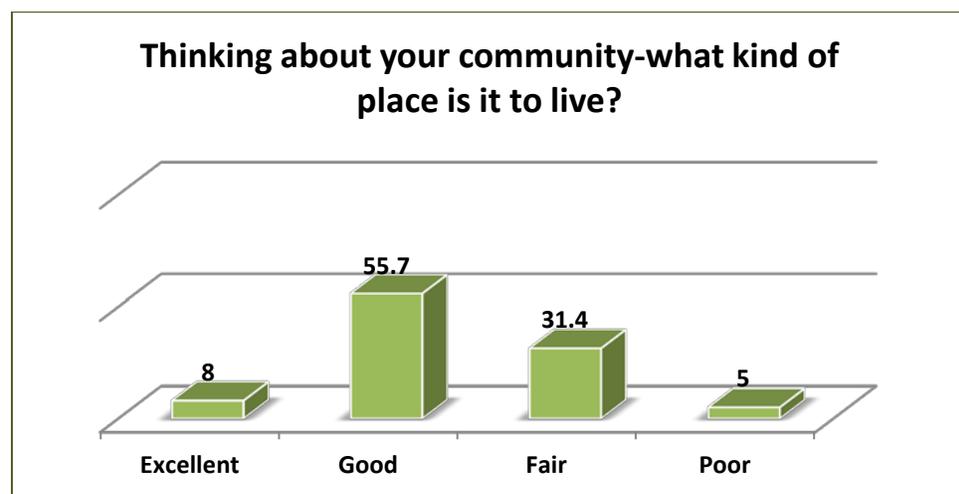
percentage of “75+” age category seek routine health care in Free Clinic and Hospital ER.

38. In your opinion, which issue below is a major problem in your community?

Categories	Frequency	%
Alcohol Drug/Abuse	461	30.0
Smoking/Tobacco Use	159	10.3
Not using seatbelts	43	2.8
Homelessness	354	23.0
Work Safety	22	1.4
Violent Behavior	315	20.5
Juvenile Delinquency	268	17.4
Suicide	52	3.4
Teen Pregnancy	143	9.3
Child Abuse	96	6.2
Poor eating habits	358	23.3
Access to and use of weapons	189	12.3
Missing	212	12.1
Total	1751	100

Poor eating habits (23%), homelessness (23%) and violent behavior (21%) were the top problems according to respondents in the sample.

39. Thinking about your community, what kind of a place is it to live?



About 56% of respondents in the sample, thought that the community they lived in was a “good place” to live in; 31% categorized it as “fair”.