



ALBEMARLE REGIONAL HEALTH SERVICES  
Partners in Public Health

Serving the communities of:

Pasquotank • Perquimans • Camden • Chowan • Currituck • Bertie • Gates

2010  
Community Health Assessment  
Camden County

# ALBEMARLE REGIONAL HEALTH SERVICES

Partners in Public Health



A University Health Systems Affiliate



BERTIE MEMORIAL HOSPITAL  
CHOWAN HOSPITAL



Community Health Assessment funding provided by  
Albemarle Regional Health Services,  
Albemarle Hospital Foundation,  
Chowan Hospital Foundation, and  
Bertie Memorial Hospital Foundation

December 1, 2010

Dear Citizens of Camden County:

Our rural network of communities, the diversity of our population, and our continued growth make our county an exciting place to live, work, and learn. These same factors challenge our system of services, which in turn, drive the need for a continuum of programs. The Community Health Assessment allows us to analyze and prioritize our community's needs and strengths with the people of Camden County. With this process, the direction and guidance becomes evident in identifying potential problems that merit focus in order to create healthier communities.

This document provides fundamental steps that will guide us to work together as a community to seek available and needed resources. I would like to personally thank all organizations and individuals that worked together in this effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Jerry L. Parks". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jerry L. Parks, MPH  
Health Director

# 2010 Camden County Community Health Assessment

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# Introduction

## Why conduct a Community Health Assessment?

Local public health agencies in North Carolina (NC) are required to conduct a Comprehensive Community Health Assessment once every four years. This community health assessment (CHA), which is comprised of both a process and a document, is intended to describe the current health status of the community, what has changed since the past assessment in 2006, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, and public and professional opinion. The *document* is a summary of all the available evidence and serves as a resource until the next assessment. Together they serve as the basis for prioritizing the community's health needs, and culminate in planning to meet those needs.

In communities where there is an active Healthy Carolinians partnership, the coalition of partners may coordinate the community assessment process with support from the local health department. Healthy Carolinians is "a network of public-private partnerships across NC that shares the common goal of helping all North Carolinians to be healthy." The members of local coalitions are interested members of the public and representatives of the agencies and organizations that serve the health and human service needs of the local community, as well as businesses, churches, schools and civic groups.

Albemarle Regional Health Services (ARHS), a district health agency, contracted with Mark Smith, PhD. Epidemiologist and Steve Ramsey, both with Guilford County Health Department to assist in collecting and analyzing the primary data for the 2010 Community Health Assessment in all seven counties within its jurisdiction. Through their association with the Public Health Regional Surveillance Team (PHRST) and North Carolina Public Health Preparedness & Response (NC PHP&R), they assisted in the assessment process by coordinating our survey sampling, trained volunteers in the use of GIS handheld units, and helped analyze the survey data. Together, the Albemarle Regional Health Services Assessment Team (ARHSAT), which included representation from each of the three Healthy Carolinians coalitions in the region, developed a multi-phase plan for conducting the assessment. The phases included: (1) a research phase to identify, collect and review demographic, socioeconomic and health data; (2) a survey phase to solicit information and opinion from the general public; (3) a stakeholder interview phase to gather information and opinion from local community leaders and health and human service agencies; (4) a data synthesis and analysis phase; (5) a period of reporting and discussion among the coalition members; and finally, (6) a prioritization and decision-making phase. Upon completion of this work the ARHSAT has the tools it will need to develop plans and activities that will improve the health and well-being of the seven counties in the region.

Members of the ARHSAT, health department staff and members of the Healthy Carolinians of the Albemarle Coalition conducted the community survey. Survey participants were asked to provide demographic information about themselves by selecting appropriate responses from lists describing categories of age, gender, race and ethnicity, marital status, education level, employment status, household income, household size, and primary caretaker information. This demographic information was collected in order to assess how well the survey participants represented the general population in each of the participating counties. Other survey items sought participants' opinions on; Quality of Life statements, Community Health; Behavioral and Social Problems, Personal Health, Emergency Preparedness, and Demographic Characteristics. Participants also were asked questions about their personal health and health behaviors. All responses were kept in confidence and not linked directly to the respondents in any way.

Throughout this report, there will be text written in blue. This indicates discussions during the Community Health Assessment Data Presentation/Workgroup with the citizens of Camden County, responses from the primary surveys, or resources available in the county.

## Community Health Assessment Acknowledgements

The Community Health Assessment Team included representatives from all three Healthy Carolinians Partnerships in the region: Healthy Carolinians of the Albemarle, Three Rivers Healthy Carolinians, and Gates Partners for Health. Members also included individuals who work to provide health, wellness, and support resources to citizens in the Albemarle District. The Community Health Assessment Team met on the second Friday of each month starting in November 2009 to create a plan for conducting the health assessment and solving any problems encountered.

Amy Underhill

Health Promotion Coordinator/Healthy Carolinians of the Albemarle Chair

Albemarle Regional Health Services

Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

- ◆ Amy Underhill coordinated and organized Community Health Assessment Team meetings as well as managed the funds dedicated to the Community Health Assessment project. As the Chair of Healthy Carolinians of the Albemarle she was responsible for disseminating information about the community health assessment process and progress being made to partnership members. Amy organized volunteers to conduct opinion surveys door-to-door and coordinated the data review and priority selection process for Currituck, Camden, Pasquotank, and Perquimans Counties.

Ann Roach

Healthy Carolinians of the Albemarle Coordinator

Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

- ◆ Ann Roach coordinated community health assessment efforts in Currituck, Camden, Pasquotank and Perquimans Counties. As the Coordinator of Healthy Carolinians of the Albemarle, Ann publicized the community health assessment and helped to get as much of the community involved as possible. She gathered numerous volunteers to conduct surveys and also helped coordinate the priority selection process for Currituck, Camden, Pasquotank, and Perquimans Counties.

Arina Boldt

Director of Marketing and Data Management/Member of Healthy Carolinians of the Albemarle

Albemarle Health

Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

- ◆ Arina Boldt attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. She also helped in the data analysis and priority selection process for the four counties under Healthy Carolinians of the Albemarle.

Ashley H. Stoop

Preparedness Coordinator & Safety Officer

Albemarle Regional Health Services

Representative for all seven counties

- ◆ Ashley Stoop was a major asset to the Community Health Assessment Team and supplied much appreciated experience with the community health assessment process, survey collection using two-stage cluster sampling, and use of GIS software and equipment. Through her efforts with PHRST teams and other Preparedness Coordinators across the state, she arranged for the use of

state and neighboring counties' GIS equipment to be used by volunteer survey collectors. She also contributed educational materials regarding emergency preparedness and travel sized bottles of hand sanitizer placed in the reusable bags that were subsequently distributed to citizens who participated in the opinion survey.

Ashley Mercer

Public Health Education Specialist/Member of Healthy Carolinians of the Albemarle  
Albemarle Regional Health Services

Representative for Pasquotank and Perquimans Counties

- ◆ Ashley Mercer attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. She greatly contributed to the collection of opinion surveys in all seven counties. As a member of Healthy Carolinians of the Albemarle she also played an integral part in the data analysis and priority selection process for Perquimans and Pasquotank Counties.

Cathie Williams

Public Health Dental Hygienist/Member Healthy Carolinians of the Albemarle  
NC Oral Health Section

North Carolina Public Health

Representative for Camden, Currituck, Pasquotank, and Perquimans

- ◆ Cathie Williams attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. She greatly contributed to the collection of opinion surveys in Pasquotank and Camden Counties. She donated toothpaste and sugar-free gum placed in the reusable bags that were distributed to citizens who participated in the opinion survey. As a member of Healthy Carolinians of the Albemarle, she also played an integral part in the data analysis and priority selection process for all four counties.

Dana Hamill

Public Health Education Specialist/Albemarle Regional Health Services

Representative for all seven counties

- ◆ Dana Hamill assisted with the facilitation and organization of Community Health Assessment Team Leader meetings, as well as participated in CHA Call-In meetings, assisted with CHA Data workgroups for Perquimans, Pasquotank, Camden, Chowan, and Bertie counties. She also assisted with data analysis and priority selection process for Healthy Carolinians of the Albemarle and Three Rivers Healthy Carolinians.

Esther Lassiter

Gates Partners for Health Director

Representative for Gates County

- ◆ Esther Lassiter coordinated community health assessment efforts in Gates County. As the Director of Gates Partners for Health, Esther publicized the community health assessment and helped to get as much of the community involved as possible. She contributed Gates Partners for Health information and prizes placed in the reusable bags that were distributed to citizens who participated in the opinion survey. She gathered numerous volunteers to conduct surveys door-to-door and finished the survey process in Gates County in two days. She also coordinated the data analysis and priority selection process for Gates County.



Fae Deaton

Spokeswomen for Woman's Heart Health/Member of Healthy Carolinians of the Albemarle  
Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

- ◆ Fae Deaton attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. She contributed heart health educational materials placed in the reusable bags that were distributed to citizens who participated in the opinion survey. As a member of Healthy Carolinians of the Albemarle, she also provided a strong voice to the group during the data analysis and priority selection process for Currituck, Camden, Perquimans, and Pasquotank counties.

Hunter Balltziglier

Wellness Coordinator/Member of Three Rivers Healthy Carolinians  
University Health Systems - Chowan and Bertie Memorial Hospitals  
Representative for Chowan and Bertie Counties

- ◆ Hunter Balltziglier attended Community Health Assessment Team Meetings and assisted in making decisions concerning the assessment process. He contributed educational materials regarding the services provided through University Health Systems placed in the reusable bags that were distributed to citizens who participated in the opinion survey. Hunter participated in the opinion survey collection process and provided a strong voice when Three Rivers Healthy Carolinians selected their priority health issues.

Jill Jordan

Health Education Director, Public Information Officer, Albemarle Regional Health Services  
Representative for all seven counties

- ◆ Jill Jordan attended Community Health Assessment Team Meetings and assisted in making decisions concerning the assessment process. As the Public Information Officer for Albemarle Regional Health Services, Jill also handled all media releases, including press releases and news articles regarding the Community Health Assessment. She also supplied an appreciated opinion to Three Rivers Healthy Carolinians as they analyzed the data and chose priority health issues for Bertie and Chowan counties.

Juanita Johnson

Director of Community Case Management/Member of Healthy Carolinians of the Albemarle  
Community Care Clinic of Pasquotank County  
Albemarle Health

- ◆ Juanita Johnson attended Community Health Assessment Team Meetings and assisted in making decisions concerning the assessment process.

Kaley Goodwin

Public Health Education Specialist/Member of all three Healthy Carolinians Partnerships  
Albemarle Regional Health Services  
Representative for all seven counties

- ◆ Kaley Goodwin coordinated and organized Community Health Assessment Team meetings, as well as managed the primary and secondary data collection process for all seven counties. She was responsible for collecting opinion survey information door-to-door in each county. She also provided information about the community health assessment process and progress being made during Three Rivers Healthy Carolinians and Gates Partners for Health meetings.

Lisa Spry

Public Health Education Specialist/Member of Three Rivers Healthy Carolinians  
Albemarle Regional Health Services  
Representative for Bertie and Chowan Counties

- ◆ Lisa Spry attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. She greatly contributed to the collection of opinion surveys in all seven counties. As a member of Three Rivers Healthy Carolinians she also played an integral part in the data analysis and priority selection process for Chowan and Bertie counties.

Mary Morris

Family/Consumer Education Agent/Three Rivers Healthy Carolinians Chair  
Bertie County Cooperative Extension  
Representative for Bertie and Chowan Counties

- ◆ As the Chair of Three Rivers Healthy Carolinians, Mary Morris helped provide updates on the community health assessment process and progress being made to partnership members. Mary volunteered to conduct opinion surveys door-to-door and played an important part in the data analysis and priority selection process for Chowan and Bertie counties.

Misty Deanes

Clerk to the Board of Commissioners/Member of Three Rivers Healthy Carolinians  
Executive Assistant to the County Manager  
Representative for Bertie County

- ◆ Misty Deanes worked to recruit volunteers to participate in the opinion survey data collection in Bertie County. She enlisted several individuals to drive door-to-door and asking residents to complete the survey. Misty also worked to publicize the Community Health Assessment and survey data collection to the residents of Bertie County. As an active member of Three Rivers Healthy Carolinians, Misty provided a valued opinion when looking at the data from Bertie County and selecting health priorities.

Nancy Easterday

Director of Patient Access/Care Coordination  
Albemarle Health

Representative for Pasquotank County and the surrounding area

- ◆ Nancy Easterday attended Community Health Assessment Team meetings and greatly assisted in making decisions concerning the assessment process. She contributed educational materials regarding the services provided through Albemarle Health, which were placed in the reusable bags distributed to citizens who participated in the opinion survey. Nancy participated in the opinion survey collection process as well as recruited other volunteers. She also provided a strong voice when selecting priority health issues.

Nancy Morgan

Three Rivers Healthy Carolinians Coordinator  
Representative for Bertie and Chowan Counties

- ◆ Nancy Morgan coordinated community health assessment efforts in Bertie and Chowan Counties. As the Coordinator of Three Rivers Healthy Carolinians, Nancy publicized the community health assessment and helped to get as much of the community involved as possible. She contributed Three Rivers Health Carolinians information and prizes placed in the reusable bags that were distributed to citizens who participated in the opinion survey. She gathered numerous volunteers to conduct surveys door-to-door. She also coordinated the data analysis and priority selection process for Bertie and Chowan counties.

Rich Olson  
City Manager/Member of Healthy Carolinians of the Albemarle  
Representative for Pasquotank County

- ◆ Rich Olson attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. His wealth of knowledge in statistics was valuable in deciding the sampling method used to gather opinion survey data as well as analyzing data and choosing priority health issues in Pasquotank County.

Wesley Nixon  
Environmental Health Specialist  
Representative for all seven counties  
Albemarle Regional Health Services Survey Collection Volunteers for Pasquotank County

- ◆ Wesley Nixon attended Community Health Assessment meetings and assisted in making decisions concerning the assessment process. Wesley served as the technical advisor for the survey collection process in all seven counties. In this role, he organized and kept track of all GIS/GPS hardware, compiled and saved all of the opinion survey data collected, and served as technical assistance to survey collection volunteers in the field.

Zary Ortiz  
Director of Hispanic Service/Member of Healthy Carolinians of the Albemarle  
Northeastern Community Development Corporation  
Representative for Camden, Currituck, Pasquotank, and Perquimans counties

- ◆ Zary Ortiz attended Community Health Assessment Team meetings and assisted in making decisions concerning the assessment process. As an active member of Healthy Carolinians of the Albemarle, she also participated in analyzing data and selecting the most important health priorities for the Healthy Carolinians Partnership.

**Survey Collection Volunteers Camden County**

Amy Underhill	Cathie Williams
Gayle Olson	Kaley Goodwin
Dottie Ireland	Wesley Nixon
Lisa Spry	

**CHA Data Presentation/Workgroup 10/05/10**

Sylvia Holley	Cathie Williamson
Melvin Hawkins	Shana Trafton
Dan Porter	Amy Underhill
Amy Underhill	Dana Hamill
Ann Roach	

**HCOTA Priority Selection Meeting 10/15/10**

Pamela Hurdle	Cathie Williams	Amy Underhill
Pamela Etheridge	Tanya Miller	
Catholene Cole	John Lamberson	
Rich Olson	Deb Conran	
Ann Roach	Stacy Fulcher	
Fae Deaton	Arina Boldt	
Hattie Sharpe	Zary Ortiz	
Susan Barco	Ashley Mercer	
Mary Walker	Dana Hamill	

## **Methodology for Secondary Data (Health Statistics)**

In order to learn about the specific factors affecting the health and quality of life of Albemarle Region residents, two UNC Chapel Hill Master of Public Health graduate students, as part of their practicum consulted numerous readily available secondary data sources.

For secondary data sources, data on the demographics, economic, and social characteristics of the community sources included:

- Administration for Children and Families
- Annie E. Casey Foundation Kids Count Data Center
- Federal Deposit Insurance Corporation (FDIC), Regional Economic Conditions (RECON)
- NC Child Advocacy Institute
- NC Coalition against Domestic Violence
- NC Court System, Domestic Violence Issues in District Court Civil Cases
- NC Department of Commerce, County Tier Designations
- NC Department of Commerce, Economic Development Network, County Profiles
- NC Department of Crime Control and Public Safety, Governor's Crime Commission Division
- NC Department of Health and Human Services, Division of Social Services
- NC Department of Justice
- NC Department of Juvenile Justice and Delinquency Prevention
- NC Department of Public Instruction Statistical Profiles
- NC Employment Security Commission
- NC Office of Budget and State Management, Log Into North Carolina (LINC) Database
- NC Rural Economic Development Center
- NC State Center for Health Statistics: Pregnancy Risk Assessment Monitoring System (PRAMS) Data
- US Bureau of Economic Analysis
- US Census Bureau, American Fact Finder
- US Census Bureau, State and County Quick Facts
- US Department of Agriculture, Economic Research Service

The primary source of health data for this report was the NC State Center for Health Statistics (NC-SCHS), including:

- Annie E. Casey Foundation
- Behavioral Risk Factor Surveillance System (BRFSS)
- Cancer Registry
- Carolina Medicare Epidemiologic Data
- Cecil G. Sheps Center for Health Services Research
- County Health Data Books
- Health Statistics Pocket Guides
- Highway Safety Research Center
- National Vital Statistics Report
- NC Communicable Disease Information
- NC Comprehensive Assessment for Tracking Community Health (NC-CATCH)
- NC Department of Health and Human Services, Division of Aging and Adult Services
- NC DHHS Oral Health Section
- NC Division of Medical Assistance
- NC Institute of Medicine (IOM)
- NC Resident Race and Sex-Specific Age Adjusted Death Rates, 2004-2008

- NC Tuberculosis Control
- Vital Statistics

Environmental data were gathered from sources including:

- NC Department of Commerce
- NC Department of Environment and Natural Resources
  - Division of Air Quality
  - Division of Enforcement
  - Division of Environmental Health
  - Division of Waste Management
  - Division of Water Quality
- NC State Laboratory of Public Health
- US Environmental Protection Agency

Other health data sources included:

- National Center for Health Statistics, Healthy People 2010
- Office of Healthy Carolinians
- NC Nutrition and Physical Activity Surveillance System (NC-NPASS)
- NC Child Advocacy Institute

Local hospital (UHS of Eastern NC: Bertie and Chowan Counties) and health department (Albemarle Regional Health Services) data has been included where appropriate.

As applicable, Camden County statistics have been compared with state statistics as well as four peer counties. These peer counties were identified by the NC-CATCH system using a two-step process in which 1) possible peer counties are selected based upon age, race and poverty characteristics, and 2) the final peer counties are selected from a group of counties within the same population range as the subject county.

For Camden County, the NC-CATCH system identified Avery, Currituck, Graham, and Polk counties as peer counties. Therefore, in addition to NC statistics, these four counties were used for comparison throughout the assessment process.

ARHSAT analyzed and synthesized all secondary and primary data described above and prepared the final Albemarle Regional Community Health Assessment Reports.

# **Chapter One:** **Camden County Community Profile**

## Location and Geography

Camden County is located in northeastern NC, in the Coastal Plain region of the state. It is characterized by swamp land, including the Great Dismal Swamp, and low flat plains. The county contains miles of waterfront along the Pasquotank River, the North River, and the Albemarle Sound. The county is situated approximately 30 miles west of the Atlantic Ocean. The nearest metropolitan area is Norfolk, VA, which is located 40 miles to the north. The county is 20 miles from the Outer Banks, 170 miles east of Raleigh, and 215 miles northeast of Wilmington.

Camden County's western border is shared with Pasquotank County and Gates County. To the northeast, the county is bounded by Currituck County, and to the south by the Albemarle Sound. The northern portion of the Camden County is bordered by the state of Virginia (Figure 1).

There are three townships in Camden County. Courthouse Township is the most populated township in the county. Camden is the county seat (1).

The nearest all four-lane highway is US Highway 64, 25 miles southwest of the county. US Highways 158 and 17 run through Camden County; these roads provide a direct connection with US 64, which leads to the Outer Banks going east and Raleigh going west. US Highway 17 connects the county to Wilmington in the south and Norfolk, VA in the north. US Highway 158 connects the county to the coast. NC Highway 343 connects many of the towns and townships in the county crossing into Currituck County in the east.

The nearest airport offering commercial passenger service is Norfolk International Airport, located 40 miles north in Norfolk, VA. US Highway 64 provides access to the Raleigh-Durham International Airport located 180 miles to the west. The Tri-County Airport in Ahoskie serves commuter and recreational fliers. On-demand air taxi service is available at Elizabeth City Regional Airport and Currituck County Airport. Norfolk, VA is the closest stop on any passenger railway system (2); the nearest Greyhound Lines stop is in Elizabeth City (3).

The county land area is approximately 306 square miles of which 241 square miles are land and 65 square miles are water. The county has 193.20 miles of paved roads as of 2007. Approximately 60% of Camden County residents live within 10 miles of a full-time four-lane highway (4).

The elevation of the county ranges from near sea level in the southern section to 24 feet in the northwestern corner. Camden County has a relatively mild climate with an annual mean temperature of around 61 degrees. The average annual precipitation is around 47 inches (5).

Crops include; small grain (wheat, corn & soybeans), cotton, potatoes, produce, and strawberries.

## History

Camden was settled around 1650 or perhaps even earlier, the first residents drifting down from Virginia and establishing themselves on both sides of the Pasquotank River. The first major settlements developed around four creeks – Raymond's, Sawyer's, Arenuse, and Joy's. Dense undergrowth and swampy bottomlands made roads impassible; therefore, travel was mainly accomplished through the waterways.

When Camden County was still part of Pasquotank County, a ferry was used to cross the Pasquotank River. During the Revolutionary Period, a charter was granted to Lemuel Sawyer, Jr. to operate a ferry from a point near Camden Courthouse, where the river was only about 200 yards wide. This ferry continued to operate until around 1911, when a bridge was constructed across the river.

Since some of the early settlers came from localities in England where watermills were in operation, this method of grinding grain was attempted here. Because the streams were sluggish, the mills were not very efficient. Much more satisfactory were the windmills located on bluffs along the banks of the broad Pasquotank River.

During the American Revolutionary War, Camden County furnished more soldiers to the cause of freedom than any other Northeastern county: 416 officers and men.

On May 9, 1777, Camden County became a separate county from Pasquotank County and was named in honor of Sir Charles Pratt, first Earl of Camden, England, as a token of gratitude because of his vigorous defense of the colonists in their complaints against the mother country. The new county was too busy with the Revolutionary War to build a courthouse until 1782.

In 1790, General Gregory was appointed by President George Washington to be the first collector of customs for the Port of Camden or "Plank Bridge." This port of entry was on Sawyer's Creek in the Camden community and was a port of considerable maritime activity, bringing commercial benefits to the entire community. Joseph Jones made an attempt to establish a town here called Jonesboro. Wharves and warehouses dotted the banks of the creek to Murden's Landing on the Pasquotank River. However, due to the shallow creek and ships of heavier tonnage being built, the once flourishing trade vanished. The port of entry was moved to Elizabeth City in 1830.

The Dismal Swamp Canal was built in the northern end of the county between the years 1793 and 1805. Dirt removed for the Canal was thrown up to form a bed for a toll road, which quickly became the route for a stagecoach line between Norfolk and Elizabeth City. Highway 17, the original Ocean Highway, now utilizes this roadbed. Building of the Canal brought economic benefits to Camden and South Mills, where mills were erected at one of the locks.

On April 19, 1962, a Civil War battle called the Battle of Sawyer's Lane, also known as the Battle of South Mills, was fought near South Mills. Here, Confederate troops fought Union troops attempting to blow up the Dismal Swamp Canal Locks. After a brisk battle, the Federal troops withdrew. (6)



## Leisure Activities/Resources Available

The Dismal Swamp Canal Welcome Center, Dismal Swamp Canal State Park, and the Dismal Swamp Trail are all main attractions in this county. The Dismal Swamp Trail is a paved, 3-mile trail. The Welcome Center loans adult bikes for use on the paved trail during their operating hours. The State Park also has mountain bikes, and canoe/kayak rentals. There are monthly Ranger guided programs, exhibits, and boardwalks. There are a total of 17 miles of trails. There is also an NC Bird Trail, which is part of the East Coast Greenway. The Dismal Swamp Nature Trail is ¼ of a mile long. The Historic Dismal Swamp Canal (Civil War Trail) is a well known attraction. Other attractions include; the North River Camp Ground, and the Historic Camden Jail.

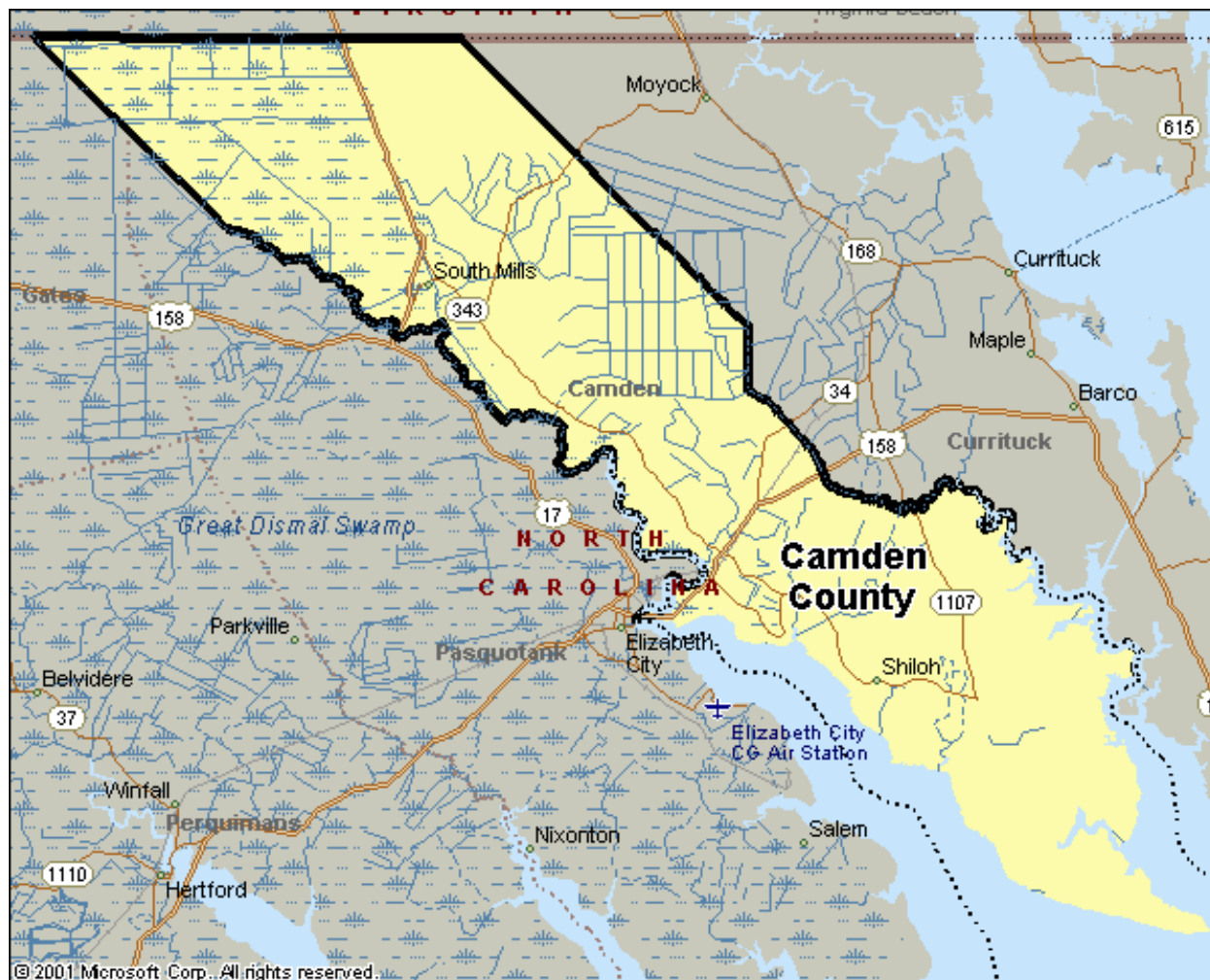
There is a boat ramp at Sawyer's Creek. Boating and water skiing are popular activities in Camden County. Other activities for Camden County include; hunting, hiking, biking, birding, picnicking, paddling, photography, Eco-tourism, and Geocaching.

Annual events include; Paddle for the Border (April/May), Fall Festival at Grandy Primary School (October), Camden Challenge Bike Event (October), and Holly Days Gift Show (November).

Camden County Parks & Recreation Department does not have an actual facility. They provide youth sports and other activities by utilizing school facilities. They provide health awareness programs such as Lose to Win (provided annually) and walking programs. Lose to Win is for county employees and the walking programs include county employees and elementary school students. Cycling events are provided annually including "Family Fun Ride".

Camden County has an active senior center. The goal of the Camden County Senior Center is to, strive to educate, inform and draw awareness to issues that challenge our senior citizens on a daily basis. The mission is to enhance socialization, condemn isolation, and promote activity and enjoyment. Citizens 55 years of age and older are invited to attend the center. Hours of operation are; Monday-Friday, from 8-5pm. Transportation is provided to and from the center. The center has an exercise area with treadmills, exercise bikes, and the elliptical machine. Educational programs are provided such as guest speakers, spiritual enrichment, games, blood pressure checks (provided by EMS), nutritious meals (M-F), and scheduled trips. The Meals on Wheels program is housed at the center.

Figure 1. County Map



**Camden County is deemed as a “bedroom community”.**  
Quote by workgroup participants.

## Demographics/Population Characteristics

- In 2008, Camden County had an estimated permanent population of 9,730 persons, making the county only about one-tenth as populous as the average North Carolina county (Table 1).
- Like the state as a whole, Camden County's population is increasing. Between 2000 and 2008, the Camden County population increased by almost 41.3% while the average NC county population only grew by 14.7%.
- In 2008, the median age of Camden County residents was 40.26 years, more than three years older than the median age for the state (Table 1).

**Table 1. General Demographic Characteristics (years as noted)**

County	2010 Tier Desig	Total Population (2008)	% Pop Change 2000 2008	No. Males (2008)	No. Females (2008)	Median Age (2008)	2008 Estimates					
							No. Under 5 Years (2008)	No. 65 Years and Older (2008)		Race		% Hispanic or Latino, Any Race
							Male	Female	% White	% Other		
Camden	1	9,730	41.3	4,786	4,944	40.26	617	603	757	82.0	16.3	1.7
State Total	n/a	9,227,016	14.7	4,518,983	4,671,536	37.14	742,661	481,681	657,787	74.9	17.7	7.4
NC County Avg.	n/a	92,270	n/a	45,190	46,715	39.0	7,427	4,817	6,578	n/a	n/a	n/a
Source	b	c	c	c	c	c	c	c	c	a	a	a

a - US Census Bureau, State and County QuickFacts , <http://quickfacts.census.gov/qfd/states/37/37029.html>,  
 b - NC Department of Commerce, County Tier Designations, <http://www.nccommerce.com/en/BusinessServices/SupportYourBusiness/Incentives/CountyTierDesignations2010.htm>  
 c - NC Office of Budget and State Management, County Estimates, <http://www.osbm.state.nc.us>

- The population of Camden County grew by 16.6% between 1990 and 2000, and 46.9% between 2000 and 2010. These rates of growth were higher than the comparable rates for the state as a whole (Table 2).
- The rate of population growth in Camden County is expected to slow by 2020.

**Table 2. Population Growth Comparison (1990-2020)**

County	Number of Persons						% Change 2000-2010 (Est.)	2020 (Projected)	% Change 2010-2020 (Projected)
	1990	2000	% Change 1990-2000	2000	2008 (Est.)	2010 (Est.)			
Camden	5,904	6,885	16.6	6,885	9,730	10,113	46.9	10,953	8.3
State Total	6,632,448	8,046,485	21.3	8,046,485	9,227,016	9,571,403	18.9	11,263,964	17.7
NC County Avg.	66,324	80,465	n/a	80,465	92,270	95,714	n/a	112,640	n/a

Source: NC Office of Budget and State Management, County Estimates, <http://www.osbm.state.nc.us>

- Following the increasing trend in population, the Camden County population is becoming denser as is the population in the state as whole (Table 3, following page).
- By 2020, the average NC County is predicted to be almost ten times more densely populated than Camden County (Table 3, following page).

**Table 3. Population Density (1990-2020)  
Persons per Square Mile**

County	1990		2000		2010 (Est.)		2020 (Est.)	
	Population	Density	Population	Density	Population	Density	Population	Density
Camden	5,904	24.5	6,885	28.6	10,113	37.3	10,953	45.53
State Total	6,632,448	n/a	8,046,485	166.2	9,441,440	196.87	11,263,964	231.68
NC County Avg.	66,324	136.1	80,465	166.9	94,414	193.8	112,640	228.34

Source: NC Office of Budget and State Management, County Estimates, <http://www.osbm.state.nc.us>

While NC becomes more urban in nature, Camden County remains entirely rural, with 100% of the population considered to be in rural areas. Statewide only about 49.3% of NC’s population is considered rural (Table 4).

**Table 4. Urban/Rural Population Distribution (1990-2008)  
Percent of Population**

County	1990		2000		2008	
	Urban	Rural	Urban	Rural	Urban	Rural
Camden	0	100	0.0	100	0	100
NC County Avg.	47.2	52.8	48.9	51.1	50.7	49.3

Source: NC Rural Economic Development Center  
<http://www.ncruralcenter.org/databank/datasheet.asp?topic=Population>  
 Percentages were calculated.

- Courthouse Township is the largest township in Camden County, accounting for nearly 40% of the county’s total population. The next largest township is South Mills, accounting for another 34% of the county’s population (Figure 2 and Table 5, following page).
- The “oldest” townships are Courthouse and South Mills, both with a median age of 39.3, while Shiloh has the youngest median age of 38.4.

**Figure 2. Camden County Township Map**



**Table 5. Camden County Population by Township (2000)\***  
Camden County Population by Township (2000)

Township	Number	Percent	Median Age
Courthouse	2,626	38.1	39.3
Shiloh	1,941	28.2	38.4
South Mills	2,318	33.7	39.3
TOTAL/Average	6,885	100	39.1

Source: US Census Bureau, American Fact Finder, Data Sets, Summary File 1, Quick Tables, County Subdivision, Chose NC and county, then add applicable townships. Highlight Table DP-1 (Profile of General Demographic Characteristics 2000). <http://factfinder>

\*Data for individual Townships have not been published since the 2000 Census.

As detailed in Table 6, the Camden County population is primarily white, with minorities making up 18% of the population in 2008. Camden County has a slightly lower proportion of African Americans than NC as a whole. The proportion of Latino residents is also considerably lower than the state.

**Table 6 Population Distribution by Race/Ethnicity (2008)**

County	Total	White		Black		Native American		Asian		Hispanic Origin	
		Number	%	Number	%	Number	%	Number	%	Number	%
Camden	9,682	7,939	82.0	1,530	15.8	39	0.4	77	0.8	165	1.7
State Total	9,222,414	6,815,364	73.9	1,992,041	21.6	119,891	1.3	175,226	1.9	682,459	7.4
NC County Avg.	92,224	68,154		19,920		1,199		1,752		6,825	

Source US Census Bureau, <http://quickfacts.census.gov/qfd/states/37/37029.html>

- Shiloh Township has the highest proportion of white residents in the county (85.6%) (Table 7).
- Courthouse Township has the highest proportion of African Americans (20.6%).
- The largest proportion of Asians (1.5%) lives in Shiloh.
- Courthouse and Shiloh Townships have the greatest proportion of Hispanics (both 0.8%).

**Table 7. Population by Township, by Race/Ethnicity (2000)\***

Township	White		Black/African		American Indian/ Alaska Native		Asian		Native Hawaiian or Other Pacific Islander		Hispanic/ Latino	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Courthouse	2,050	78.1	540	20.6	12	0.5	3	0.1	0	0	21	0.8
Shiloh	1,661	85.6	223	11.5	9	0.5	29	1.5	0	0	16	0.8
South Mills	1,840	79.4	426	18.4	8	0.3	7	0.3	2	0.1	12	0.5

Source US Census Bureau, American Fact Finder, Data Sets, Summary File 1, Quick Tables, County Subdivision, Select areas, Table DP-1 (Profile of General Demographic Characteristics 2000). <http://factfinder.census.gov>

\*Data for individual Townships have not been published since 2000 Census.

- The largest age segment of the population in Camden County, as well as NC, is the 5-19-year-old group, representing 18.7% of the Camden County population and 20.4% of the NC population. The adult age group 35-44 is the second largest segment population in the county (14.2%) and the state (14.7%) (Tables 8 and 9).
- People aged 0-4 compose the smallest portion of the population in Camden County (5.4%), statewide children aged 0-4 compose the smallest portion of the state population (6.8%).

**Table 8. Population Distribution by Age, Number (2008)**

County	Total Population	0-4 Years	5-19	20-24	25-34	35-44	45-54	55-64	65+
Camden	9,730	521	1,821	726	1,163	1,385	1,616	1,138	1,360
State Total	9,227,016	623,069	1,884,566	679,812	1,151,430	1,358,899	1,348,989	1,040,783	1,139,468
NC County Avg.	92,270	6,231	18,846	6,798	11,514	13,589	13,490	10,408	11,395

Source: NC Office of State Budget and Management

[http://www.osbm.state.nc.us/ncosbm/facts\\_and\\_figures/socioeconomic\\_data/population\\_estimates/county\\_estimates.shtm](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtm)

- In 2008, people over the age of 65 made up 14.0% of the Camden County population and 12.3% of the total NC population (Table 9).
- Children under the age of five represented only 6.3% of the Camden County population in 2008; statewide children in this age category represent 8.0% of the population.

**Table 9. Population Distribution by Age, Percent (2008)**

County	Total Population	Percent of Total							
		0-4 Years	5-19	20-24	25-34	35-44	45-54	55-64	65+
Camden	9,730	5.4	18.7	7.5	12.0	14.2	16.6	11.7	13.9
State Total/Average	9,227,016	6.8	20.4	7.4	12.5	14.7	14.6	11.3	12.3

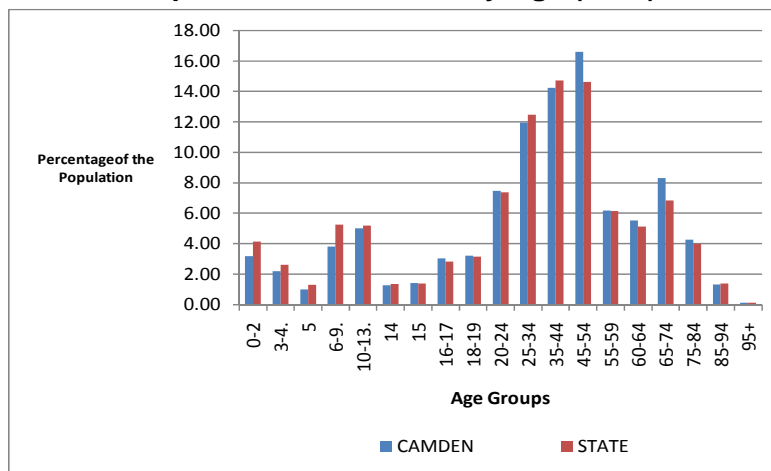
Source

NC Office of State Budget and Management

Calculated based on figures in the previous table

- Figure 3 plots a more finely divided distribution of Camden County population by age. The county age distribution differs from the state age distribution: Camden County has a larger proportion of people aged 16-17, 20-24, 45-54, 60-84 and a smaller proportion of people aged 0-14, 25-44, and 85-94 (Figure 3).

**Figure 3  
Population Distribution by Age (2008)**



Source: NC Office of State Budget and Management

[http://www.osbm.state.nc.us/ncosbm/facts\\_and\\_figures/socioeconomic\\_data/population\\_estimates/county\\_estimates.shtm](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtm)

Percentages were calculated.

## Older Adults

### Growth of the Elderly Population

North Carolina has long been perceived as a good place for elderly persons to live. As a result, the state both retains its elderly population and attracts elderly persons from outside the state who come to join their adult children or to retire here.

- The population of adults in Camden County over the age of 65 is growing and is expected to continue to increase over the next 20 years.
- Though all segments of the elderly population are growing, the fastest growing segment is the group aged 65-74. This part of the elderly population is expected to increase by 40.3% between 2000 and 2030.
- The percent of the population aged 75-84 is predicted to increase by 43.4% between 2000 and 2030. The segment aged 85-94 is predicted to increase by 58.6%, and the segment aged 95 and older could increase by 84.8% over the same period.

### Location of the Elderly Population

- As of the 2000 Census, 13.6% of the Camden County population was over the age of 65 (Table 10).
- Though Courthouse Township has the largest number of adults older than 65, Shiloh is the township with the largest percentage of people aged 65 or older.
- In all three townships in Camden County, adults aged 65 and older represent more than 12% of the population. In North Carolina, a total of 12% of the population is made up of adults aged 65 and older.

**Table 10. Camden County Population of Adults Age 65 and Older (2000)\***

Township	Number	% of Township Population
Courthouse	339	12.9
Shiloh	285	14.7
South Mills	309	13.3
TOTAL	933	13.6

Source US Census Bureau, American Fact Finder, Data Sets, Summary File 1, Quick Tables, County Subdivision, Select areas, Table DP-1 (Profile of General Demographic Characteristics 2000).  
<http://factfinder.census.gov>.

\*Data for individual Townships have not been published since 2000 Census.

### Characteristics of the Elderly Population

Characteristics of the elderly persons in a county can help service providers understand how this population can or cannot access and utilize services. Factors such as educational level, mobility and disability are all useful predictors of service access and utilization. The NC Division of Aging (7) collects and catalogues information about factors like these on the county level. Some of the Division's US Census Bureau-derived data on Camden County – and comparable data for the state of NC as a whole, are summarized below.

### **Educational Attainment**

- A higher percentage of the oldest elderly persons in Camden County possess a high school diploma than their counterparts elsewhere in NC. In Camden County, 64.2% of persons age 65 and older have a high school diploma, compared to a 58.4% for the state as a whole. On the other hand, 81.4% of younger “mature” persons aged 45-64 in Camden County have a high school diploma, compared to 80.1% for the state as a whole.
- Only about 85% (as many Camden County residents as North Carolina residents) age 65 and older have had a graduate school education (4.7% vs. 5.5%). In the age group 45-64 the difference is greater: 6.5% in Camden County compared to 8.8% statewide.

### **Living Conditions**

- In 2000 approximately 66 persons in Camden County were classified as grandparents raising grandchildren under the age of 18. This number computes to a proportion of the total population equal to approximately 0.8%, a figure smaller than the comparable rate for NC as a whole (1%).
- With regard to home ownership, the figures for the elderly population in Camden County are higher than for the state as a whole: in Camden County approximately 90% of the persons between the ages of 45 and 64 as well as those aged 65 and older are homeowners. In the state as a whole, the comparable figure is 80% and 82% respectively.

### **Mobility**

- The elderly population in Camden County has a slightly lower proportion of persons with disabilities than in NC as a whole. According to 2000 US Census figures, 20.0% of persons age 65 or older in Camden County reported having one disability; 24.2% of the same population reported having two or more disabilities. These percentages compare to respective statewide figures of 20.6% and 25.1%. The US Census Bureau of disability includes any long-lasting physical, mental or emotional condition that can make it difficult for persons to walk, climb stairs, dress, bathe, learn or remember.
- Significantly lower proportions of Camden County residents in several older age groups are without a personal vehicle as compared to similar data for NC as a whole. In Camden County, 4.3% of householders between the ages of 55 and 64, 2.2% of those between the ages of 65 and 74, and 14.0% of those aged 75 or older do not have a personal vehicle. These percentages compare to respective statewide figures of 6.0%, 9.0% and 21.3%.
- **During the Data Presentation Workgroup, participants commented that Camden County has an active senior center. It is a great retirement county, crime is not out of control, it is quiet and peaceful, and seniors are not left totally alone here. There is always family to stop by and check on them.**

## **Non-English Speaking Population**

North Carolina has seen continuous growth in the number of foreign-born residents, with this segment of the population increasing from 39,382 in 1969 to 430,000 in 2000, an almost 11-fold increase. According to demographers, this official count is likely an underestimate, since many in this population do not participate in the Census. The foreign-born population in a community is one that potentially does not speak English, and so is of concern to service providers.

Statewide, the greatest proportion of the increase in foreign-born persons is represented by immigrants of Hispanic origin; however, statewide there has also been an influx of foreign-born immigrants from Southeast Asia.



Although there has been an increase in the number of foreign-born residents in Camden County since the mid-1980s, the rate of increase is considerably less than in the state as whole; for the most recent period described (1995-2000) the rate was zero.

According to data:

- As of the 2000 Census, there were 45 foreign-born residents in Camden County, making up 0.1% of the total county population at that time.
- Almost 85% of the Camden County residents who were foreign-born entered the United States between 1980 and 1994.
- As of 2000, 171 individuals, or 2.6% of the Camden County population, reported they spoke Spanish at home, making Spanish the most commonly spoken language other than English in the county (8). However, of the Camden County residents who reported speaking Spanish, 89% said they speak English “very well” (8).
- Approximately 3% of Camden County *households* speak a language other than English, although none of them are actually linguistically isolated, (defined as all household members who are older than 14 having at least some difficulty speaking English).
- There is a significantly higher proportion of Hispanics/Latinos between the ages of 4 and 10, 20 and 24, and 39 and 45 than in the Camden county population overall. There is a significantly lower proportion of Hispanics/Latinos in most other age groups, with the greatest difference in the age groups over 65 years of age. Ordinarily the predominant group of adult Hispanic/Latino residents in eastern NC tends to include the young, working-age groups, spanning ages 20 through 39. The predominant age category in Camden County is older. There is a tendency that these Hispanic/Latino residents represent a stable, permanent population, as indicated. This observation is corroborated by the fact that recent immigration into the county has stalled.
- While the data in this chart has not been updated since the 2000 Census, it was estimated that in 2009, there were 207 Hispanic/Latino individuals living in Camden County accounting for 1.7% of the population. Statewide it is estimated that there are 717,612 Hispanic/Latino individuals living in NC in 2009 accounting for 7.4% of the population (8).

## Commuting Patterns

- The percentage of Camden County workers commuting out of the county to work increased between 1990 and 2000 as did the percent leaving the state to work. During that period, a significantly higher percentage of the Camden County workforce left the county for work (i.e., traveled to a job in another county or state) than that in the average NC County, which is not unexpected for a small county bordering another state.
- The majority of workers in Camden County (and NC) drive alone to work. The number of people driving alone to work increased between 1990 and 2000, as did use of public transportation and walking to work or working from home. The number of workers carpooling to work declined in Camden County during this time. All means of transportation to work increased in NC in the last decade.

## Socioeconomic Climate

### Income

According to data in Table 11, Camden County residents have a per capita income that is \$12,536 (36.4%) lower than the state average.

The median household income in Camden County is 22.8% *higher* than in the NC county average.

**Table 11. Income (2009)**

County	2010 Tier Desig	Per Capita Personal Income (2009)	Per Capita Income Difference from State	Median Household Income (2009)	Median Household Income Difference from State
Camden	1	\$21,917	-\$12,536	\$47,396	-\$14,024
NC County Avg.	n/a	\$34,453	n/a	\$61,420	n/a
Source	a	b,c	calculated	b,d	calculated

a - NC Department of Commerce, County Tier Designation, <http://www.nccommerce.com/finance/tiers/>

b - NC Department of Commerce, Economic Development, County Profiles. (County) <https://edis.commerce.state.nc.us/docs/countyProfile/NC/37029.pdf>

c - US Bureau of Economic Analysis: <http://www.bea.gov/regional/sqpi/> (State)--preliminary figures

d - Administration for Children and Families <http://www.acf.hhs.gov/programs/ocs/liheap/guidance/SMI75FY09>

### Employment

The following definitions will be useful in understanding data in this section.

The term *labor force* includes all persons over the age of 16 who, during the week, are employed, unemployed or in the armed services. The term *civilian labor force* excludes the Armed Forces from that equation. Civilians are considered *unemployed* if they are not currently employed but are available for work and have actively looked for a job within the four weeks prior to the date of analysis. Those who have been laid off and are waiting to be called back to their jobs as well those who will be starting new jobs in the next 30 days are also considered “unemployed”. The *unemployment rate* is calculated by dividing the number of unemployed persons by the number of people in the civilian labor force.

*Employment growth* is the rate at which net new, non-agricultural jobs are being created.

- Since 2005, Camden County has suffered negative employment growth. However, the county fared better in 2009 than the state as a whole with lower percentages of negative growth (Table 12).

**Table 12. Annual Employment Growth (2005-2009)**  
Percent Change from Previous Year

County	2005 Q3	2006	2007	2008	2009
Camden	3.7	2.8	2.2	-3.5	-1.3
NC County Avg.	1.7	3.3	1.4	-0.7	-5.3

Source

FDIC, Regional Economic Conditions (RECON). <http://www2.fdic.gov/recon>

Table 13 details the various categories of industry in Camden County and NC;

- Educational service is the largest industry in Camden County, accounting for 23.8% of the labor force. In the state, healthcare/social assistance is the largest industry, accounting for 14.8% of the labor force.
- Accommodation is the second largest industry in Camden County, employing 21.9% of the labor force; statewide, retail trade is also the second largest industry (11.7%).

**Table 13. Employment by Industry (Third Quarter, 2009)**

Industry	% of Workforce	
	Camden	NC
Accommodation/Food Services	2.1	9.1
Administrative/Waste Services	15.0	5.8
Agriculture/Forestry/Fishing/Hunting	6.3	0.9
Arts/Entertainment/Recreation	0	1.8
Construction	7.0	5.1
Educational Services	23.8	8.5
Finance/Insurance	0.9	3.9
Health Care/Social Assistance	0	14.8
Information	0	1.9
Management of Companies	0	1.9
Manufacturing	3.3	11.6
Mining	0	0.1
Other Services (not Public Admin)	4.2	2.5
Professional and Technical Services	2.8	4.7
Public Administration	7.6	6.3
Real Estate/Rental Leasing	1.0	1.3
Retail Trade	21.9	11.7
Transportation/Warehousing	2.1	3.3
Unclassified	0.9	0.3
Utilities	0	0.4
Wholesale Trade	1.1	4.4

Percentages were calculated.

Source: NC Employment Securities Commission, <http://esesc23.esc.state.nc.us/d4/default.aspx>

Table 14 lists the major employers in Camden County, only one of which employed more than 250 people during the period cited.

**Table 14: Major Employers in Camden County (3<sup>rd</sup> Quarter, 2009)**

Employer	Industry	Number Employed
Camden County Board of Education	Education and Health Services	250-499
Rainbow Shops/Emphasis/Ups N Downs	Trade, Transportation, & Utilities	100-249
Blackwater Lodge & Training Center	Education and Health Services	100-249
Ep Management Services Llc	Professional & Business Services	100-249
County Of Camden	Public Administration	100-249
Caci Technology Inc	Professional & Business Services	50-99
Waterbrooke Of Elizabeth City	Education & Health Services	50-99
Northeastern Community Development Corp	Other Services	Below 50
Swain & Temple, Inc.	Natural Resources and Mining	Below 50
Sikorsky Support Services, Inc.	Manufacturing	Below 50

Source: Employment Security Commission of NC, <http://esesc23.esc.state.nc.us/d4/QCEWLargestEmployers.aspx>

## Unemployment

- As of March 2010, 397 members of the Camden County civilian labor force were unemployed (9).
- Unemployment rates have historically been below the state rate, and have fluctuated since 1998 with the lowest unemployment rate of 2.6 in 1999. Since this time, the rate has displayed an overall increasing trend. The most recent (March 2010) Camden County unemployment rate, 8.5%, is below the state rate of 11.7% (Table 15).

**Table 15. Annual Unemployment Rate (2000-2010)**

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Camden	3.0	4.0	4.5	4.1	3.8	4.1	4.3	4.0	5.5	8.0	9.1
NC County Avg.	3.6	5.5	6.7	6.5	5.5	5.3	4.7	4.7	6.2	10.6	11.7

## Business Closings and Layoffs

According to data catalogued by the NC Employment Security Commission (10) from newspaper reports and data submitted to the commission, between 2008 and 2009 (to date) there were no reported business closings in Camden County. There were two businesses that reported layoffs. It should be noted that these data are largely anecdotal and as such may be underestimates.

## Poverty

The “poverty rate” is the percent of the population (both individuals and families) whose money income (which includes job earning, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below the threshold established by the Census Bureau.

- The poverty rate in Camden County has been consistently below the comparable state rate since 2000. Before this time, it exceeded the state rate (Table 16).
- The Camden County poverty rate has decreased by about half since 1980, from 16.1% to 8.7% in 2008.

**Table 16. Annual Poverty Rate (1980-2008)**

County	1980	1990	2000	2008
Camden	16.1	16.1	10.1	8.7
NC County Average	14.8	13.0	12.3	14.6
Source	a	a	b	b

a - Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

b - Economic Research Service, US Dept of Agriculture, 2003 County Level Poverty Rates for NC. <http://www.ers.usda.gov/data/povertyrates>

## Poverty and Race

- Since 1990, poverty rates in Camden County have been consistently highest among the African American population, and the percent of African Americans in poverty has increased (Table 17).
- Statewide, between 1990 and 2000 poverty rates increased in the remaining populations.

**Table 17. Persons in Poverty by Race (1990 and 2000)**

County	1990					2000				
	Total Persons in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Other in Poverty	Total Persons in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Other in Poverty
Camden	945	16.1	15.2	18.6	0.7	689	10.1	7.5	21.3	6.7
State Total/Avg.	829,858	13.0	8.7	27.1	0.502	958,667	12.3	8.5	22.9	1.3
Source	Log Into North Carolina (LINC) database, <a href="http://linc.state.nc.us">http://linc.state.nc.us</a>									

## Children in Poverty

- Since 2006, Camden County has demonstrated lower proportions of persons in poverty under the age of 18, when compared to the state. (Table 19).
- In 2008, 12% Camden County residents under the age of 18 lived in poverty, a proportion 60% lower than the comparable state proportion.
- Camden County has had a consistently smaller proportion of children under the age of 18 in poverty when compared to the state as a whole, and the difference has remained essentially unchanged during the past three years. (Table 19).
- Corroborating this evidence for less child poverty in Camden County than the average NC County is data from the NC Child Advocacy Institute (11) on the percentage of school children receiving free or reduced school lunches. In 2005, 29% of Camden County school-aged children were enrolled in a free or reduced cost school lunch program; in 2007 that percentage had decreased to 25%, which is the lowest level in the state. These county figures compare to the statewide figures of 48% (2005) and 54.8% (2007).

Table 18: Free & Reduced Lunch

RESIDENCE		2006
North Carolina		48.5
Camden		25.8
PEERS	Avery	61.4
	Currituck	24.5
	Graham	51.4
	Polk	50.1

**Table 19. Percentage of Children in Poverty by Age (2006-2008)**

County	2006			2007			2008		
	All Ages	Under 18	Ages 5-17	All Ages	Under 18	Ages 5-17	All Ages	Under 18	Ages 5-17
Camden	8.7	11.9	10.8	8.3	10.9	9.7	8.7	11.0	9.5
State Total	14.6	20.1	18.3	14.3	19.5	17.8	14.6	19.9	18.2

Source US Census Bureau, People: Poverty. Small Area Income and Poverty Estimates, <http://www.census.gov/did/www/saipe/data/statecounty/data/2008.html>

- In past Census periods, the percent of very young children (under the age of 6) in poverty in Camden County has been quite high, exceeding the comparable state rate. Only in the most recent census in 2000 did the percent of children in poverty in the county fall below the comparable state figure and this trend has continued. (Table 20, following page).

**Table 20. Children under Age 6 in Poverty (1980-2008)**

County	1980		1990		2000		2008	
	Number	%	Number	%	Number	%	Number	%
Camden	101	20.2	127	27.2	80	16.9	91	11.6
State Total	94,676	n/a	102,822	n/a	113,199	n/a	157,320	n/a
NC County Average	947	19.7	1,028	19.1	1,132	17.8	1,573	21.2
Source	a	a	a	a	a	a	b	b

a - Log Into North Carolina (LINC) database, <http://linc.state.nc.us>. Children = Under 6

b - US Census Bureau, People: Poverty. Small Area Income and Poverty Estimates <http://www.census.gov/did/www/saipe/data/statecounty/data/2008.html>

## Food Stamps

- Despite a decrease in 2001, the number of people on food stamps has steadily increased in Camden County between 2000 and 2009. (Table 21)

**Table 21. Food Stamp Recipients (2000-2009)**

Average Monthly Number of Food Stamp Recipients

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Camden	414	387	389	394	538	507	547	520	557	652
State Total	506,736	483,015	555,951	624,167	727,710	787,756	842,363	874,426	924,265	1,077,914
NC County Avg.	5,067	4,830	5,560	6,242	7,277	7,878	8,424	8,744	9,243	10,779

- Camden County has had a consistently lower percentage of children (under 18) receiving food stamps than the average NC county. While this number has previously fluctuated, more recently it is increasing in both Camden County and the state (Table 22).

**Table 22. Food Stamp Recipients, Ages 0-17 (1999-2004)**

Percent of Children 0-17 who receive Food Stamps						
County	1999	2000	2001	2002	2003	2004
Camden	9.7	8.2	8.0	7.7	9.8	10.0
NC County Avg.	13.7	11.8	12.7	14.3	16.3	18.0
	a	a	a	a	a	b
Source	a - Previously but no longer: NC Child Advocacy Institute, County and State Data, CLIKS On-Line database, <a href="http://www.aecf.org/cgi-bin/cliiks.cgi?action=rawdata_results&amp;subset=NC">http://www.aecf.org/cgi-bin/cliiks.cgi?action=rawdata_results&amp;subset=NC</a> b - NC Child Advocacy Institute, County and State Data, CLIKS On-line Database, <a href="http://www.aecf.org/cgi-bin/cliiks.cgi">http://www.aecf.org/cgi-bin/cliiks.cgi</a>					

## Housing

- In Camden County, the *percentage* of and *number* of owned housing units increased between 1990 and 2000; both were lower than the NC county average (Table 23).
- The *percentage* and *number* of rental household units in the county decreased over the same period.
- The number and percentage of mobile home units decreased in the county while they increased in the state.
- Despite the decrease in mobile home units, in 2000 Camden County had a higher percentage of mobile homes than the state as a whole.

**Table 23. Housing (1990 and 2000)**

County	1990									2000									2008				
	Total Housing Units		Average Persons/ Household		Owner Occupied Units		Renter Occupied Units		Median Rent	Mobil Home Units		Total Housing Units		Average Persons/ Household		Owner Occupied Units		Renter Occupied Units		Median Rent	Mobile Home Units		Total Housing Units
	No.	%	No.	%	No.	%	No.	%	\$	No.	%	No.	%	No.	%	No.	%	No.	%	\$	No.	%	No.
Camden	2,466	2.7	1,764	71.5	416	16.9	\$209	513	20.8	2,973	2.6	2,219	74.6	443	14.9	\$344	499	16.8	3,919				
State Total	2,818,193	n/a	1,711,882	n/a	805,144	n/a	n/a	421,464	n/a	3,523,944	n/a	2,172,355	n/a	959,658	n/a	n/a	577,323	n/a	4,201,378				
NC County Avg.	28,182	2.5	17,119	60.7	8,051	28.6	\$284	4,215	15.0	35,239	2.5	21,724	61.6	9,597	27.2	\$431	5,773	16.4	42,014				
	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	b

Source a--Log Into North Carolina (LINC) database, <http://linc.state.nc.us>  
b--US Census Bureau State and County QuickFacts, <http://quickfacts.census.gov/qfd/states/37/37029.html>

## Affordable Housing

According to data from the NC Rural Economic Center (12):

- 20.8% of the Camden County population at the time was living in “unaffordable” housing; this compares to 20.7% statewide. The Census Bureau defines unaffordable housing as housing that costs more than 30% of the total household income.
- Approximately 0.3% of Camden County housing units, compared to 0.1% statewide, were considered “substandard”, meaning that they were overcrowded (more than one person living in a room) *and* lacking complete indoor plumbing facilities (hot and cold piped water, a flush toilet, and a bath or shower).

There is limited HUD-subsidized housing, public housing or Choice Voucher Section 8-approved housing in the entire Albemarle Region.

- The HUD Homes and Communities webpages and associated links list one single-family HUD-sponsored home in Camden County and thirteen in the Albemarle Region (13).
- There is no HUD Public and Indian Housing Authority located in Camden County. HUD PHA offices in the Albemarle Region are in Ahoskie (Hertford County), Edenton (Chowan County), Elizabeth City (Pasquotank County), and Hertford (Perquimans County) (14)
- The only privately owned HUD-subsidized rental housing properties in Camden County listed on the HUD website are a group home for the mentally disabled in Shiloh (15).

The US Department of Agriculture catalogues information about rental properties available in rural areas (16). According to the USDA, the MFH web site provides an online guide to government assisted rental projects.

- The most recent listing (May 23, 2010) of available rental properties showed four rental properties in Camden County, all of which are located in Elizabeth City: Melbourne Apartments, Woodstock I Apartments, Woodstock II Apartments, and Woodstock III Apartments.
- According to workgroup participants, unless you own your own property, it is expensive to live here; there is no affordable housing in Camden County. There is no public housing.

## Homelessness

According to the Albemarle United Way and the NC Coalition to End Homelessness (Nancy Holochwost), there are three homeless shelters in the Albemarle Region, all located in Elizabeth City (Pasquotank County).

## Children and Families

- In 2009, 5.3% of Camden County residents were under the age of 5 (Office of State Budget and Management).
- In 2009, approximately 20.9% of residents were under the age of 18 (Office of State Budget and Management).
- According to 2000 Census data, the largest number and percent of children lives in Courthouse Township.

**Table 24. Camden County Population Under 18, by Township (2000)**

Township	Number	% Township Population
Courthouse	689	26.2
Shiloh	469	24.2
South Mills	527	22.7
TOTAL	1,685	24.5
Source	US Census Bureau, American Fact Finder, Data Sets, Summary File 1, Quick Tables, County Subdivisions, Select areas, Table QT-P1 (Age Groups and Sex 2000). <a href="http://factfinder.census.gov">http://factfinder.census.gov</a>	



## Single-Parent Families

- The number and percent of homes with single parents increased between 1990 and 2000 in Camden County and the state (Table 25).
- When compared to the state, Camden County has a significantly lower percentage of single parent homes.
- The number of homes with single fathers in Camden County tripled over this period, and the state number almost doubled. By 2000, the percentage of homes headed by a single male was the same in Camden County as the state average.
- The number and percentage of homes with single mothers increased in Camden County over the period.

**Table 25. Single Parent Families (1990 and 2000)**

County	1990								2000							
	Total Family Homes		Total Homes with Single Parent		Single Male Head of Household		Single Female Head of Household		Total Family Homes		Total Homes with Single Parent		Single Male Head of Household		Single Female Head of Household	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Camden	1,714		82	4.8	15	0.9	67	3.9	2,024	162	8.0	56	2.8	106	5.2	
State Total	1,824,465		488,515	n/a	31,588	n/a	164,000	n/a	2,158,869	697,521	n/a	60,791	n/a	227,351	n/a	
NC County Avg.	18,245		4,885	26.8	316	1.7	1,640	9.0	21,589	6,975	32.3	608	2.8	2,274	10.5	

Source Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

## Child Care Programs

- Between 2006 and 2007, the number of children in regulated child care increased in both Camden County and the average NC county (Table 26).
- Camden County had a slightly higher number of children in subsidized care in 2005 than the NC county average. Between 2001 and 2005 the number decreased in both Camden County and the state.
- Of the children in regulated care in Camden County, 38% received a subsidy in 2005, a rate slightly higher than the NC county average.
- The number of children in foster care in Camden County increased between 2006 (2 children) and 2008 (10 children.) The number of children in foster care decreased significantly in NC between 2006 and 2008.

**Table 26. Child Care Programs (years as noted)**

County	# Children (0-12) Enrolled in Regulated Child Care (2006)	# Children (0-12) Enrolled in Regulated Child Care (2007)	% Children (0-12) in Regulated Child Care Receiving Subsidy (2001)	% Children (0-12) in Regulated Child Care Receiving Subsidy (2005)	# Children (0-12) Eligible for but Not Receiving Child Care Subsidy (2005)	# Children in Foster Care (2006)	# Children in Foster Care (2007)	# Children in Foster Care (2008)
Camden	115	126	113% *	38%	12	2	5	10
State Total	265,943	276,099	43%	37%	37,063	17,385	17,008	15,773
NC County Avg.	2,659	2,761	n/a	n/a	3,706	174	170	158
Source	b	b	a	a	a	b	b	b

\* Note: the source reports that 47 children were enrolled and 53 received subsidy

a - NC Child Advocacy Institute, Data and Statistics, 2004 Children's Index County Profiles, select your county from drop down menu, <http://www.ncchild.org/content/view/216/150/lang.iso-8859-1/>

b - Annie E. Casey Foundation. Kids Count Data Center. <http://datacenter.kidscount.org/>

In September 2000, the NC Division of Child Development issued star rated licenses to all eligible Child Care Centers and Family Child Care Homes. North Carolina's Star Rated License System gives stars to child care programs based on how well they are doing in providing quality child care. Child Care programs receive a rating of one to five stars. A rating of one star means that a child care program meets NC's minimum licensing standards for child care. Programs that choose to voluntarily meet higher standards can apply for a two to five star license. (Note: Religious-sponsored child care programs will continue to operate with a notice of compliance and will not receive a star rating.)

Three areas of child care provider performance are assessed in the star system: program standards, staff education, and compliance history. Each area has a range of one through five points. The star rating is based on the total points earned for all three areas. Listed below is the breakdown for the number of stars received based on the total points earned in each of the three areas. A five-star facility has earned a total of 14-15 points, a four-star facility 11-13 points, a three-star facility 8-10 points, a two-star facility 5-7 points, and a one-star facility 3-4 points.

According to the NC Division of Child Development Child Care Facility Search Site (17) there are eight child care facilities in Camden County that are licensed to operate in NC in the following categories:

- Five Star Center License – 1 facility
- Three Star Center License – 2 facilities
- One Star Center License—1 facility
- GS 110-106—1 facility
- Three Star Family Child Care Home License – 1 facility
- Two Star Family Child Care Home License—2 facilities

## Education

### Educational Attainment and Investment

According to data presented in Table 27:

- In the 2007-2008 school year, Camden County had 14.4% more high school graduates than the average NC county.

- According to 2008 End of Grade (EOG) Test results, both third and eighth graders in the Camden County School System performed at higher rates of proficiency in both math and reading than students statewide.
- The 2008 average SAT scores for students in the Camden County school system (1424) was 65 points below the NC average (1489).
- In 2008-2009, the rate of acts of school violence in Camden County schools (2.12) was 72.0% lower than the NC system-wide average (7.59).
- The 2008-2009 total-per-pupil expenditure (i.e., per-pupil expenditure from state, federal, and local sources) in the Camden County school system (\$8,321) ranked 58<sup>th</sup> among school systems in the state.

**Table 27. Educational Attainment of Residents (years as noted)**

County	% High School Graduates (2007-2008)	% College Graduates-- Bachelor's Degree (2008)	Per Pupil Expenditure State, Fed and Local * (2007-2008)	Total Per Pupil Expenditure State Ranking (2007-2008)	% 3rd Graders Proficient on EOG Math Test (2008)	% 3rd Graders Proficient on EOG Reading Test (2008)	% 8th Graders Proficient on EOG Math Test (2008)	% 8th Graders Proficient on EOG Reading Test (2008)	Average Total SAT Scores (2008)	School Violence: Acts/1,000 Students (2008-2009)
Camden	81.8		\$8,321.98	58	78.9	68.7	80.4	67.8	1424	2.12
NC County Avg.	70.0	26.0	\$8,045.49	n/a	73.2	54.5	68.2	54.2	1489	7.59
Source	b	c	b	b	c	c	c	c	d	e

a - NC Department of Commerce, Economic Development Information Service, <http://cmedis.commerce.state.nc.us/countyprofiles>  
 b - NC Dept. of Public Instruction, <http://www.ncpublicschools.org/docs/fbs/resources/data/statisticalprofile/2009profile.pdf>  
 c - Annie E. Casey Foundation Kids Count Data Center <http://www.aecf.org/cgi-bin/cliks.cgi>  
 d-- LINC <http://linc.state.nc.us/>  
 e - <http://www.ncpublicschools.org/docs/research/discipline/reports/consolidated/2008-09/consolidated-report.pdf>

\*Child Nutrition Excluded

### High School Drop-Out Rate

- The overall high school drop-out rate in NC has been increasing while the rate in Camden County has been decreasing since 2002 (Table 28, Next Page).
- The drop-out rate in Camden County decreased 12.6% between 2002 and 2008. For most of the time since 2003 the local drop-out rate has been lower than the average NC county rate.
- According to the latest figures, the high school drop-out rate in Camden County (4.3) is 14% lower than the NC rate (5.0).

**Table 28. High School Drop-Out Rate (2002-2008)**

County	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Camden	4.9	3.9	3.8	4.9	2.6	4.3
NC County Avg.	4.8	4.8	4.7	5.2	5.3	5

Source: NC Dept. of Public Instruction Statistical Profiles, <http://www.ncpublicschools.org/fbs/resources/data/>

### Schools and Enrollment Primary and Secondary Education

- There are five public schools in Camden County: three elementary schools and two secondary schools (18, 19). Camden County has no charter school (18, 19) or private school (20).

- Enrollment in Camden County public schools has consistently increased since 2003, while public schools in the average NC county have also experienced increased enrollment (Table 29).
- During the 2008-2009 school year, 1,958 students were enrolled in the public school system in Camden County.
- Camden County children do attend private schools in Pasquotank County. There is no county specific data available on children attending private schools (based on county of residence). A total of 358 children attend private schools in Pasquotank County, Camden County children are included.
- For the 2009-2010 school year, 60 children were home schooled in Camden County.

**Table 29. Public School Enrollment (SY2003-SY2008)**

County	Number of Students				
	2003-04	2004-05	2005-06	2006-07	2007-08
Camden	1,647	1,751	1,882	1,941	1,958
State Total	1,325,344	1,356,405	1,390,168	1,417,426	1,436,562
NC County Average	13,253	13,564	13,902	14,174	14,366

Source: NC Dept. of Public Instruction Statistical Profiles, <http://www.ncpublicschools.org/fbs/resources/data/>

## Higher Education

- The College of the Albemarle (COA), a regional community college, serves Camden County residents as well as others in the Albemarle region with locations in Edenton in Chowan County, Elizabeth City in Pasquotank County, and Manteo in Dare County. COA was the first comprehensive community college in the state of North Carolina (21).
- Chowan University is a small (<1,000 students) four-year liberal arts university located in Murfreesboro (Hertford County). Chowan University is affiliated with the Southern Baptist Association (22).
- Mid-Atlantic Christian University (formerly Roanoke Bible College) is a small (<200 students) private, co-educational four-year college located in Elizabeth City in Pasquotank County offering associate and baccalaureate degrees. Mid-Atlantic Christian University is supported by the Fellowship of Churches of Christ and Christian Churches (23).
- Elizabeth City State University, a Historically Black University, (ECSU) is a four-year state university located in Elizabeth City in Pasquotank County. A constituent institution of [The University of North Carolina](#), ECSU offers baccalaureate programs in the arts and sciences and professional and pre-professional areas, as well as master's degrees in selected disciplines. Originally an institution for African-American students, the university's rich heritage provides a strong background for its increasingly multicultural student body (24).
- East Carolina University (ECU) is a large, four-year state university that is also a constituent member of the UNC System. ECU was founded in 1907 to alleviate the desperate shortage of teachers in the eastern part of the state. The College of Education has been joined by programs of high distinction in health care and the fine and performing arts. Today the university offers 106 bachelor's degree programs, 71 master's degree programs, 4 specialist degree programs, 1 first-professional MD program, and 16 doctoral programs in professional colleges and schools, the

Thomas Harriot College of Arts and Sciences, and the Brody School of Medicine (25). A total of 48 Camden County Residents were enrolled in ECU (on-campus) in the Fall 2009 Semester, 9 were enrolled in distance programs, and 14 were enrolled as first-time freshmen (26).

## Crime and Safety

### Crime Rates

Table 30 shows the rates for “index crime”, which consists of violent crime (murder, rape, robbery, and aggravated assault) plus property crime (burglary, larceny, arson, and motor vehicle theft), from 2004 through 2009. Table 36 shows the actual number of index crimes by type that occurred in Camden County between 2000 and 2009.

- The index crime rate in Camden County has fluctuated since 2004, with a low of 730.2 in 2005. Most recently the index crime rate is 74.8% lower than the comparable state index crime rate (Table 30).
- The violent crime rate also fluctuated between 2004 and 2009 but remained significantly below the state rate. The most recent rate (62.0) is the lowest rate during the reported time period.
- The property crime rate in the county was highest in 2008, although it has remained well below the rate for NC as a whole.

**Table 30. Crime Rates (2004-2009)**

Crimes per 100,000 Population

County	2004			2005			2006			2007			2008			2009		
	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime
Camden	1211.1	178.5	1032.6	730.2	141.3	588.9	858.8	111.5	747.3	1,082.50	86.6	995.9	1,140.30	105.6	1,034.7	826.4	62.0	764.5
NC County Avg.	4573.9	446.9	4127.1	4622.4	478.5	4143.9	4654.4	483.5	4170.9	4659.4	480.6	4178.8	4581.0	477.0	4103.9	4178.4	417.2	3761.2

Source NC Department of Justice, 2009 Annual Summary Report. <http://crimereporting.ncdoj.gov/Reports.aspx>

- As detailed in Table 31, the actual number of violent crimes committed in Camden County fluctuates on a yearly basis with the highest number having occurred in 2004. Aggravated assault accounts for the majority of violent crimes in the county.
- Property crimes committed in Camden County also fluctuate yearly with the highest number having occurred in 2008. Larceny (the theft of property without the use of force) was the most common property crime in most years including 2009.

**Table 31. Number of Index Crimes Reported (2000-2009)**

Type of Crime	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>Violent crime</b>	7	1	n/a	2	14	12	10	8	10	6
<i>Murder</i>	0	0	n/a	0	0	0	2	0	0	0
<i>Rape</i>	1	0	n/a	0	0	0	2	3	2	0
<i>Robbery</i>	0	0	n/a	0	0	1	1	0	1	1
<i>Aggravated assault</i>	6	1	n/a	2	14	11	5	5	7	5
<b>Property crime</b>	77	4	n/a	50	70	50	67	92	98	74
<i>Burglary</i>	25	2	n/a	24	35	19	33	23	30	24
<i>Larceny</i>	51	2	n/a	24	35	28	29	69	65	48
<i>Motor vehicle theft</i>	1	n/a	n/a	2	0	3	5	0	3	2

Source NC Department of Justice, 2009 Annual Summary Report. <http://crimereporting.ncdoj.gov/Reports.aspx>

- As detailed in Table 32, Of the 15,515 registered sex offenders living in North Carolina in July, 2010, nineteen were residing in Camden County (27).

- Since 2006, no clandestine drug lab discoveries have occurred in Camden County as compared to an increasing rate in the state as whole (28).
- As of 2010, there were no gangs reported in the county. This number has remained at zero since 2004 (29).
- In 2008, 78 people in Camden County were charged with driving while intoxicated (DWI). Of those charged, 45 were convicted, for a conviction rate of 57.7% which is just slightly higher than the state rate of 55.7% (30).

**Table 32: Camden County Criminal Activities (Years as Reported)**

County	Registered Sex Offenders (July, 2010)	Number of Gangs		Number of Methamphetamine Lab Busts				Most Common Crimes (2009)		
		2004	2010	2006	2007	2008	2009	#1	#2	#3
Camden	19	0	0	0	0	0	0	Larceny	Burglary	Aggravated Assault
State Total	15,515	387	891	197	157	197	206	Larceny	Burglary	Aggravated Assault
Source	a	b	b	c	c	c	c	d	d	d

Sources:

a-NC Department of Justice, Sex Offender Registry. <http://sexoffender.ncdoj.gov/stats.aspx>.

b-Governor's Crime Commission. 2010 Report to the General Assembly. <http://www.ncgccd.org/pdfs/pubs/2010gangreport.pdf>

c-NC Department of Justice, Meth Lab Busts. <http://www.ncdoj.gov/getdoc/b1f6f30e-df89-4679-9889-53a3f185c849/Meth-Lab-Busts.aspx>

d-NC Department of Justice, 2009 Annual Summary Report. <http://crimereporting.ncdoj.gov/Reports.aspx>

Robbery = Larceny by the threat of violence

Larceny = The theft of property without the use of force

Burglary = The unlawful breaking and entering into the premises of another, with the intent to commit a felony.

MV Theft = The theft or attempted theft of a motor vehicle.

## Juvenile Crime

According to data in Table 33:

- The number of complaints of undisciplined and delinquent youth decreased in both Camden County and the average NC county between 2004 and 2009.
- The rates of both undisciplined youth and delinquent youth in Camden County were below the NC rates in 2009.
- The number of Camden County youths sent to secure detention increased from one to two between 2004 and 2009 while the comparable number in the average NC county decreased 16.5% during the same interval.
- Camden County Schools Resource Officers were discussed during the workgroup. These officers work with students and their parents/guardians. The students Resource Officers deal with in school, they usually know them outside of the school as well (they get in trouble outside of school).
- Camden County has a Juvenile Crime Prevention Council that meets monthly.

**Table 33. Juvenile Justice Complaints and Outcomes**

County	Number of Complaints								Outcomes					
	Undis (2004)	Undis (2009)	Delinq (2004)	Delinq (2009)	Non-Divertable Class A-E Felonies (2009)	Serious Felony H-I, A1 Misdem. (2009)	Minor-Misdem. Class 1,2, or 3 (2009)	Infraction (2009)	Undis Rate (2009)	Delinq Rate (2009)	Number Sent to Secure Detention (2004)	Number Sent to Secure Detention (2009)	Number Sent to Youth Development Center (2009)	Number Transferred to Superior Court (2009)
Camden	4	2	10	8	0	6	2	0	1.43	7.21	1	2	0	0
State Total	5,218	4,631	40,823	35,801	766	8,581	26,213	241	5.20	29.14	7,921	6,612	365	28
NC County Avg.	52	46	408	358	8	86	262	2	n/a	n/a	79	66	4	0.28
Source	a	b	a	b	c	c	c	c	b	b	a	b	b	c

a - NC Department of Juvenile Justice and Delinquency Prevention, Statistics, Annual Report 2004. <http://www.ncdjjdp.org/statistics/annual.html>

b-NC Division of Juvenile Justice. 2009 Annual Report. [http://www.ncdjjdp.org/resources/pdf\\_documents/annual\\_report\\_2009.pdf](http://www.ncdjjdp.org/resources/pdf_documents/annual_report_2009.pdf)

c-NC Department of Juvenile Justice and Delinquency Prevention County Databooks. <http://www.ncdjjdp.org/statistics/databook.html>

Undis = Undisciplined

Juvenile between 6 and 16, who is unlawfully absent from school, or regularly disobedient and beyond disciplinary control of parent/guardian, or is regularly found where it is unlawful for juveniles to be, or has run away from home for more than 24 hours.

Delinq = Delinquent

Any juvenile between 6 and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult.

Complaint

Formal allegation that a juvenile committed an offense, which will be reviewed by a counselor who decides whether to approve or not approve the complaint; if approved it be heard in juvenile court.

Transferred to Superior Court

A juvenile who is 13, 14 or 15 who is alleged to have committed a felony may be transferred to Superior Court and tried and sentenced as an adult. If a juvenile is over 13 and charged with first degree murder, the judge must transfer the case to Superior

Rate

Per 1,000 persons aged 6-17 in the county

## Domestic Violence

- As illustrated in Table 34, the numbers of restraining orders issued in regard to domestic violence cases in Camden County increased annually from 3 in 2000 to 7 in FY2008-2009 (31).

**Table 34: Camden County Domestic Violence**

County	Ex-Parte Orders		Protective Orders	
	2000	FY 2008-2009	2000	FY 2008-2009
Camden	7	11	3	7
State Total	21,400	33,823	9,581	12,430
NC County Average	214	338	96	124

Source

NC Court System. Domestic Violence Issues in District Court Civil Cases.

<http://www.nccourts.org/Citizens/SRPlanning/Documents/dome2008-2009.pdf>

Ex-Parte Orders protect alleged victim and minor children PRIOR to a domestic violence court hearing

Protective Orders are issued AFTER a domestic violence court hearing has been conducted.

- No domestic violence homicides have occurred in Camden County between 2007 and 2009 (32).

**Table 35: Domestic Violence Related Homicides**

Domestic Violence Related Homicides			
County	2007	2008	2009
Camden	0	0	0
State Total	86	84	68
NC County Average	0.86	0.84	0.68

Source: NC Coalition against Domestic Violence

<http://www.nccadv.org/homicides.htm>

- The state of NC maintains a Pregnancy Risk Assessment Monitoring System (PRAMS) that documents physical abuse before, during and after pregnancy among women who are surveyed by phone shortly after giving birth. Although these data are available only on a regional basis,

they may be useful in understanding the domestic violence issues in any county within the region. Camden County is part of the large Region IV (Eastern region) of the PRAMS network, data for which is presented in Table 36. From these data it is apparent that women in this region report these kinds of abuse similar to state rates across all the categories assessed.

**Table 36. Physical Abuse Before and During Pregnancy in Region VI – Eastern Region\* (2002-2004)**

Question	Eastern Region			North Carolina		
	# Respondents	% Responses		# Respondents	% Responses	
		Yes	No		Yes	No
Physical Abuse during 12 mos. before pregnancy	701	5.2	94.8	4572	5.4	94.6
Physical abuse by husband/partner before pregnancy	701	4.2	95.8	4574	4	96
Physical abuse by non-family/friend before pregnancy	703	2.5	97.5	4578	2.9	97.1
Physical abuse during pregnancy	703	4.5	95.5	4570	5	95
Physical abuse by husband/partner during pregnancy	703	3.2	96.8	4575	3.3	96.7
Physical abuse by non-family/friend during pregnancy	703	2.6	97.4	4578	2.4	97.6

Source

Pregnancy Risk Assessment Monitoring System for North Carolina, <http://www.schs.state.nc.us/SCHS/data/prams.cfm>

\* Eastern Region VI includes Bertie County as well as: Northampton, Halifax, Nash, Wilson, Edgecombe, Wayne, Greene, Lenoir, Pitt, Duplin, Onslow, Jones, Craven, Carteret, Pamlico, Beaufort, Martin, Hertford, Gates, Currituck, Camden, Pasquotank, Perquimans

## Elder Maltreatment

According to the Camden County Department of Social Services, there were no Adult Protective Services reports for elder abuse, neglect or maltreatment submitted in FY2005 or FY2006 (33).

## Child Maltreatment

- The *number* of substantiated child abuse cases in Camden County fluctuated between 2003 and 2007 (Table 37). (A case of child abuse is substantiated if the investigation finds proof that abuse did in fact occur.)
- The highest number of child abuse reports and substantiated cases in Camden County in the past five years occurred in the 2004-2005 timeframe.

**Table 37. Child Abuse/Neglect Investigations, Number of Reports (2003-2007)**

County	2003-2004		2004-2005		2005		2006		2007	
	Reports Made	Substantiated	Reports Made	Number Substantiated	Reports Made	Number Substantiated	Reports Made	Number Substantiated	Reports Made	Number Substantiated
Camden	37	7	48	13	48	13	40	1	56	9
State Total	113,557	27,310	111,581	19,908	111,581	20,394	119,932	20,573	122,132	15,058
NC County Avg.	1,136	273	1,116	199	1,116	204	1,199	206	1,221	151
	a	a	a	a	b	b	b	b	b	b

Source

a-NC Department of Health and Human Services, Division of Social Services, Statistics and Reviews, Child Welfare, Central Registry Statistics

<http://www.ncdhhs.gov/dss/stats/cr.htm>

b - Annie E. Casey Foundation. Kids Count Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>

The most common types of maltreatment in the Region are: injurious environment, improper supervision and improper care/lack of discipline.

Children who are only subject to family assessments are not included in the number of children who are substantiated.

- The Camden County child abuse substantiated *rate* also has fluctuated, with a low of zero in 2001 and a high of 6.0 in 2005. Overall, the substantiated rate has increased slightly while rate of reports investigated in the county has also increased overall during this period (Table 38, following page).
- The rate of reports investigated as well as the rate of substantiated cases has been lower in Camden County than the comparable state rate in each of the past available reporting periods.
- Statewide there were 25 child abuse homicides in 2007 and 33 in 2008; none of the homicides were in Camden County (34).



**Table 38. Child Abuse/Neglect Substantiated Rate, per 1,000 Children aged 0-17 (2001-2007)**

County	2001		2002		2003		2005		2006	2007
	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate of Investigation
Camden	13.2	0.0	16.7	3.0	17.9	3.0	23.0	6.0	n/a	25.4
NC County Avg	51.0	16.0	52.7	16.2	51.9	14.5	54.0	10.0	56.2	54.3
	a	a	a	a	a	a	b	b	b	b

Source a-NC Department of Health and Human Services, Division of Social Services, Statistics and Reviews, Child Welfare, Central Registry Statistics. <http://www.dhhs.state.nc.us/dss/stats/cr.htm>

b - Annie E. Casey Foundation. Kids Count Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>

- The numbers of children in DSS custody have fluctuated and is currently at its highest level. When available, the number of children in custody is much lower when compared to the NC county average (Table 39).

**Table 39. Number of Children Placed by DSS (2005-2009)**

County	2005	2006	2007	2008	2009
Camden	2	2	5	5	10
State Total	10,829	11,309	11,230	10,524	9,878
NC County Avg.	108	113	112	105	99

Source

Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

## Transportation

Inter-County Public Transportation Authority is intended to provide high quality transportation services to the people who live or visit the five-county service area of Pasquotank, Perquimans, Camden, Chowan, and Currituck counties. ICPTA services provide transportation to the general public to nutrition sites, medical appointments and other locations in order to access services or attend activities related to daily living, while promoting improved quality of life. Out-of-town Medical transportation to Virginia and Greenville are provided on specific days of the week and by appointment only.

In 2010, among Camden County residents, 961 trips were provided to the general public (includes going to work, school, grocery store, etc.), and ICPTA provided 158 trips to the elderly and disabled. Riders that are wheelchair bound can be secured on the bus in their wheelchair. ICPTA does contract with the Medicaid Program. Medicaid will pay for trips with prior approval.

## Environmental Health

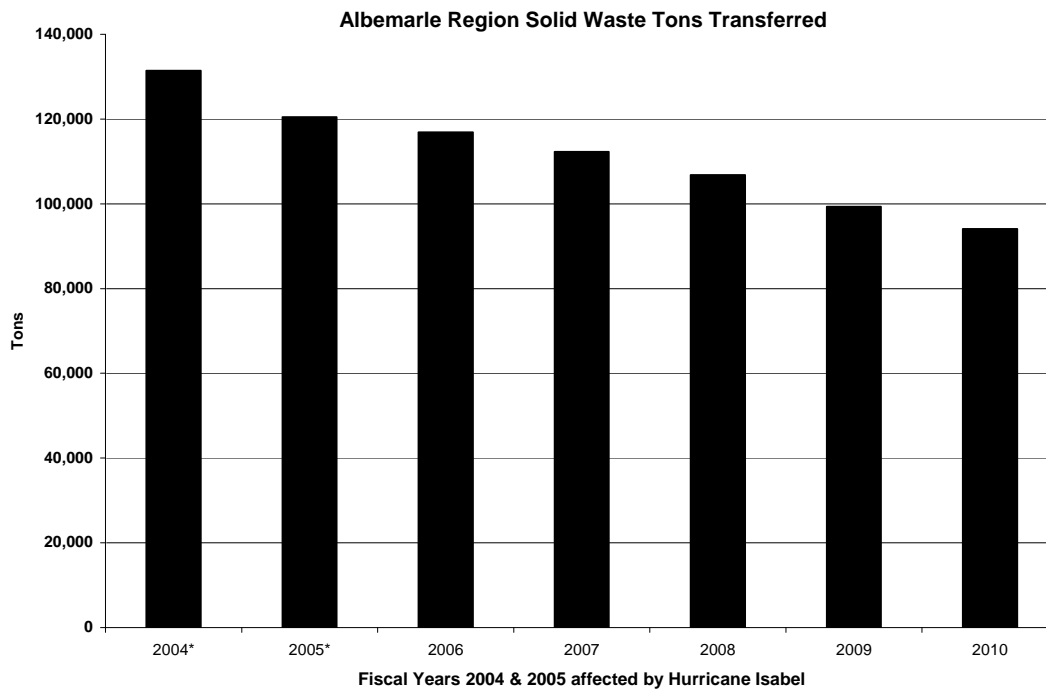
Albemarle Environmental Management Systems affords the community services to ensure health and safety while reducing the spread of communicable diseases.

- Sewage Inspection
- Swimming Pool Inspection
- Lead Investigation
- Food & Lodging Inspection
- Management Entity
- Communicable Disease Investigation

### Albemarle Regional Solid Waste Management Authority

Albemarle Regional Solid Waste Management Authority is a county-level legal entity serving the counties of Perquimans, Chowan, Gates, Dare, Currituck, Hyde, and Tyrrell. This area has approximately 107,000 permanent residents and several hundred thousand visitors each year. Through a 26-year contract signed in 2009 with Republic Services of NC, the Authority aims to provide cost-effective and efficient solid waste disposal for the region. All municipal wastes and most construction and demolition debris in the region are landfilled in the East Carolina Environmental Landfill in Bertie County. The waste is primarily sent there through the three transfer stations located in Dare, Currituck, and Perquimans Counties. The towns and counties operate their own solid waste collection programs. The Authority conducts centralized solid waste billing, data collection and reporting, educational services, and technical assistance for local programs.

**Figure 4: Albemarle Region Solid Waste**



The use of onsite wastewater systems, also known as septic systems, is the most common method of wastewater collection and treatment in the county. Albemarle Regional Health Services regulates the design, installation, and maintenance of these systems in accordance with The Laws and Rules for Sewage Treatment and Disposal Systems of the North Carolina Department of Environment and Natural Resources, Division of Environmental Health.

**Table 40: On-Site Waste Water Program**

<b>CAMDEN</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Construction Authorizations – New	71	70	16
Construction Authorizations –Repair	14	11	16
Improvement Permits Denied	11	6	0
Improvement Permits Issued	135	62	23
Other Site Visits	127	85	49

Data provided by Albemarle Regional Health Services

# **Chapter Two:** Access to Care

## Health Care Resources

Access and utilization of health care is affected by a range of variables including the availability of medical professionals in a region, insurance coverage, transportation, cultural expectations and other factors. Compilation of comprehensive health resources data was beyond the scope of this project; nevertheless, some overview data were collected and are presented here.

## Health Care Professionals

### Practitioners

- The proportional availability of physicians, physician extenders and nurses in Camden County has been consistently lower than the state as a whole, as demonstrated by the higher persons-per-provider data shown in Table 41 (following page).
- The persons-per-primary care physician ratio has increased since 2001, indicating that as the county population grows, the county is not gaining physicians.
- The ratio of persons-per-nurse has decreased slightly between 2005 and 2007, indicating that nurses are coming to the area.
- There have been no dentists in Camden County during the time frame reported.
- There is a particular shortage of dentists who accept Medicaid patients, especially children. According to information in a dental services referral list provided by NC Division of Medical Assistance (36), there are nine dentists in the Albemarle Region who will accept Medicaid children. (Bertie-1, Chowan-1, Pasquotank-6, Perquimans-1.) (35)
- The NC Division of Medical Assistance maintains a list of dentists who are enrolled in the NC Medicaid program and who have filed claims for at least ten new Medicaid patients in the first quarter of the calendar year. Since there are no dentists in Camden County, the system does not include Camden County (36).

The number of health care professionals in Camden County has remained low throughout the past decade with very few of the most essential health care professionals; physicians, registered nurses and dentists. In 2008, there were 2.1 physicians per 10,000 people which is extremely low when compared to the states average of 21.2 per 10,000 people. The ratio of registered nurses to people is also low when compared to the total ratio of the state. In Camden County in 2008, there were 21.7 registered nurses per 10,000 people with a state average of 95.1 registered nurses per 10,000 people. Camden County currently has no dentists. The county's lack of health care professionals is mostly likely due to the rural atmosphere of the area and low socioeconomic status of its citizens. Lower incomes lead to higher numbers of uninsured individuals who cannot afford to visit a doctor or dentist. Without being able to receive fair compensation for their services health care professionals have no incentive to start practicing in the area. Citizens who need care that is not available in Camden County usually travel to neighboring counties or very often cross the state line into Virginia.

**Table 41: Active Health Care Professionals: Camden County 2000, 2004, 2008 and NC 2008**

<b>Physicians</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>	<b>NC 2008</b>
Total Physicians	4	3	2	19,542
Primary Care Physicians	2	2	1	8,347
<i>Family Practice</i>	2	2	1	2,684
<i>General Practice</i>	0	0	0	122
<i>Internal Medicine</i>	0	0	0	2,922
<i>Obstetrics/Gynecology</i>	0	0	0	1,026
<i>Pediatrics</i>	0	0	0	1,593
Other Specialty	2	1	1	11,149
Physicians per 10,000 Population	5.8	3.8	2.1	21.2
Primary Care Physicians per 10,000 Population	2.9	2.5	1.0	9.0
<b>Dentists and Dental Hygienists</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>	<b>NC 2008</b>
Dentists	0	0	0	3,987
Dental Hygienists	1	2	0	4,963
Dentists per 10,000 Population	0.0	0.0	0.0	4.3
<b>Nurses</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>	<b>NC 2008</b>
Registered Nurses	22	18	21	87,743
Nurse Practitioners	0	0	0	3,150
Certified Nurse Midwives	0	0	0	225
Licensed Practical Nurses	5	3	5	17,888
Registered Nurses per 10,00 Population	32.0	22.9	21.7	95.1
<b>Other Health Professionals</b>	<b>2000</b>	<b>2004</b>	<b>2008</b>	<b>NC 2008</b>
Chiropractors	0	0	0	1,317
Optometrists	0	0	0	983
Pharmacists	0	0	0	8,578
Physical Therapists	0	0	0	4,643
Physical Therapy Assistants	0	0	0	2,182
Podiatrists	0	0	0	278
Psychologists	0	0	0	1,844
Psychological Associates	0	0	0	896
Physician Assistants	0	0	1	3,228

Source: 2008 UNC Sheps Center for Health Services Research <http://www.shepscenter.unc.edu/hp/profiles.htm>

**Table 42. Persons-per-Provider Type (2001-2007)**

County	2001				2003				2005				2007			
	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist
Camden	3,512	3,512	270	0	3,922	3,922	314	0	9,008	9,008	530	0	9,519	5,734	501	0
NC County Avg.	1,198	872	109	2,471	1,193	860	110	2,432	1,056	749	109	2,302	1,043	717	107	2,313

Source: NC State Center for Health Statistics, Pocket Guides 2001-2007. <http://www.schs.state.nc.us/SCHS/data/county.cfm>

- The data indicate that although there is representation in Camden County in several major categories of health care, many categories such as; general practice, internal medicine, obstetrics/gynecology, pediatrics, nurse practitioners, chiropractics, podiatry, dentistry, optometry, pharmacy, and psychology lack representation.
- It was stated during the workgroup that people are accustomed to driving 20-25 minutes to a hospital. That is probably why the majority of survey respondents responded in favor to the health care system.
- It was stated during the workgroup that for regular/routine doctor visits, you're okay. But, if you have an emergency you're in trouble. Sometimes EMS crews are stationed at Camden FD from 7am-7pm. This distributes EMS more evenly throughout the county. Participants were hoping they would include South Mills in this.

## Hospitals and Health Centers

Because there is no hospital or urgent care facility in Camden County, residents must utilize facilities elsewhere in the region, such as those cited below.

### Albemarle Hospital

Albemarle Hospital or Albemarle Health as recently named, located in Elizabeth City, NC in Pasquotank County, is a regional, not-for-profit, 182-bed community hospital serving not only Pasquotank County but also Camden, Chowan, Currituck, Dare, Gates, and Perquimans Counties, a total of more than 130,000 people. Albemarle Health, a University Health Systems affiliate, is northeast North Carolina's regional health and wellness provider. With a medical staff of more than 100 physicians representing 30 medical specialties the hospital provides a complete range of care, including; inpatient hospitalization; advanced surgery; a rehabilitation program; a diagnostic center; same-day ambulatory surgery; urgent and emergency care; and a regional oncology center; as well as a wide array of community education and support groups.

The Albemarle Hospital Foundation is supported by over 900 hospital employees, physicians, and volunteers in efforts to develop and fund community outreach programs such as Community Care Clinics, which serve the region's indigent, underinsured, and uninsured residents (37).

### Bertie Memorial Hospital

Bertie Memorial Hospital is a non-profit, six-bed facility, located in Windsor, and is an affiliate of University Health Systems of Eastern North Carolina. The hospital provides; surgical, 24-hour emergency and diagnostic services, specialty clinics and primary care clinics (family medicine and internal medicine). Through its outpatient therapy services unit the hospital provides physical, speech and occupational therapy. The hospital also includes a home healthcare agency (University Home Care of Cashie), and has a telemedicine link with the Brody School of Medicine at East Carolina University in Greenville, NC. The hospital's primary care physician practice operates the Cashie Medical Center, which provides medical care for children and adults (38).

### **Chesapeake Regional Medical Center**

Chesapeake Regional Medical Center, located in Chesapeake, VA is a major health resource for southeastern Virginia and northeastern North Carolina residents including those in Camden County. It has a medical staff of 600 members from every major discipline and 310 all-private beds. Services include; cancer services, cardiac care, home health, hospice, community outreach, diabetes services, nutrition counseling, obstetrical services, orthopedic services, outpatient testing, and women's services (39).

### **Chowan Hospital**

Chowan Hospital, an 89-bed facility located in Edenton (Chowan County) NC, is an affiliate of the University Health Systems of Eastern North Carolina. The hospital provides services and programs to 45,000 people in four counties (Chowan, Perquimans, Washington, and Tyrell). The hospital offers a wide range of services and healthcare specialties provided by a medical staff that includes practitioners in primary care, pediatrics, internal medicine and surgery. Special medical and surgical services at Chowan Hospital include; intensive care, a surgical center, an emergency department, a labor and delivery suite and bone density screening. The hospital offers outpatient clinics in; cardiology, gastroenterology, oncology and other medical specialties; it also provides physical, speech and occupational therapy in hospital, outpatient and home settings. The hospital also has a telemedicine link with the Brody School of Medicine at East Carolina University (40).

Affiliated with Chowan Hospital is the Chowan Hospital Foundation, a non-profit corporation formed in 1992 whose mission is to provide leadership and resources for the enhancement of the health care status of residents in Chowan County and neighboring counties. Through partnerships with the community, Chowan Hospital Foundation has offered; free monthly cancer support groups and cooking classes, funding for community screenings, medical exams, and diabetes education. In addition, programs have been offered that focus on; child and maternal health, diabetes prevention and management, cardiovascular health and access to care. In April 2008, digital mammography became a reality at Chowan Hospital through the fund raising efforts of the Foundation and countless community partners.

### **Outer Banks Hospital**

The Outer Banks Hospital, located in Nag's Head (Dare County), NC is a private, not-for-profit acute care 21-bed hospital of which two are designed as labor/delivery/recovery/postpartum rooms, and one is a Level 1 nursery bed. Services include; emergency services, inpatient and outpatient surgery, labor and delivery, physical therapy, respiratory therapy, speech therapy, laboratory, blood bank and radiology. During the summer, a Minor Care section helps accommodate the increased volume that accompanies the tourist season. Dare County Emergency Medical Services provides medical air transports out of the community utilizing the helipad adjacent to the emergency department, weather permitting. The hospital is a partnership between University Health Systems of Eastern North Carolina and Chesapeake Regional Health Center. (41).

### **Roanoke-Chowan Hospital**

Roanoke-Chowan Hospital is a 114-bed, not-for-profit hospital located in Ahoskie (Hertford County), NC. The hospital services approximately 39,000 residents in Hertford County and three neighboring counties. The Roanoke-Chowan Hospital's medical staff includes; primary care, pediatric and internal medicine physicians, as well as specialists in orthopedics, general surgery, urology, cardiology and obstetrics and gynecology. It also engages consulting physicians and specialists from Pitt County Memorial Hospital (in Greenville) the Brody School of Medicine and the surrounding region. Roanoke-Chowan Hospital has a 24-hour emergency department to care for patients in our area. In addition, EastCare, an emergency transport service with air and ground vehicles, provides service to immediately transfer patients in need



of further treatment. As part of University Health Systems of Eastern North Carolina the hospital's patients have access to treatment at facilities and clinics in other locations (42).

### **Tertiary and Critical Care Facilities**

Tertiary care is specialized consultative care, usually provided on referral from primary or secondary medical care personnel. It is offered by specialists working in centers that have the staff, equipment and other facilities for special investigation and treatment. The nearest tertiary care facility in NC accessible to Camden County residents is Sentara in Norfolk, VA with 500 beds. Pitt County Memorial Hospital (43), a 745-bed hospital and academic medical center located in Greenville, NC, is also a tertiary care facility that serves Camden residents. The hospital is a tertiary referral center and provides; acute, intermediate, rehabilitation and outpatient health services to more than 1.3 million people in 29 counties. Clinical staff includes more than 500 physicians and 1,200 nurses.

#### **Pitt**

Pitt County Memorial Hospital also is designated as a Level I Trauma facility, meaning it conforms to the highest national and state standards for trauma care. (Trauma is a sudden, serious and sometimes life-threatening injury that requires immediate and highly skilled medical attention). The hospital's Trauma Center is responsible for the development and maintenance of a coordinated trauma system in eastern NC and is the site of the Eastern Regional Advisory Committee (ERAC). The hospitals affiliated with ERAC work with Pitt County Memorial Hospital to plan, implement and evaluate the care of injured patients throughout eastern North Carolina. (43)

### **Community Health Center**

The Albemarle Hospital Foundations operates Community Care Clinics in Camden, Chowan, Currituck, Gates, Pasquotank, and Perquimans counties. The Foundation, established in 2003, allows each clinic site to offer prescriptions, financial assistance for prescriptions, and free primary care to the medically indigent, uninsured, and underinsured in the Albemarle Region. The Albemarle Hospital Foundation targets minorities and the growing Hispanic population, as well as those populations' increasing health care needs in the area of chronic disease (especially high cholesterol, high blood pressure, obesity, and diabetes). Community Care Clinics also operate specialized preventive care outreach programs, targeting the Hispanic and African American populations (44).

### **Local Health Department**

The Camden County Health Department is part of the Albemarle Regional Health Services (ARHS), a seven-county regional, accredited Public Health Department headquartered in Elizabeth City, NC. The local health department is located in Camden County Medical Complex, at 160 U.S. 158, Building B, in Camden. Comprehensive clinical services include; Women's Preventive Health, Maternal Health, Adult Health, Communicable Diseases programs, Immunizations, School and Community Health Education, Breast and Cervical Cancer Control Program, Diabetes Management, Child Health, WIC, Albemarle Hospice, Albemarle Home Care, Albemarle Life Quest/Health Promotion, Environmental Health, Solid Waste Management Authority, and the Regional Landfill services. Camden County Health Department houses Albemarle Home Care for Camden County at the same location (45).

### **Long-Term Care Facilities**

The NC Division of Aging and Adult Services provided the following information on categories of long- and short-term adult care (47).

### Nursing Homes

Nursing homes are facilities that provide nursing or convalescent care for three or more persons unrelated to the licensee. A nursing home provides long term care of chronic conditions or short term convalescent or rehabilitative care of remedial ailments, for which medical and nursing care are indicated. All nursing homes must be licensed in accordance with NC law by the NC Division of Facility Services Licensure Section (47). According to the Medicare Nursing Home Compare System there are no nursing homes in Camden County (46).

### Adult Care Homes

Adult care homes are residences for aged and disabled adults who may require 24-hour supervision and assistance with personal care needs. People in adult care homes typically need a place to live, some help with personal care (such as dressing, grooming and keeping up with medications), and some limited supervision. Medical care may be provided on occasion but is not routinely needed. These facilities, which are also sometimes called *domiciliary homes*, *rest homes*, or *family care homes*, vary in capacity from 2 to 100. Adult care homes differ from nursing homes in the level of care and qualifications of staff. There are 626 adult care homes and 620 family care homes in NC. They are licensed by the State Division of Facility Services (Group Care Section) under state regulations and are monitored by Adult Home Specialists within county departments of social services. Facilities that violate licensure rules can be subject to sanctions, including fines. (47). In Camden County, there is one adult care home and one family care home as of 2010 (Table 43).

#### Adult Care Homes

- Needham Adult Care Home-Shiloh, NC  
24 beds

#### Family Care Homes

- Needham Family Care Home-Shiloh, NC  
6 beds

**Table 43: Long Term Care Facilities**

County	Nursing Facility Beds					2010	
	2005	2006	2007	2008	2009	Family Care Homes	Adult Care Homes
Camden	0	0	0	0	0	1	1
State Total	43,987	44,248	44,210	44,234	44,315	620	626
NC County Avg	440	442	442	442	443	6	6
	a	a	a	a	a	b	c

a - Log into North Carolina (LINC) database. <http://linc.state.nc.us>

b - NC DHHS, Division of Aging and Adult Services, <http://facility-services.state.nc.us/fchlist.pdf>

c-NC DHHS, Division of Aging and Adult Services, <http://www.ncdhhs.gov/dhsr/data/ahlist.pdf>

### Mental Health Services and Facilities

East Carolina Behavioral Health LME (ECBH) is a local Management Entity designated by the NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services to oversee the appropriate provision of state and federally funded services and supports. ECBH manages a local benefit plan designed to assist with the multiple challenges of managing services while containing cost.

East Carolina Behavioral Health does not provide direct services. Their mission is to work in partnership with people who face significant challenges related to substance abuse, mental illness, and/or developmental disability. Our commitment is to provide consistently excellent, person-centered, family-oriented services within a recovery-based system that is flexible, accessible, and respects the individual's freedom of choice. A person can access services by contacting the Access to Care Line at 1-877-685-2415. The Access to Care line is staffed by clinical professionals who provide triage, screening and referrals to providers throughout the ECBH area. Emergency assistance is provided 24-hours daily, 365 days a year.

East Carolina Behavioral Health Serves The Following Counties: •Beaufort •Bertie •Camden •Chowan •Craven •Currituck •Dare •Gates •Hertford •Hyde •Jones •Martin •Northampton •Pamlico •Pasquotank •Perquimans •Pitt •Tyrrell •Washington. (48)

## Medical Insurance

### Medically Indigent Population

In most communities, citizens' access to and utilization of health care services is related to the ability to pay for those services, either directly or through private or government health insurances plans/programs.

- In Camden County, the percentage of the total population that is uninsured has fluctuated; at times exceeding and at other times falling below the comparable state percentage. The county percentage exceeded the comparable state percentage in 1999 and 2004.
- Since 1999, the percent of the population without health insurance was highest in Camden County in 2004 at 23.1%.
- In 2005, the proportion of uninsured children under the age of 18 in Camden County (8.8) was lower than the proportion of uninsured children in the state as a whole (11.3%) (Table 44.)

**Table 44. Percent of Population without Health Insurance, by Age (2003-2005)**

County	2003			2004			2005		
	Total	Under 18	18-64	Total	Under 18	18-64	Total	Under 18	18-64
Camden	18.5	10.8	21.4	23.1	10.9	27.3	17.7	8.8	20.7
NC County Avg.	19.4	n/a	n/a	17.5	n/a	n/a	17.2	11.3	19.5

Source - Sheps Center for Health Services Research, Publications.

County Level Estimates of the Uninsured 2003, 2004, and 2005 Updates. <http://www.shepscenter.unc.edu/>

### Medicaid

- The number and percent of Camden County residents eligible for Medicaid have remained fairly stable between 2005 and 2008, but have decreased overall during this period (Table 45, following page).
- When compared to the NC county average, a 40% smaller percent of Camden County residents were eligible for Medicaid in 2008.
- Camden County spends 37.6% less per capita on Medicaid than the average NC county.

**Table 45. Medicaid Eligibility and Expenditures (2005-2008)**

County	FY 2005				FY 2006				FY 2007				FY 2008							
	Est. Total Population	Number Eligible	% Eligible	Per Capita Expenditure Rank	Est. Total Population	Number Eligible	% Eligible	Per Capita Expenditure Rank	Est. Total Population	Number Eligible	% Eligible	Per Capita Expenditure Rank	Est. Total Population	Number Eligible	% Eligible	Per Capita Expenditure Rank				
Camden	8,525	1,136	13.3	\$616	93	9,008	1,177	13.1	\$675	92	9,284	1,237	13.3	\$646	93	9,519	1,161	12.2	\$625	95
State Total	8,541,263	1,563,751	18.3	\$885	n/a	8,682,066	1,602,645	18.5	\$911	n/a	8,860,341	1,682,028	19.0	\$965	n/a	9,069,398	1,726,412	19.0	\$ 1,002.00	n/a
NC County Avg.	85,413	15,638	n/a	n/a	n/a	86,821	16,026	n/a	n/a	n/a	88,603	16,820	n/a	n/a	n/a	90,694	17,264	n/a	n/a	n/a

Source: NC Division of Medical Assistance, <http://www.dhhs.state.nc.us/dma/hcms.htm>

### North Carolina Health Choice

As has been established with previously cited data, children are disproportionately burdened by poverty and its consequences. One of these consequences is limited access to health care due to inability to pay. Enrollment in Medicaid or NC Health Choice for Children can help them access needed services. Families not eligible for Medicaid but whose income is not sufficient to afford rising health insurance premiums may be able to receive free or reduced-price comprehensive health care for their children through the North Carolina Health Choice for Children (NCHC) program. This plan, which became effective in October 1998, includes the same benefits as the State Health Plan, plus vision, hearing and dental benefits (following the same guidelines as Medicaid). Children enrolled in NCHC are eligible for benefits including; sick visits, check-ups, hospital care, counseling, prescriptions, dental care, eye exams and glasses, hearing exams and hearing aids and more.

- The number of Camden County children enrolled in Medicaid grew between 2004 and 2007. Meanwhile, the number and percent of Camden County children enrolled in Health Choice decreased over this same time period. (Table 46).
- Statewide, the number of children enrolled in Medicaid increased 18.3% between 2004 and 2007, while the percent enrolled in Health Choice decreased by 2.3% (Table 46).

**Table 46. Children Enrolled in Medicaid and Health Choice (2004, 2007 unless otherwise indicated)**

County	2004				2007			
	# Children Enrolled in Medicaid	% Children Enrolled in Medicaid	# Children Enrolled in Health Choice	% Children Enrolled in Health Choice	# Children Enrolled in Medicaid (2008)	% Children Enrolled in Medicaid	# Children Enrolled in Health Choice	% Children Enrolled in Health Choice
Camden	450	22	141	7	526	n/a	130	5.8
State Total	674,963	33	121,836	6	825,928	n/a	119,086	5.4
NC County Avg.	6,750	n/a	1,218	n/a	8,259	n/a	1,191	n/a
	a	a	a	a	b		a	a

Source: b - Annie E. Casey Foundation. Kids Count Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>  
 b-NC Division of Medical Assistance, <http://www.dhhs.state.nc.us/dma/ncms.htm>

## Community Care of North Carolina: ACCESS, ACCESS II and ACCESS III Carolina ACCESS

Carolina ACCESS, implemented in 1991, is North Carolina's Primary Care Case Management (PCCM) Program for Medicaid recipients. It serves as the foundation managed care program for Medicaid recipients and brings a system of coordinated care to the Medicaid program by linking each eligible recipient with a primary care provider (PCP) who has agreed to provide or arrange for healthcare services for each enrollee. Primary care providers bill fee-for-service and are reimbursed based on the Medicaid fee schedule; they also receive a small monetary incentive per member per month for coordinating the care of program participants enrolled with their practice. By improving access to primary care and encouraging a stable doctor-patient relationship, the program helps to promote continuity of care, while reducing inappropriate health service utilization and controlling costs.

- As of July 2006 there were 822,596 Medicaid recipients enrolled in Carolina ACCESS statewide, which represents 73% of all Medicaid recipients eligible to participate (49).
- As of July 2006 there were 542 Medicaid recipients in Camden County enrolled in Carolina ACCESS or ACCESS II, which represents 70% of all Medicaid recipients in the County eligible to participate (49).
- According to data provided by the state (50) there was (as of August, 2006) one medical provider in Camden County, participating in Carolina ACCESS II.

## Carolina ACCESS II and ACCESS III

ACCESS II and III are enhanced primary care programs initiated in 1998 to work with local providers and networks to manage the Medicaid population with processes that impact both the quality and cost of healthcare. ACCESS II includes local networks comprised of Medicaid providers such as primary care providers, hospitals, health departments, departments of social services, and other community providers who have agreed to work together to develop the care management systems and supports that are needed to manage enrollee care. In addition to a primary care provider, ACCESS II and III enrollees have care managers who assist in developing, implementing, and evaluating enhanced managed care strategies at each demonstration site. Providers in ACCESS II and III receive a small monetary incentive per member per month; the demonstration sites are paid a similar small per member per month care management fee. ACCESS II includes 10 integrated networks; ACCESS III includes countywide partnerships in three counties.

- Camden County residents participate in ACCESS II.

An average of about 13% of Camden County residents were Medicaid-eligible during this period.

## Medicare

The number and percentages of dually eligible Medicare/Medicaid beneficiaries in Camden County remained relatively stable between 1999 and 2001, with slight decreases in the under 65 age group and slight increases in the 65-74 and 75-84 age groups (Table 47). The Camden County percentages are consistently below the comparable state percentages.

**Table 47. Dually Eligible Medicare Beneficiaries (Eligible for both Medicare and Medicaid) (1999-2001)**

County	1999								2000								2001							
	<65		65-74		75-84		85+		<65		65-74		75-84		85+		<65		65-74		75-84		85+	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Camden	54	28.3	46	9.2	39	15.9	15	22.7	58	27.2	44	9.0	45	17.0	12	16.4	56	25.7	50	9.5	42	16.5	17	22.7
State Total	87,716	n/a	61,667	n/a	53,564	n/a	25,539	n/a	83,428	n/a	61,588	n/a	52,715	n/a	25,377	n/a	92,941	n/a	62,197	n/a	53,919	n/a	24,419	n/a
NC County Avg.	877	36.3	617	15.3	536	22.8	255	36.4	834	35.8	616	15.4	527	22.9	254	37.3	929	37.0	622	24.2	539	22.6	244	35.6

Source: Carolina Medicare Epidemiologic Data, Medicare Population Data, <http://www.mrncc.org/NCMED/beneficiary.asp>

# **Chapter Three: Health Statistics**

## Understanding Health Statistics

### Age-adjustment

Mortality rates or death rates are often used as measures of the health status of a community. Many factors can affect the risk of death, including race, gender, occupation, education and income. The most significant factor is age, because the risk of death inevitably increases with age. Thus, as a population ages, its collective risk of death increases. Therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of “young” people, and other populations have a higher proportion of “old” people. In order to compare mortality data from one community with the same kind of data from another, it is necessary first to control for differences in the age composition of the communities being compared. This is accomplished by “age-adjusting” the data. Age-adjustment is a complicated statistical manipulation usually performed by the professionals responsible for collecting and cataloging health data, such as the staff of the NC State Center for Health Statistics (NC-SCHS). It is not necessary to understand the nuances of age-adjustment to use this report. Suffice it to know that age-adjusted data are preferred for comparing health data from one population to another and have been used in this report whenever available.

### Aggregate Data

Another convention typically used in the presentation of health statistics is aggregate data combining data gathered over a five-year period. The practice of presenting data that are aggregated over a five-year period avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. It is particularly important to aggregate data for smaller counties like Camden County. The calculation is performed by dividing the number of cases or deaths due to a particular disease over five years by the sum of the population size for each of the five years.

### Incidence

Incidence is the population-based *rate* at which new cases of a disease occur and are diagnosed. It is calculated by dividing the number of newly diagnosed cases of a disease or condition during a given time period by the population size during that time period. Typically, the resultant value is multiplied by 100,000 and is expressed as cases per 100,000.

#### Incidence

Incidence is calculated according to the following formula:

$$\text{Incidence} = \frac{\text{number of new cases of disease}}{\text{population size}} \times 100,000 = \text{cases per 100,000 people}$$

The incidence rates for certain diseases, such as cancer, are simple to obtain, since data are routinely collected by the North Carolina Central Cancer Registry. However, other conditions, such as diabetes or heart disease, are not normally reported to central data-collecting agencies. It is therefore difficult to measure burden of disease within a community, and incidence is often estimated by consulting hospital records. Utilization records show the number of residents within a county who use hospital, in-patient services for given diseases during a specific time period. Typically, these data underestimate the true incidence of the given disease in the population, since individuals who are diagnosed outside of the hospital, in-patient setting are not captured by the measure.

## Mortality

Mortality is calculated by dividing the number of deaths due to a specific disease in a given time period by the population size in the same time period. Like incidence, mortality is a *rate*, usually presented as number of deaths per 100,000 residents. Mortality rates are easier to obtain than incidence rates since the underlying (or primary) causes of death are routinely reported on death certificates. However, some error can be associated with cause-of-death classification, since it is sometimes difficult to choose an underlying cause of death from potentially many, co-occurring conditions.

### Mortality

Mortality is calculated according to the following formula:

$$\text{Mortality Rate} = \frac{\text{number of deaths from disease}}{\text{population size}} \times 100,000 = \text{deaths per 100,000 people}$$

## Prevalence

Prevalence, which describes the extent of a problem, refers to the number of existing cases of a disease or health condition in a population at a defined point in time or during a time period. Prevalence expresses a *proportion*, not a rate. It is not used extensively in this report.

## Trends

Data for multiple years is included in this report wherever possible. Since comparing data on a year-by-year basis can yield very unstable trends due to the often small number of cases and deaths per year in Camden County, the preferred method for reporting incidence and mortality trend data is long-term trends using the age-adjusted aggregated format. Most data points used in the report are standardized to the 2000 US population.

## ICD Coding Changes

Beginning in 1999, all causes of death were coded using the 10<sup>th</sup> Revision of the International Classification of Diseases (ICD-10). For the years 1979-1998, the ninth (ICD-9) revision was used. With three years of data now available using ICD-10 coding, multiyear age-adjusted data has been published. Previous data points were published over five-year periods, and as data becomes available using ICD-10 coding, the NC-SCHS will again build up to five-year rates. Community health planning groups should incorporate these five-year rates into the trends when they become available to maintain continuity, but it should be noted that in this report the final data point in many trend lines is a three-year rather than a five-year aggregate.

The most important consequence of the change in coding is that differences between ICD-9 and ICD-10 disease definitions could cause comparability problems across the two revisions. To help users cope with potential problems, the NC-SCHS has provided comparability ratios for leading causes of death (Table 48, following page).

The comparability ratio is a measure of expected changes due only to the changes in disease definitions. The ratio is calculated by dividing the number of deaths coded using ICD-10 in a standard population by the number of deaths coded using ICD-9 in the same population. The ratio can be used to determine whether an apparent change in mortality is due to factors other than a change in coding. For example, after 1998 there will be a 6% rise in mortality due to cerebrovascular disease, due only to the changes in disease definition. Any other visible change should be due to factors other than coding.



## Behavioral Risk Factor Surveillance System (BRFSS)

Camden County residents participate regularly in the state's annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of the nine-county North East Region II sample (52). However, the typically small number of participants (n=510 in 2005 and 508 in 2006) across the sample of which the county is a part yields data too limited to interpolate reliably to a single county, so it is seldom used in this document. In 2007 and 2008, the county was represented under the even larger Eastern NC Region further complicating the ability to interpolate the data reliably to a single county.

## Leading Causes of Death

Table 48 shows the leading causes of death in Camden County, listed in descending order based on combined mortality data for the years 2004 through 2008. Figures in **boldface** type indicate causes of death for which the Camden County rate exceeds the comparable rate for the state as a whole.

**Table 48. Age-Adjusted Mortality Rates for the Leading Causes of Death in Camden County, North Carolina and the United States (2004-2008)**

Cause of Death	Camden County		North Carolina	United States (2006)
	Number	Rate	Rate	Rate
1. Total Cancer	92	189.9	192.5	187.0
2. Heart Disease	88	186.1	202.2	211.0
<b>3. Unintentional Non-Motor Vehicle Injuries</b>	17	<b>34.8</b>	28.4	40.6
4. Cerebrovascular Disease	16	40.7	54.4	45.8
5. Chronic Lower Respiratory Diseases	13	28.4	47.8	41.6
6. Alzheimer's Disease	10	25.8	28.7	24.2
7. Diabetes Mellitus	10	22.7	25.2	24.2
<b>8. Unintentional Motor Vehicle Injuries</b>	10	<b>22.1</b>	18.6	16.2
<b>9. Pneumonia and Influenza</b>	9	<b>20.7</b>	20.3	18.8
<b>10. Suicide</b>	7	<b>12.8</b>	11.9	11.1
11. Kidney Disease	5	12.1	18.8	15.1
12. Septicemia	4	9.9	14.2	11.4
13. Chronic Liver Disease and Cirrhosis	3	5.4	9.1	9.2
14. Homicide	2	3.8	7.2	6.2
15. HIV/AIDS	1	2.7	4.4	4
<b>Total Deaths All Causes (some causes not listed)</b>	346	753.2	861.4	810.4
Source	a	a	a	b

a - NC State Center for Health Statistics, County-level Data. County Health Databook. 2010 County Health Data Book. 2004-2008 Race-Sex-Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook/>

b - National Vital Statistics Reports. Deaths--Final Data for 2006. Vol 57, No. 14. [http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57\\_14.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr57/nvsr57_14.pdf)

## State and National Mortality Rate Comparisons

Table 48 provides recent, overall age-adjusted mortality rates for Camden County, as well as for NC and the US.

*In comparing rates – including mortality rates – it is important to consider the base number of events on which each rate was calculated. When the number of events is small, the rate calculated from that number may be unstable and neither a reliable measure nor a valid predictor. Because many of the counties in the Albemarle Region are small, the numbers of events in a particular population group, and sometimes the overall population, are often small. This report will **not** analyze rate differences or disparities for any cause of death for which there were five or fewer aggregate deaths during the period in question for any of the populations being compared. The apparent difference may be unstable and will not be presented as fact. In Camden County, small numbers of events will severely limit comparison of gender and racial differences in mortality rates.*

Following the caveat discussed above there are nevertheless some valid differences in mortality rates between Camden County, the state as a whole, and the US:

Compared to NC data, Camden County has **higher** age-adjusted mortality rates for:

- **Unintentional Non-Motor Vehicle Injuries**-by 18.4%
- **Unintentional Motor Vehicle Injuries**-by 15.8%
- **Pneumonia and Influenza**-by 1.9%
- **Suicide**-by 7%

Compared to the national mortality rates available, Camden County has **higher** age-adjusted mortality rates for:

- **Cancer**-by 1.5%
- **Alzheimers Disease**-by 6.2%
- **Unintentional Motor Vehicle Injuries**-by 26.7%
- **Pneumonia and Influenza**-by 9.2%
- **Suicide**-by 13.3%

## Gender Disparities in Mortality

Table 49 compares Camden County age-adjusted mortality rates stratified by gender. The mortality data cited in this section were obtained from the NC State Center for Health Statistics.

**Table 49. Age-adjusted Mortality Rates by Gender, Camden County (2004-2008)**

Cause of Death	Males		Females	
	Number	Rate	Number	Rate
<b>1. Total Cancer</b>	59	280.2	33	121.9
Trachea, Bronchus and Lung	21	94.8	5	17.3
Colon, Rectum and Anus	4	21.0	3	12.2
Pancreas	4	16.9	2	7.3
Female Breast	n/a	n/a	3	10.8
Prostate	4	21.4	n/a	n/a
<b>2. Heart Disease</b>	60	267.7	28	114.4
<b>3. Unintentional Non-Motor Vehicle Injury</b>	7	30.5	10	38.9
<b>4. Cerebrovascular Disease</b>	5	26.8	11	48.9
<b>5. Chronic Lower Respiratory Disease</b>	3	16.4	10	38.5
<b>6. Alzheimer's Disease</b>	2	14.4	8	34.5
<b>7. Diabetes</b>	5	20.7	5	21.8
<b>8. Unintentional Motor Vehicle Injury</b>	10	45.0	0	0.0
<b>9. Pneumonia and Influenza</b>	6	29.9	3	12.6
<b>10. Suicide</b>	5	18.1	2	8.1
<b>11. Kidney Disease</b>	2	12.5	3	12.6
<b>12. Septicemia</b>	1	5.3	3	13.1
<b>13. Chronic Liver Disease and Cirrhosis</b>	1	3.6	2	6.9
<b>14. Homicide</b>	2	7.6	0	0.0
<b>15. HIV/AIDS</b>	1	5.4	0	0.0
<b>Total Deaths All Causes (some causes not listed)</b>	<b>196</b>	<b>923.4</b>	<b>150</b>	<b>604.6</b>

Source - NC State Center for Health Statistics, County-level Data. County Health Databook. 2010 County Health Data Book. 2004-2008 Race-Sex-Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook/>

For all deaths combined, Camden County males have a 34.5% higher mortality rate than females.

*For reasons described in the previous section, this report will **not** analyze disparities for any cause of death for which there were five or fewer aggregate deaths among males or females during the period in question.*

Following the minimum event caveat described previously, there are nevertheless a few valid gender differences in mortality in Camden County.

Compared to the mortality rates for Camden County females, the mortality rates among Camden County **males are higher** for:

- **Total Cancer**-by 56.5%
- **Heart Disease**-by 57.3%

Compared to the mortality rates for Camden County males, the mortality rates among Camden County **females are higher** for:

- **Unintentional Non-Motor Vehicle Injuries**-by 21.6%

## Racial Disparities in Mortality

Racial disparities in mortality are discussed in detail in the descriptions of specific diseases and health conditions in the sections that follow. *As described previously, this report will **not** analyze disparities for any cause of death for which there were five or fewer aggregate deaths among any stratified group during the period in question.*

For all causes of death, the age-adjusted mortality rate among whites (715.7) in Camden County for the period from 2004 through 2008 was 20.3% lower than the overall age-adjusted mortality rate for minorities (897.7). In addition, following the minimum event caveat, for the period from 2004 through the 2008 there were no causes of death that had higher mortality rates among whites compared to minorities.

The mortality rate in Camden County was higher among **minorities** for:

- **Heart Disease**-by 26.1%
- **Total Cancer**-by 38.3%
- **Trachea, Bronchus, and Lung Cancer**-by 28.4%

## Cancer

### Total Cancer (Top leading cause of death for Camden County)

Cancer is the group of diseases characterized by the uncontrollable growth and spread of abnormal body cells. If the disease remains unchecked, it can result in death (59). Cancers of all kinds are sometimes grouped together in a parameter called “total cancer”. Total cancer was the leading cause of death in Camden County for the period from 2004-2008. In 2008, in Camden County hospital charges associated with cancer diagnoses totaled \$479,864 (60).

Cancer incidence and mortality data for Camden County were obtained from the North Carolina Central Cancer Registry, which collects data on newly diagnosed cases from NC clinics and hospitals, as well as on NC residents whose cancers were diagnosed at medical facilities in bordering states.

### Total Cancer Incidence

For all cancers combined, there were 238 newly diagnosed cases in Camden County between 2003 and 2007. Table 50 shows age-adjusted total cancer incidence rates for the period from 2003-2007, as well as rates for colorectal, lung, breast, and prostate cancers. The incidence rate for total cancer in Camden County (529.8) is above the average rate for all NC counties (4). Nationally, the age-adjusted cancer incidence rate for all types of cancer was 461.8 (56). Incidence rates for individual cancers will be presented and discussed subsequently.

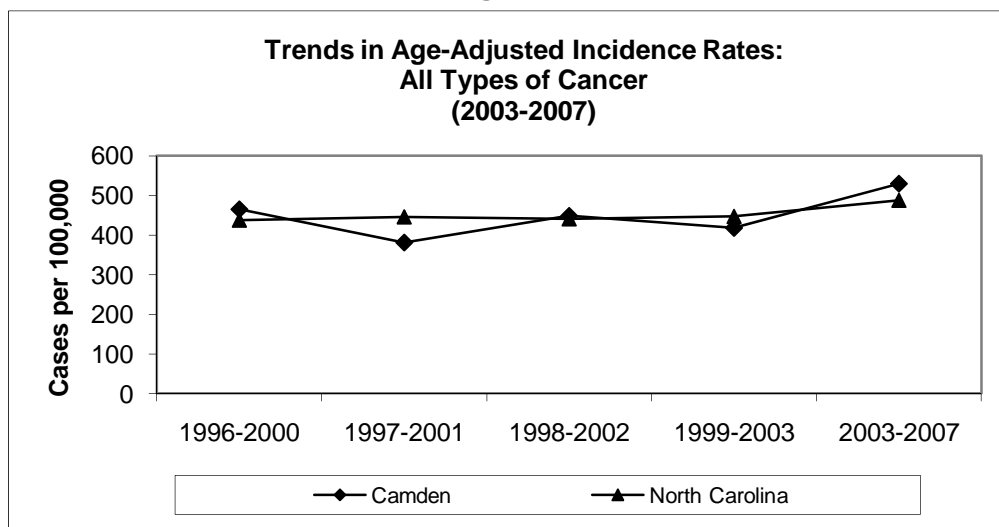
**Table 50. Cancer Incidence (2003-2007)**

County	All Cancer		Colon/Rectum Cancer		Lung/Bronchus Cancer		Female Breast Cancer		Prostate Cancer	
	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate	# Cases	Incidence Rate
Camden	238	529.8	27	60.2	38	84.6	46	186.4	29	144.7
State Total	216,944	487.0	21,000	47.4	33,559	75.8	36,562	149.6	30,578	153.8

Source: NC State Center for Health Statistics. 2003-2007 Cancer Incidence Rates by County for Selected Sites per 100,000 Population. <http://www.schs.state.nc.us/SCHS/CCR/incidence/2007/5yearRates.pdf>

As shown in Figure 5, the total cancer incidence rate in Camden County has fluctuated above and below the state rate throughout the reporting period. In recent years, the county rate has increased above the state rate.

**Figure 5**



Source: NC State Center for Health Statistics. NC Cancer Incidence Rates 2003-2007. Cancer Incidence Rates for All Counties for Selected Sites per 100,000 Population. Available at: <http://www.schs.state.nc.us/SCHS/CCR/incidence/2007/5yearRates.pdf>

## Total Cancer Mortality

Cancer is the leading cause of death among Camden County residents, resulting in 92 deaths between 2004 and 2008. The mortality rate for all types of cancer in Camden County for that period was 189.9 deaths per 100,000, which was below the state rate of 192.5 (Table 51).

**Table 51. Total Cancer Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	92	189.9	44	244.6	23	106	15	373.4	10	179.1
State Total	85,206	192.5	35,288	232.6	31,591	155.2	9,699	293	8,628	169.7

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/> 2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

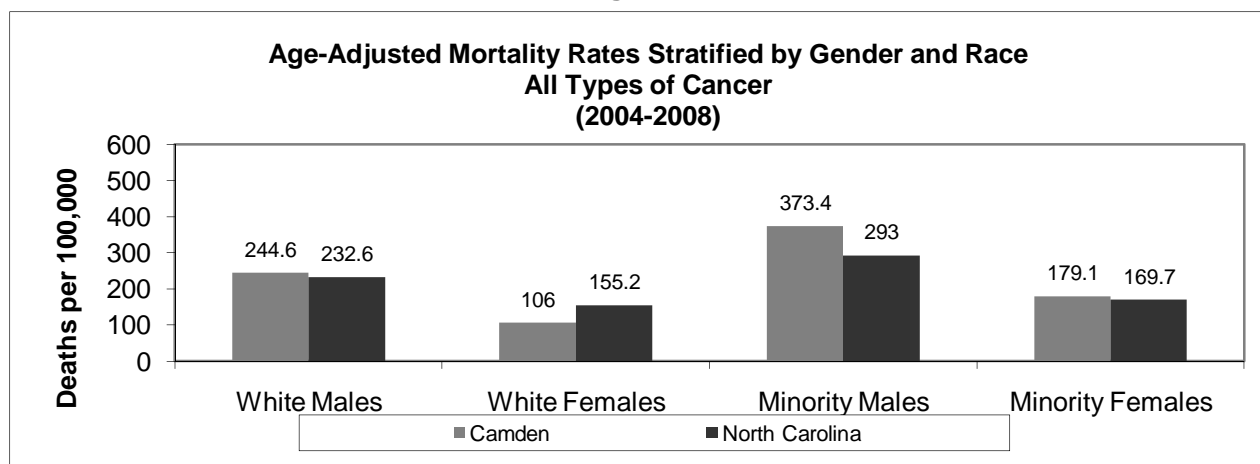
Until 1993, the overall cancer mortality rate for Camden County was below that of the state as a whole. Since this time, the mortality rate for Camden County has exceeded the regional and state rates and in 2004-2008 the rates were virtually the same. (Figure 6)

The Healthy Carolinians 2010 goal is a mortality rate of 166.2 per 100,000 for all types of cancer, a target Camden County rate currently exceeded by 12.5% (54). The county mortality rate for total cancer also exceeds the Healthy People 2010 target of 159.3 deaths per 100,000 by 16.1% (55). The national mortality rate for all types of cancer was 187.0 per 100,000 in 2006, with cancer ranking as the second leading cause of death (53). For 2004-2008, the total cancer mortality rates in Camden County and NC exceeded the national rate.

## Gender and Racial Disparities in Total Cancer Incidence and Mortality

Figure 6 compares the age-adjusted mortality rates due to total cancer for Camden County stratified by gender and race. In Camden County, minority males have a 34.5% higher rate of death due to cancer than white males. White females have a 40.8% lower rate of death due to cancer than minority females. Among white men in Camden County, the mortality rate due to all types of cancer is 56.7% higher than the rate for white women, and the mortality rate for minority men is 52.0% higher than the rate for minority women.

Figure 6



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

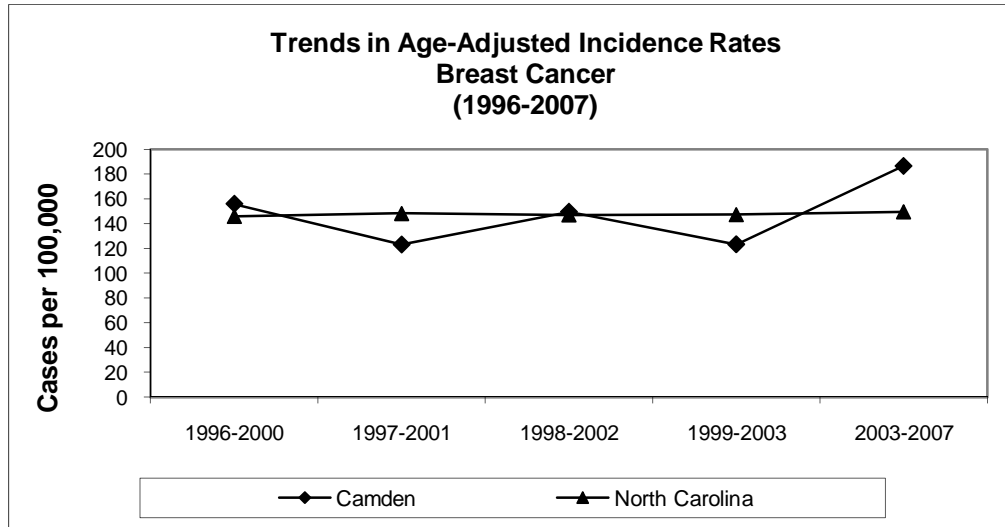
## Breast Cancer

### Breast Cancer Incidence

Between 2003 and 2007, breast cancer was the most commonly diagnosed cancer in Camden County, with 46 new cases diagnosed during that period (Table 50, cited previously). Nationally, breast cancer is the third most commonly diagnosed cancer, with an incidence rate of 131.4 per 100,000 in 2006. Nationally, the incidence rate is highest nationally among non-hispanic white females (138.9 per 100,000) (53).

Since 1996, breast cancer incidence rates have fluctuated more in Camden County than in NC. The breast cancer incidence rate has not changed appreciable at the state level but has shown an increase at the county level (Figure 7).

Figure 7



Source: NC State Center for Health Statistics. NC Cancer Incidence Rates 2003-2007. Cancer Incidence Rates for All Counties for Selected Sites per 100,000 Population. Available at: <http://www.schs.state.nc.us/SCHS/CCR/incidence/2007/5yearRates.pdf>

### Breast Cancer Mortality

Between 2004 and 2008, 3 people died of breast cancer in Camden County, a number of deaths below the threshold for calculating a mortality rate for purposes of comparison. During this time, 6,301 people died of breast cancer in NC (25.0 per 100,000) (Table 52).

The Healthy Carolinians 2010 goal for breast cancer is a mortality rate of 22.6 per 100,000 (54). In 2006, the national breast cancer rate was 23.4, and breast cancer was the second most deadly cancer (53). The Healthy People 2010 target rate is 22.3 per 100,000 females (55). The current Camden County rate is already below the national and Healthy Carolinians goals.

Table 52. Breast Cancer Mortality (2004-2008)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	3	10.8	0	0	2	7.5	0	0	1	30.8
State Total	6,301	25	40	0.3	4,589	22.8	14	0.4	1,658	31.3

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

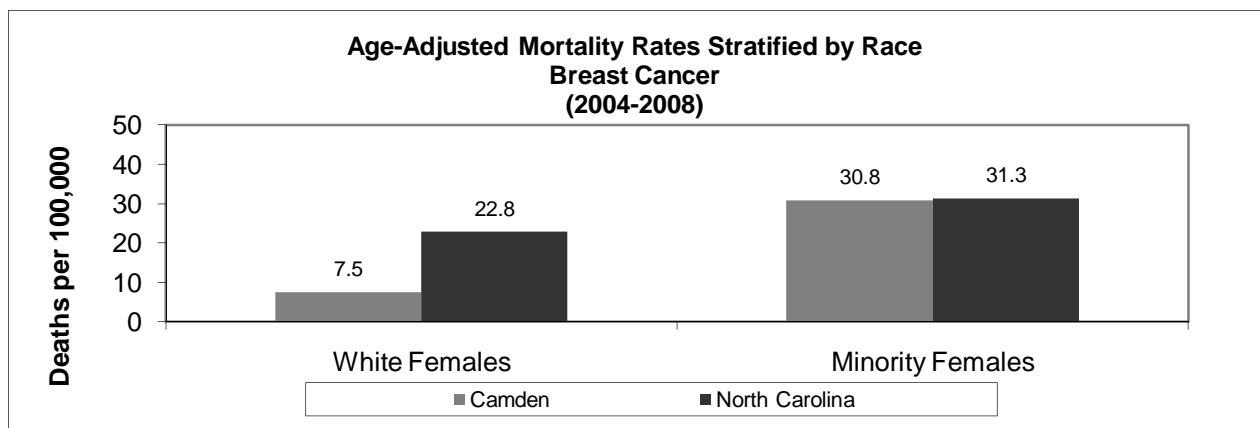
While the breast cancer mortality rate in the state has increased slightly during the period cited, the county mortality has fluctuated above and below these levels, most likely due to varying, small numbers of breast cancer deaths.

While rare, it should be noted that, breast cancer does occur in males, although no Camden County males died of breast cancer in the cited period.

## Racial Disparities in Breast Cancer Mortality

Figure 8 compares 2004-2008 aggregate age-adjusted breast cancer mortality rates, for white females and minority females in Camden County and NC. Because of a small number of breast cancer deaths in Camden County it is not possible to make meaningful mortality rate comparisons at the county level.

**Figure 8**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>

## Breast Cancer Risk Factors (59)

Risk factors for breast cancer include:

- A personal or family history of breast cancer
- A biopsy-confirmed hyperplasia
- A long menstrual history (menstrual periods that started early and ended late in life)
- Obesity after menopause
- Recent use of oral contraceptives or postmenopausal estrogens and progestins
- Not having children or having a first child after age 30
- Consumption of alcoholic beverages

Suspected risk factors include:

- High breast density

## Prostate Cancer

### Prostate Cancer Incidence

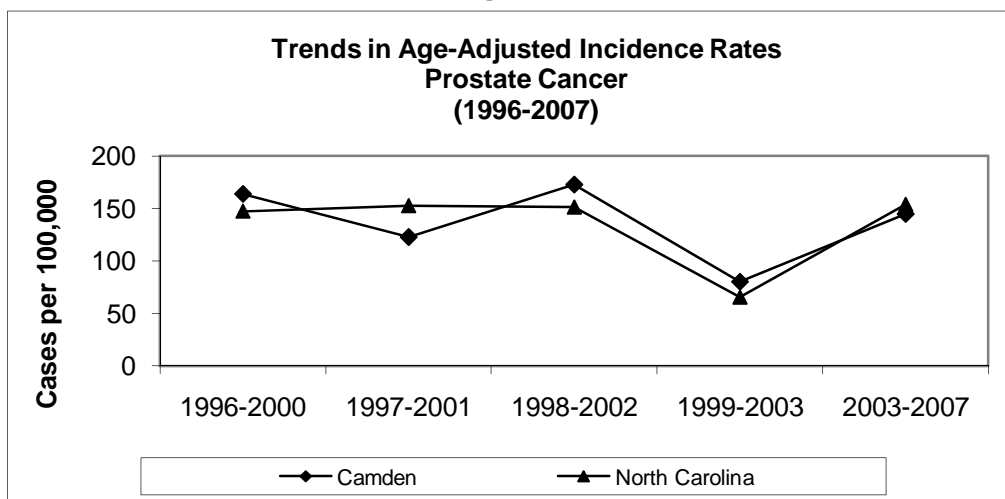
As of 2006, prostate cancer had the highest incidence rate of all cancers nationwide, 152.6 new cases per 100,000. Nationally, the prostate cancer incidence rate was highest among African American males (215.1 per 100,000) (53).

During the most recent reporting period, there were 29 new cases of prostate cancer diagnosed in the county (Table 50, cited previously). Over \$45,332 was spent treating Camden County prostate cancer patients in 2008 (60).



After several years of stability, the prostate cancer incidence rates in the state and the county dropped significantly between the 1998-2002, and 1999-2003 reporting periods (Figure 9). However the rates increased again during the 2003-2007 reporting period. The prostate cancer incidence rate in Camden County (144.7) was 5.9% lower than the rate statewide (153.8) (Table 50, cited previously) during the 2003-2007 reporting period.

**Figure 9**



Source: NC State Center for Health Statistics. NC Cancer Incidence Rates 2003-2007. Cancer Incidence Rates for All Counties for Selected Sites per 100,000 Population. Available at: <http://www.schs.state.nc.us/SCHS/CCR/incidence/2007/5yearRates.pdf>

## Prostate Cancer Mortality

In Camden County between 2004 and 2008, the numbers of prostate cancer deaths were below the threshold for meaningful mortality rate comparisons. During that period 4 males in Camden County died from prostate cancer (Table 53). The Healthy People 2010 goal for prostate cancer mortality is 28.8 deaths per 100,000 males (55), a rate Camden County is currently below. Nationally, prostate cancer has the second highest mortality rate among the four main cancers (53).

**Table 53. Prostate Cancer Mortality (2004-2008)**

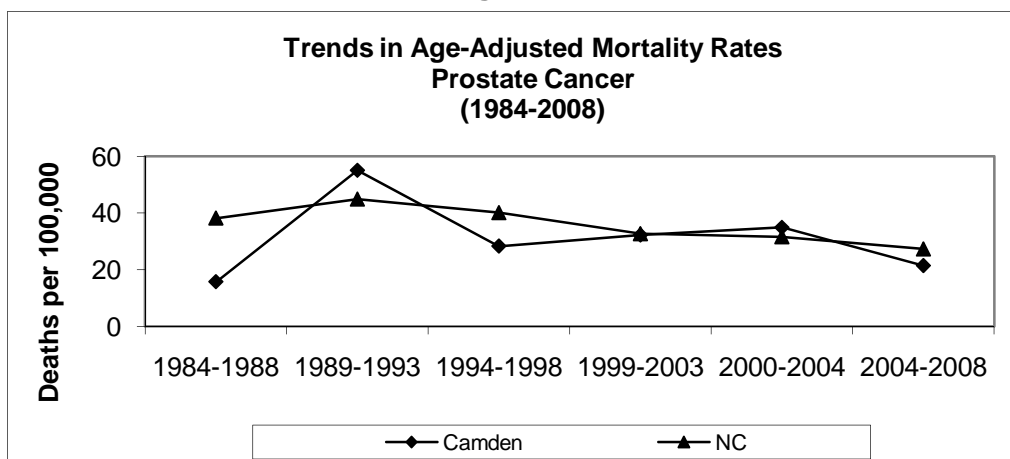
County	Overall Rate		White Males		Minority Males	
	Number	Rate	Number	Rate	Number	Rate
Camden	4	21.4	3	18.2	1	26.3
State Total	4,314	27.3	2,855	21.8	1,459	56.3

Source

NC State Center for Health Statistics, 2010 County Health Databook.  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates  
<http://www.schs.state.nc.us/SCHS/healthstats/databook/>

Since 1989, the prostate cancer mortality rate in the county has decreased significantly (Figure 10).

**Figure 10**

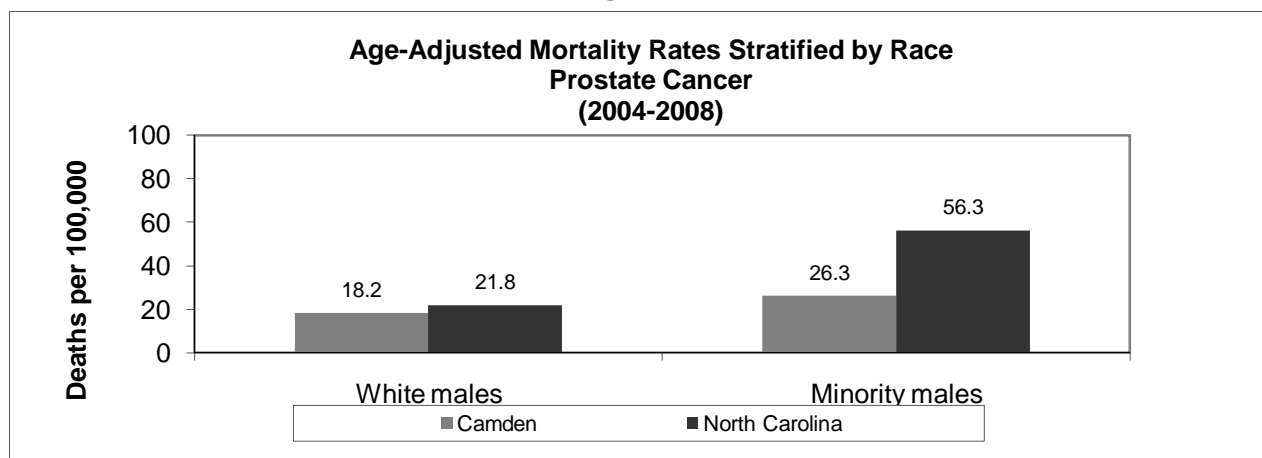


Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Racial Disparities in Prostate Cancer Mortality

The number of prostate cancer deaths among both white and minority males in Camden County was below the threshold for meaningful mortality rate comparison at the county level. At the state level, minority males die from prostate cancer at a rate 61.1% higher than the rate for white males (Figure 11).

**Figure 11**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Prostate Cancer Risk Factors (59)

Risk factors for prostate cancer include:

- Increasing age
- Familial predisposition (may be responsible for 5-10 percent of cases)

A suspected risk factor is:

- High fat consumption

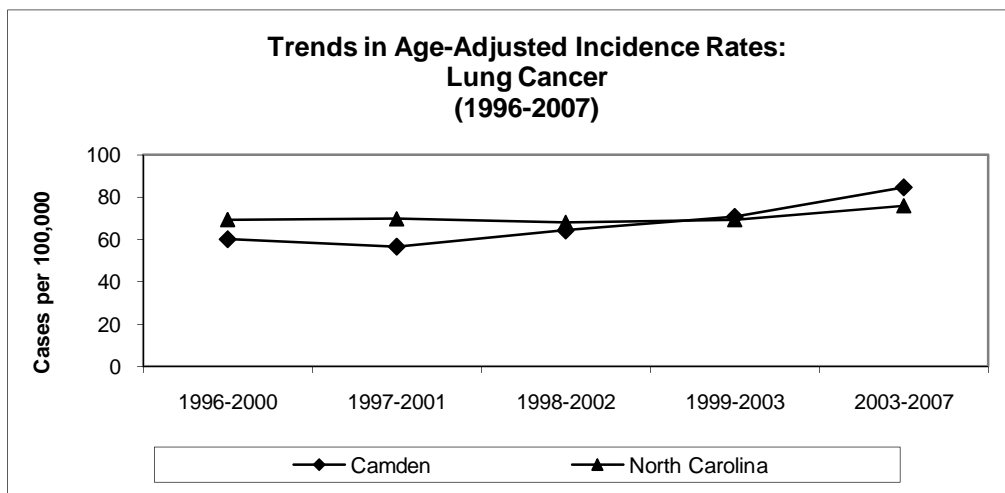
## Lung Cancer

### Lung Cancer Incidence

Between 2003 and 2007, 38 new cases of trachea, bronchus, and lung cancer were diagnosed in Camden County. The resulting aggregate incidence rate of 84.6 was higher than the incidence rate for the state (75.8). In 2008, hospital charges for the treatment of lung cancer in Camden County residents totaled \$62,901 (60).

Until the 1998-2002 reporting period, the Camden County lung cancer incidence remained below the relatively steady state rate. Most recently it has exceeded the state rate, by 10.4 % (Figure 12).

Figure 12



Source: NC State Center for Health Statistics. NC Cancer Incidence Rates 2003-2007. Cancer Incidence Rates for All Counties for Selected Sites per 100,000 Population. Available at: <http://www.schs.state.nc.us/SCHS/CCR/incidence/2007/5yearRates.pdf>

### Lung Cancer Mortality

The 2004-2008 lung cancer mortality rate was lower in Camden County than in the state as a whole (52.2 vs. 59.1). Between 2004 and 2008, a total of 26 people died of lung cancer in Camden County (Table 54).

Nationally, lung cancer is the leading cause of cancer deaths, with a mortality rate of 51.7 per 100,000 in 2006 (53). Camden County's current lung cancer mortality rate exceeds the national rate by 1%. The Healthy People 2010 goal is to reduce the lung cancer mortality rate to 44.9 per 100,000 (55). Camden County currently exceeds this target rate by 14%.

**Table 54. Lung Cancer Mortality (2000-2004)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	26	52.2	16	79.6	4	17.4	5	125.5	1	16.3
State Total	26,325	59.1	12,507	80.2	9,108	44.9	3,035	88.7	1,675	33.2

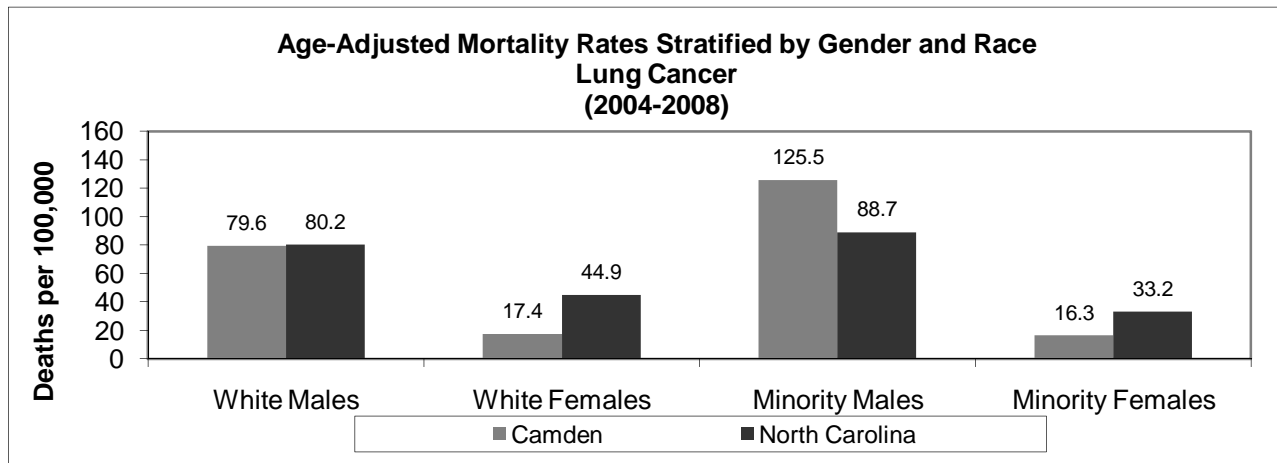
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
 2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

The lung cancer mortality rate in Camden County has fluctuated since 1984, but decreased during the 2004-2008 reporting period (52.2) and is currently below the statewide rate (59.1) by 11.7%.

### Gender and Racial Disparities

In Camden County, the numbers of lung cancer deaths among white females, minority males, and minority females were below the threshold for meaningful mortality rate comparison. Statewide, the lung cancer mortality rate for white men is 44.0% higher than the rate for white women. The mortality rate for minority men is 62.6% higher than the rate for minority women (Figure 13).

**Figure 13**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

### Lung Cancer Risk Factors (59)

Risk factors for lung cancer include:

- Cigarette smoking
- Exposure to arsenic
- Exposure to some organic chemicals, radon, and asbestos
- Radiation exposure from occupational, medical, and environmental sources
- Air pollution
- Tuberculosis
- Secondhand exposure to tobacco smoke

## Colon and Rectal Cancer

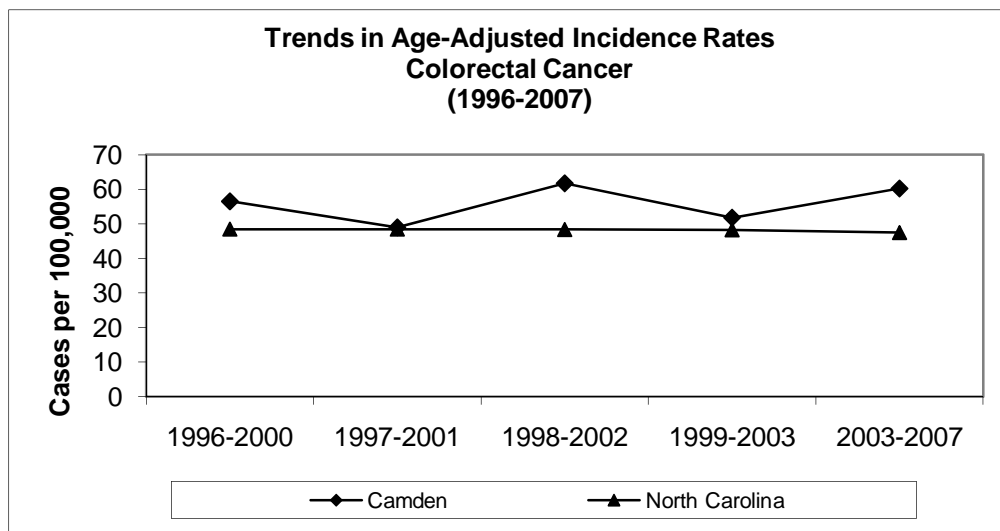
### Colorectal Cancer Incidence

Cancers of the colon and rectum accounted for 27 new cancer diagnoses in Camden County between 2003 and 2007, making it the fourth most commonly diagnosed cancer in the county (Table 50, cited previously). At that time, the local incidence rate (60.2) for colon and rectal cancer was 21.3% higher than the incidence rate for the state as a whole (47.4). In 2008, hospital charges attributable to colorectal cancers among Camden County residents totaled over \$72,538 (60).

Colorectal cancer was the third most commonly diagnosed cancer in the US in 2006. Nationally, incidence rates were highest among black men (63.0) (53).

The Camden County colorectal cancer incidence rate has remained above the state rates since the 1996-2000 reporting period (Figure 14).

**Figure 14**



Source: NC State Center for Health Statistics. NC Cancer Incidence Rates 2003-2007. Cancer Incidence Rates for All Counties for Selected Sites per 100,000 Population. Available at: <http://www.schs.state.nc.us/SCHS/CCR/incidence/2007/5yearRates.pdf>

### Colorectal Cancer Mortality

The colorectal mortality rate in Camden County was slightly lower than the rate for the state as a whole for the period between 2004 and 2008 (Table 53). During this period, 7 people in Camden County died from colorectal cancer, representing an age-adjusted mortality rate of 16.1 per 100,000.

**Table 55. Colorectal Cancer Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	7	16.1	3	20.3	1	5.6	1	27	2	32.4
State Total	7,627	17.3	2,932	19.4	2,798	13.5	917	27	980	19.4

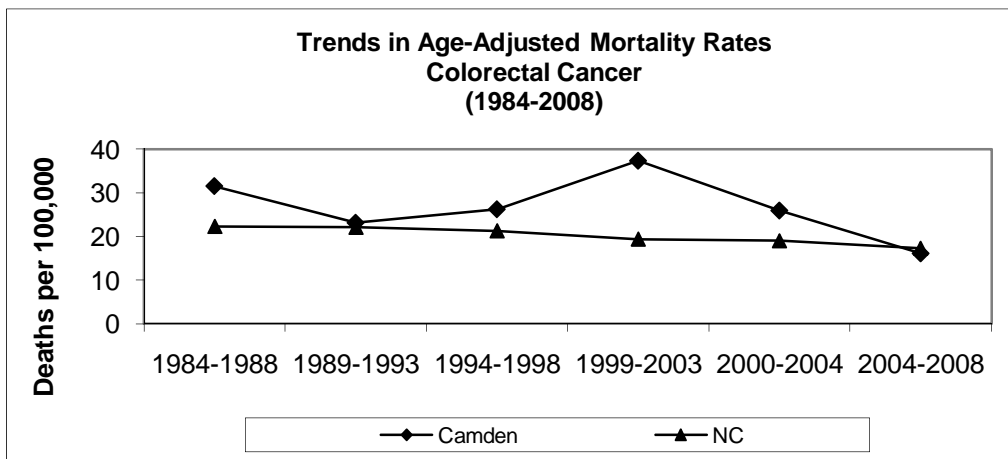
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

Of the four major cancer types, colorectal cancer had had the lowest national mortality rate: 17.1 per 100,000 in 2006 (53). The current mortality rate for Camden County is slightly below the 2006 national mortality rate. Current mortality rates for NC are virtually the same as the national rate.

The Healthy Carolinians 2010 target rate for colorectal mortality is 16.4 deaths per 100,000 (54), a rate Camden County is currently below by 1.8%.

The state colorectal mortality rates have both been declining since 1984, while the comparable Camden County rate has been more variable with a peak in 1999-2003 (37.3 deaths per 100,000), but has shown a decreasing trend since then (Figure 15).

**Figure 15**



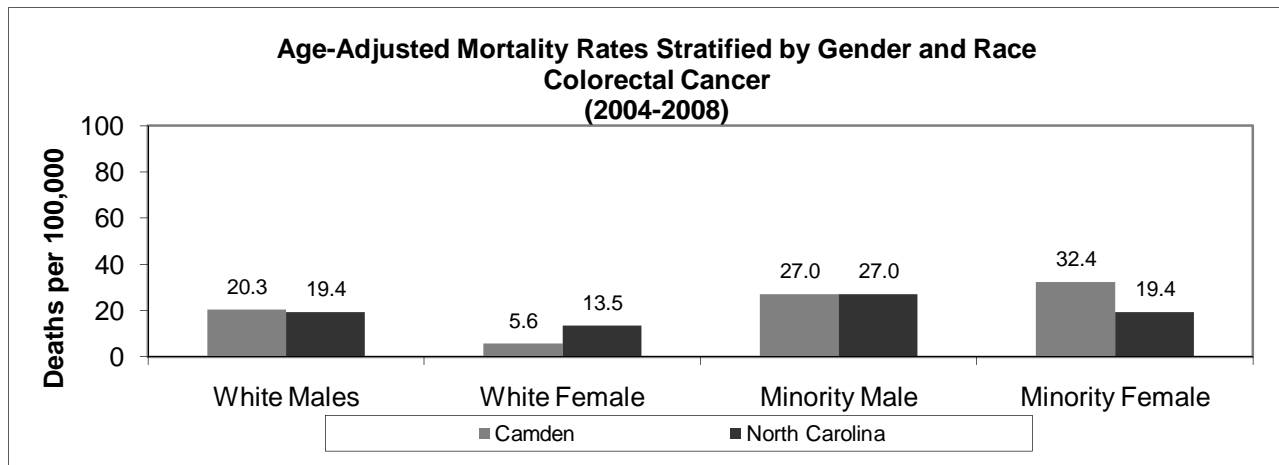
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Gender and Racial Disparities in Colorectal Cancer Mortality

Figure 16 (following page) compares aggregate age-adjusted mortality rates due to colorectal cancer for the period 2004-2008. In Camden County, the numbers of colorectal cancer deaths among all race-sex groups were below the threshold for meaningful local mortality rate comparison. On the state level, however, the mortality rate among white men was 28.1% lower than the rate among minority men; the mortality rate for white women is 30.4% lower than the rate for minority women.

The state mortality rate among white men is higher than that for white women by 30.4%. The state mortality rate among minority males is 28.1% lower than the rate of minority females.

**Figure 16**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Colorectal Cancer Risk Factors (59)

Risk factors for colorectal cancer include:

- Personal or family history of rectal polyps
- Inflammatory bowel disease

Other suspected risk factors include:

- Smoking
- Physical inactivity
- High-fat diet
- Low-fiber diet
- Alcohol consumption

## Heart Disease and Stroke (Second and fourth leading causes of death in Camden County)

Heart disease and cerebrovascular disease (stroke) are both diseases of the circulatory system. While heart disease is any disease that diminishes or interrupts blood supply to the heart, stroke is an interruption in blood supply to the brain. The most common cause of both of these diseases is a narrowing or blockage of arteries that supply the heart and brain, respectively (59). Risk factors for heart disease and stroke include the following:

- Age (65 or older for heart disease, 55 or older for stroke)
- Gender (male)
- Heredity/family history
- Race (especially African American)
- Tobacco use
- High cholesterol
- High blood pressure

- Physical inactivity
- Obesity/overweight
- Diabetes
- Stress
- Alcohol abuse

## Heart Disease and Stroke Incidence

Hospital utilization data provided by the NC-SCHS for Table 56 gives some indication of the burden of heart disease in Camden County. Between 2004 and 2008, the hospital discharge rates for all circulatory diseases, as well as heart disease and cerebrovascular disease individually, declined overall in Camden County. However, together, the two diseases still account for more hospitalizations than any other condition. Consequently, costs due to these two conditions were greater than any other condition, together accounting for \$1,629,806 in hospital charges in Camden County in 2008 (60).

It should be noted that the usefulness of hospital discharge information is limited in that it does not include people who may have cardiovascular or cerebrovascular conditions but have *not* sought medical care or been hospitalized. The category represented in Table 56 includes not only diagnoses of heart disease and cerebrovascular disease, but other diseases of cardiovascular and circulatory systems as well. Therefore, the sum of the rates for heart disease and cerebrovascular disease will not add up to the total discharge rates for all cardiovascular and circulatory diseases.

	2004	2005	2006	2007	2008
<b>Cardiovascular and Circulatory Diseases</b>	12.6	12.7	12.2	13.1	9.6
<b>Heart Disease</b>	8.8	9.2	9.5	9.6	6.6
<b>Cerebrovascular Disease</b>	1.6	1.8	1.7	2.0	1.0

Source: North Carolina State Center for Health Statistics, County Health Databooks Inpatient Hospital Utilization and Charges by Principle Diagnosis and County of Residence <http://www.schs.state.nc.us/SCHS/data/databook>

## Heart Disease Mortality

Heart disease and stroke are the second and fourth leading causes of death among Camden County residents. During the 2004-2008 time period, 88 Camden County residents died of heart disease and 16 died of stroke (Table 48 cited previously).

The most recent data (aggregated for the years 2004-2008), show that overall county mortality due to heart disease (182.2) is lower than the state rate (202.2) (Table 57).

County	Overall Rate		White Males		White Females		Black Males		Black Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	88	186.1	46	248.4	20	102.5	14	344.5	8	144.3
State Total	87,332	202.2	35,043	248.4	33,582	154.1	9,370	289.1	9,337	186.1

NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data



The Healthy Carolinians 2010 goal is to reduce the heart disease mortality rate to 219.8 per 100,000 (54). Camden County is currently below the target rate by 15.3%. The Healthy People 2010 goal is to reduce mortality due to heart disease to 166 per 100,000 (55). Camden County exceeds this goal by 10.8%.

Nationally, as of 2006, the mortality rate due to heart disease was 211.0 (53), which is 11.8% higher than the mortality rate among Camden County residents and 4.2% higher than the rate statewide.

Since 1984, the mortality rate due to heart disease in Camden County has paralleled a decreasing trend seen at the state level.

## Stroke Mortality

The Camden County mortality rate for stroke (40.7) is lower than that of the state as a whole (54.4).

The Healthy Carolinians 2010 goal is to reduce the mortality rate due to stroke to 61 deaths per 100,000 population (54), which Camden County is 33.3% lower than. The most recent (2006) death rate due to stroke in the United States is 45.8 per 100,000 (56), which is 11.1% higher than Camden County. The state mortality rate exceeds that of the country as a whole by 15.8%.

**Table 58. Cerebrovascular Disease Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	16	40.7	5	34.1	8	44.8	0	0	3	63.3
State Total	23,158	54.4	6,763	50.9	10,688	48.9	2,432	78.5	3,275	65.7

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

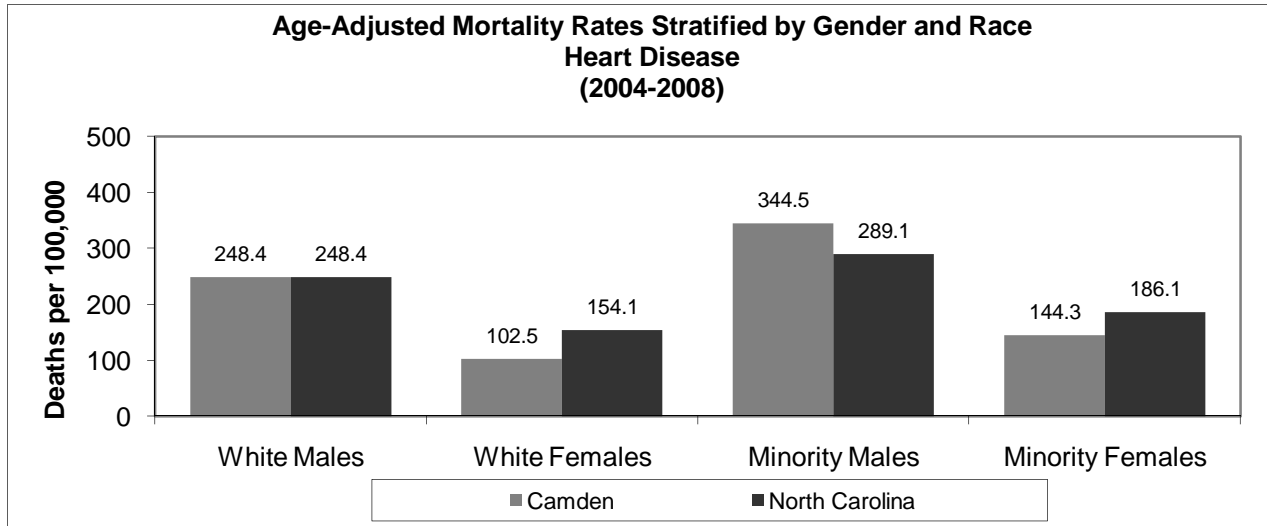
Between 1984 and 2008, the mortality rate due to stroke in Camden County decreased as did the comparable state rate.

## Gender and Racial Disparities in Heart Disease and Stroke Mortality

Figure 17 (following page) compares age adjusted mortality rates due to heart disease, aggregated between 2004-2008 among white males, minority males, white females, and minority females. In Camden County, minority males have a 27.9% higher mortality rate (344.5) due to heart disease than white males (248.8). Minority females in Camden County have a 29.0% higher mortality rate (144.3) due to heart disease than white females (102.5).

Gender disparities in heart disease mortality exist among both whites and minorities in Camden County. The mortality rate due to heart disease among white males (248.4) is 58.7% higher than that of white females (102.5). The mortality rate among minority males (344.5) is 58.1% higher than the rate among minority females (144.3). The mortality rate due to heart disease among minority males in Camden County is higher than the comparable rates at the regional and state level.

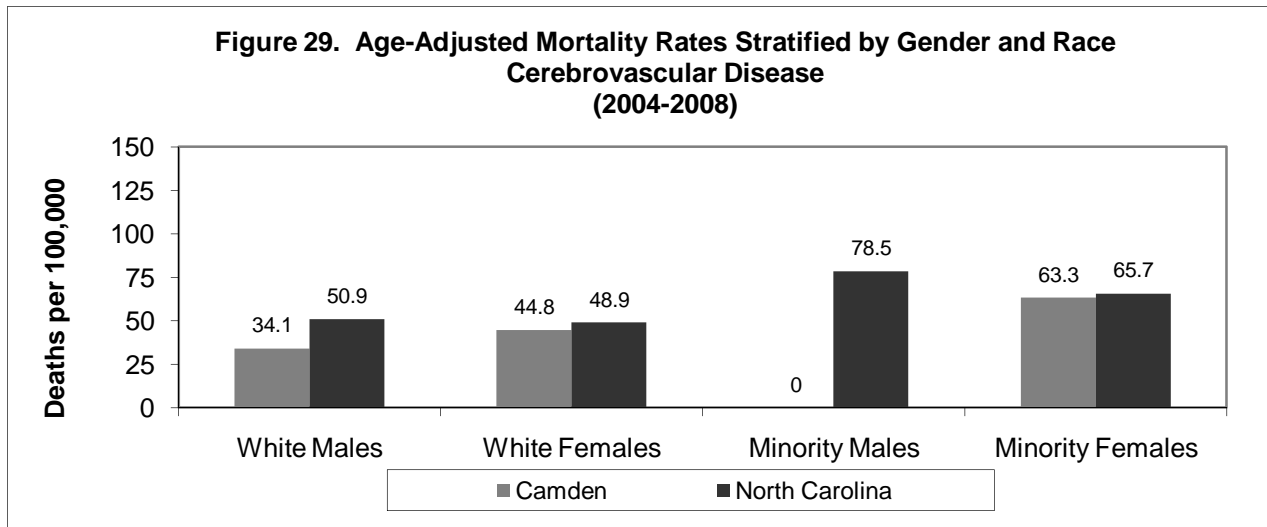
**Figure 17**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-20048 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Figure 18 compares age-adjusted mortality rates for cerebrovascular disease. The cerebrovascular mortality rate among minority males (83.5) is 93% higher than the rate for white males (43.2); the rate among minority females (38.5) is 41% lower than white females (65.1). The cerebrovascular disease mortality rate among white females is 34% higher than the rate among white males. The mortality rate due to cerebrovascular disease is more than twice as high among minority males as among minority females.

**Figure 18**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Unintentional Non-Motor Vehicle Injury (Third leading cause of death in Camden County)

The NC-SCHS distinguishes unintentional non-motor vehicle injuries from motor vehicle injuries when calculating mortality rates for unintentional injuries and ranking leading causes of death. Motor vehicle injuries are among the ten leading causes of death in Camden County. Unintentional non-motor vehicle injuries are also among the ten leading causes of death in the county ranking number three. Unintentional injuries of all types are costly injuries and led to \$675,088 in hospital charges for Camden County residents in 2008 (60).

### Unintentional Non-Motor Vehicle Injury Mortality

Between the years 2004 and 2008, there were seventeen deaths in Camden County due to unintentional non-motor vehicle injuries (e.g., boating accidents, falls, animal bites, drowning, choking) for a local mortality rate of 34.8, which is 12.1% lower than the state rate (Table 59).

Unintentional non-motor vehicle injuries are the fifth leading cause of death nationwide. The 2006 national mortality rate was 40.6 (53). The Healthy People 2010 goal is to reduce deaths due to unintentional injuries to no more than 17.5 per 100,000 (55). The current rate in Camden County is well below these nationwide rates.

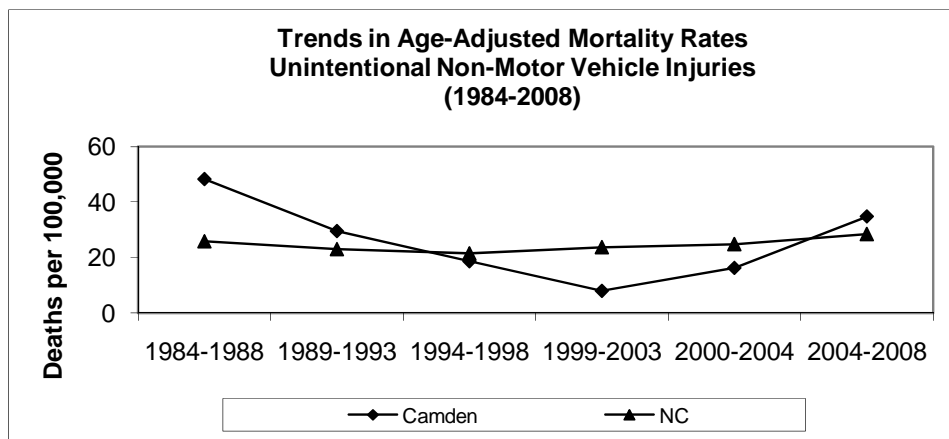
**Table 59. Unintentional Non-Motor Vehicle Injury Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	17	34.8	7	36.1	9	43.3	0	0	1	20.5
State Total	12,435	28.4	6,082	39.6	4,276	22	1,341	31.2	736	13.8

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

Camden County mortality rates due to non-motor vehicle injuries reached a low during the 1999-2003 reporting period and have been increasing since then. The state as a whole has been at a fairly consistent rate since 1984 (Figure 19).

**Figure 19**



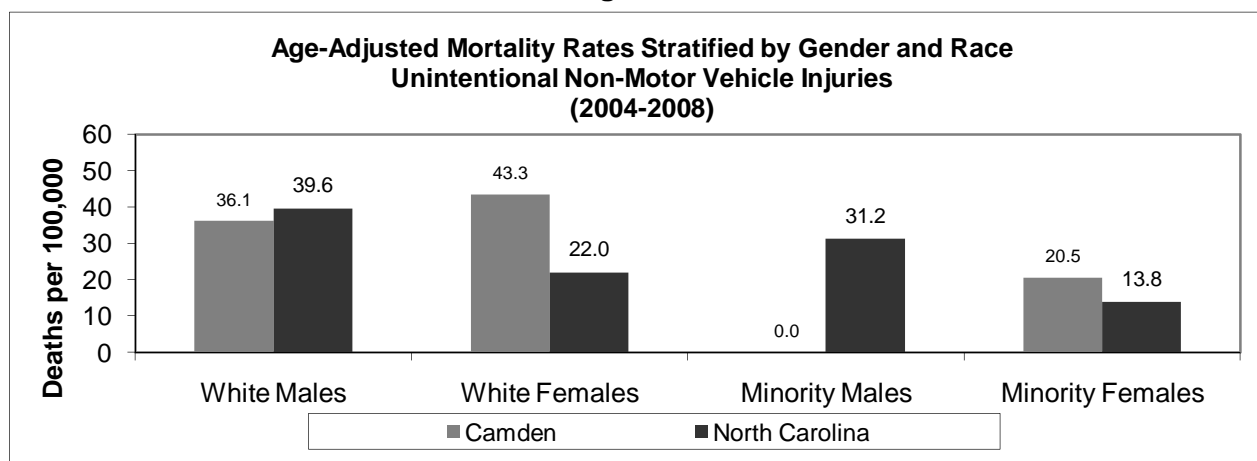
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Gender and Racial Disparities in Unintentional Non-Motor Vehicle Injury Mortality

In Camden County, the numbers of deaths due to unintentional non-motor vehicle injuries for the 2004-2008 period were below the threshold in the race stratified categories to compute mortality rates reliable for comparison. However, in Camden County white males (36.1) have a 16.6% lower mortality rate than white females (43.3). At the state level, significant gender disparities are apparent (Figure 20). The data show that the mortality rate for minority males (31.2) is more than twice the rate among minority females (13.8) and the mortality rate among white males (39.6) is 44.4% higher than the rate among white females (22.0), which is in contrast to the ratio seen amongst whites in Camden County.

Racial disparities also exist in NC. At the state level, the mortality rate among minority males is 21.2% lower than that of white males. The mortality rate due to non-motor vehicle injuries was 37.3% higher among white women than among minority women in the state as a whole.

Figure 20



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Chronic Lower Respiratory Disease (Fifth leading cause of death)

According to the National Institutes of Health (NIH), chronic obstructive pulmonary disease (COPD) is a group of lung diseases involving limited airflow, airway inflammation and the destruction of lung tissue (59). Around 1999, the NC State Center for Health Statistics started classifying COPD within the broader heading of chronic lower respiratory disease (CLRD), which was not used as a separate category previously. It can be assumed that COPD rates from pre-1999 can be compared to CLRD rates after 1999. Hospital charges for treating Camden County residents with CLRD totaled \$313,747 in 2008 (60).

### COPD/CLRD Mortality

Chronic Lower Respiratory Disease deaths for Camden County included; emphysema, bronchitis, asthma, and chronic obstructive pulmonary disease. Although Chronic Lower Respiratory Disease is not listed specifically as an area of focus for HCOTA, priority areas do include smoking, which will raise awareness and provide education for this group of diseases.

COPD/CLRD was the fifth leading cause of death in Camden County for the period 2004-2008. Table 60 shows race-sex specific age-adjusted mortality rates for COPD/CLRD in Camden County and NC for that period. The overall COPD/CLRD mortality rate in Camden County (28.4) is 40.6% lower than the state rate (47.8). The national mortality rate for CLRD was 40.5 in 2006 (53), a rate lower than the state rate but higher than that of the county.

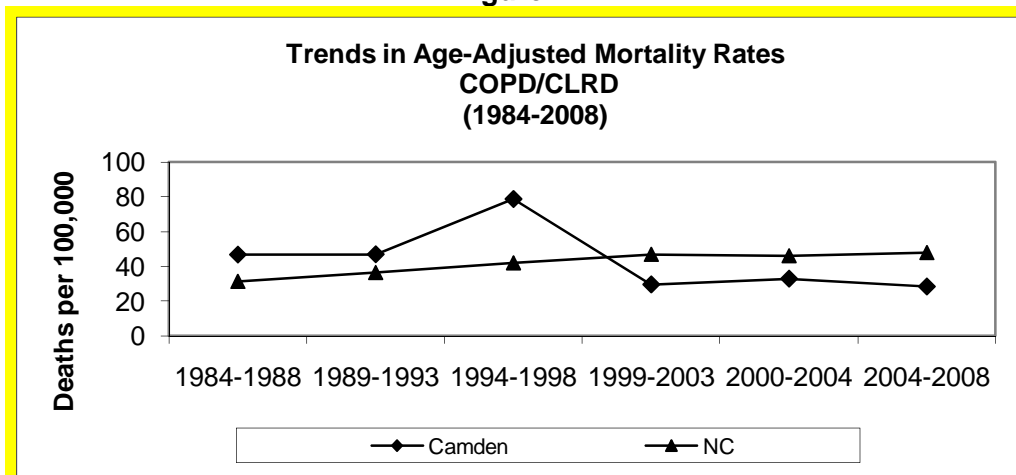
**Table 60. Chronic Lower Respiratory Disease Mortality, including COPD (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	13	28.4	1	9.9	9	44.8	2	54.2	1	16.3
State Total	20,522	47.8	8,590	61.1	9,577	46	1,352	46.5	1,003	20.3

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

As demonstrated in Figure 21, COPD/CLRD mortality rates have increased overall since 1979 in the county, the region, and the state. In the period from 1994 to 1998, the Camden County COPD/CLRD mortality rate increased sharply to a 15-year high. Since this time it has decreased below regional and state levels.

**Figure 21**

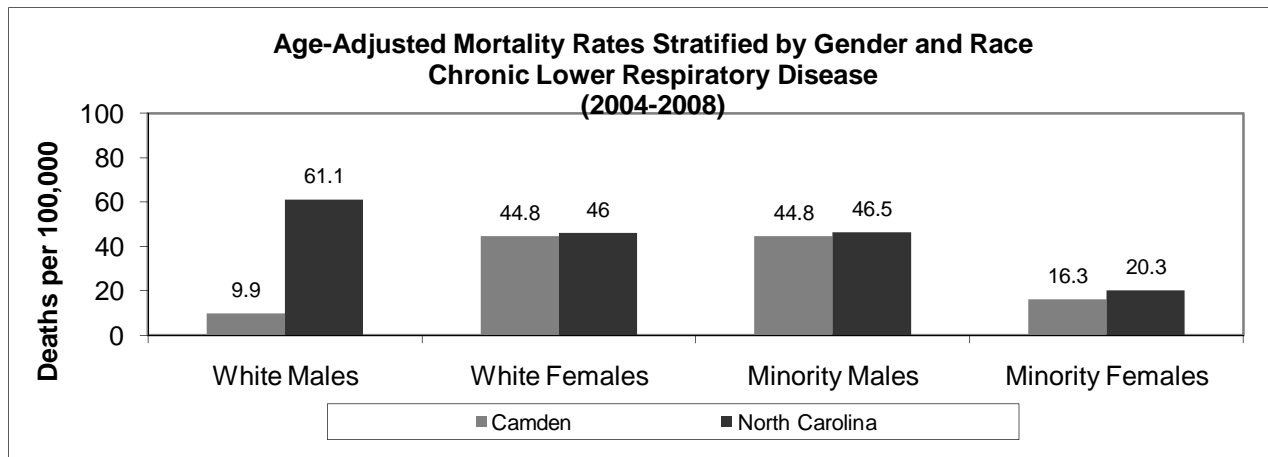


Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Gender and Racial Disparities in COPD/CLRD Mortality

In Camden County, the number of COPD/CLRD deaths among most race and gender groups between 2004 and 2008 was below the threshold for meaningful local mortality rate comparison. However, of the 13 COPD/CLRD deaths in Camden County during the period, nine (69.2%) were among white women. At the state level, the mortality rate due to COPD/CLRD was 23.9% higher among white men (61.1) than among minority men (46.5), and the rate among white women (46.0) was 55.9% higher than the rate among minority women (20.3). The mortality rate for white men is 24.7% higher than the rate for white women. The COPD/CLRD mortality among minority males is 56.3% higher than the rate among minority women (Figure 22).

**Figure 22**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2006 County Health Data Book. Mortality. 2000-2004 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## COPD/CLRD Risk Factors

The leading cause of COPD/CLRD is smoking, which leads to emphysema and chronic bronchitis, the two most common forms of COPD/CLRD. Other risk factors include environmental pollutants and passive smoking (exposure to secondhand smoke) (59).

## Other leading causes of death for Camden County exceeding the state rate:

### Unintentional Motor Vehicle Injuries

The NC-SCHS distinguishes unintentional motor vehicle injuries from all other injuries when calculating mortality rates and ranking leading causes of death.

### Unintentional Motor Vehicle Injury Mortality

Injury mortality attributable to motor vehicle accidents is the eighth leading cause of death in Camden County. Between 2004 and 2008, there were 10 deaths due to motor vehicle injuries in Camden County, computing to a rate 15.8% higher than the state average (Table 61).

The Healthy Carolinians 2010 goal for motor vehicle injury is to reduce the mortality rate to 15.8 per 100,000 (54). Camden County needs to reduce its rate by 28.5% to meet this goal.

In the US, in 2006, motor vehicle crashes were the ninth leading cause of death, with a mortality rate of 16.2 (56). Camden County currently exceeds this rate by 26.7%. The Healthy People 2010 goal is to reduce the overall motor vehicle accident mortality rate to 17.7 per 100,000 (55). For the period 2004-2008 Camden County exceeds this goal by 19.9%.

**Table 61. Unintentional Motor Vehicle Injury Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	10	22.1	9	48	0	0	1	27.2	0	0
State Total	8,308	18.6	4,368	26.3	1,924	11.2	1,462	28.4	554	9.4

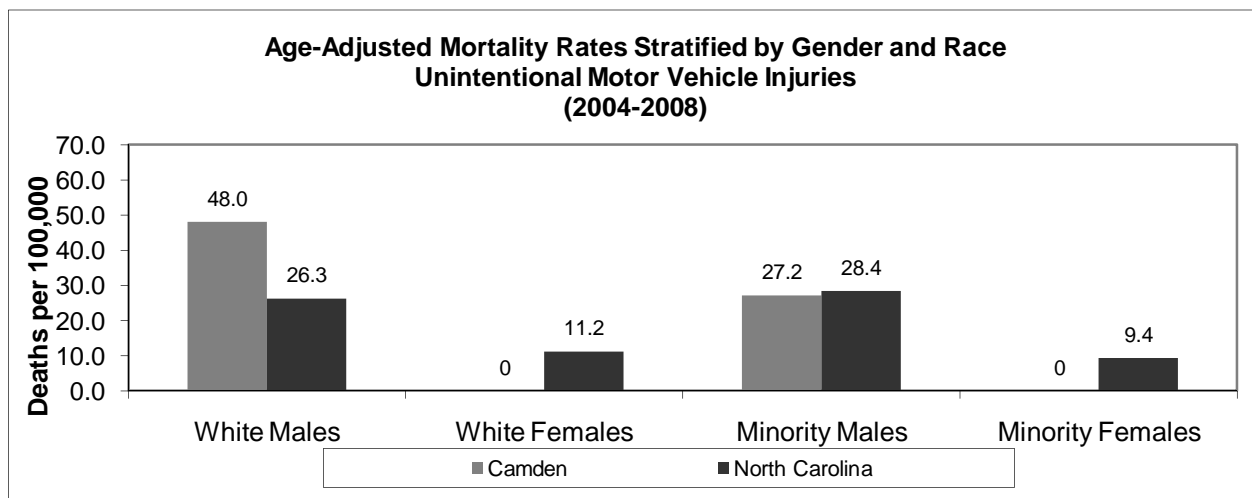
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

The motor vehicle injury mortality rate has decreased slightly in Camden County and statewide since 1984. The most recent state rate is below the Camden County rate.

### Gender and Racial Disparities in Unintentional Motor Vehicle Injury Mortality

The number of motor vehicle deaths in Camden County was below the threshold for meaningful mortality rate comparisons between race-sex groups at the county level. On the state level, racial disparities are not as dramatic as gender disparities. The mortality rate due to motor vehicle injury for white men (26.3) is 57.4% higher than the rate for white women (11.2). The mortality rate was 69.9% higher among minority men (28.4) than among minority women (9.4) (Figure 23).

**Figure 23**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Sometimes significant disparities in motor vehicle injury mortality exist among age groups. During the five-year aggregate period between 2004 and 2008, the highest motor vehicle injury mortality rate (53.9) in Camden County occurred in the age group 65-84.

According to data catalogued by the Annie E. Casey Foundation (57) there were two motor vehicle fatalities in Camden County among children from ages 0 to 17 between 2003 and 2007, the most recent time period for which data was reported.

**Table 62. Death Counts and Unadjusted Death Rates: Unintentional Motor Vehicle Injuries (2004-2008)**

	All Ages		0-19		20-39		40-64		65-84	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	10	21.7	3	25.5	3	27.0	1	5.9	3	53.9
State Total	8,308	18.7	1,302	10.8	3,108	24.8	2,593	18	n/a	n/a

NC State Center for Health Statistics, 2010 County Health Databook, 2004-2008 Ten Leading Causes of Death by County of Residence and Age Group: Ranking, Number of Deaths, and Unadjusted Death Rates per 100,000 Population

Source: <http://www.schs.state.nc.us/SCHS/d>

\*Doesn't include deaths not listed in the Top Ten Leading Causes of Death.

**Table 63: Unintentional Motor Vehicle Injury Age-Adjusted Death Rates per 100,000 Population**

RESIDENCE		2005-09
North Carolina		17.6
<i>Camden</i>		N/A
PEERS	Avery	N/A
	Currituck	29.5
	Graham	N/A
	Polk	N/A

According to the NC Highway Research Center, in 2008, there were 146 motor vehicle accidents in Camden County, resulting in 78 nonfatal injuries and three fatalities (Table 64).

Frequently, motor vehicle crashes are associated with alcohol consumption. In 2008, approximately 6.9% of Camden County motor vehicle accidents were associated with alcohol, a figure just slightly higher than the state percentage of 5.7%. Alcohol was involved in 13.0% of all *nonfatal* motor vehicle accidents in Camden County but was not involved in any *fatal* accidents. In the state as a whole, 8.6% of all *nonfatal* motor vehicle accidents and almost 30% of all *fatal* motor vehicle accidents were alcohol related (30).

**Table 64. Motor Vehicle Injuries, 2008**

	Crashes		Number of Injuries				Alcohol Related Crashes			No. DWI Charges	No. DWI Convictions	% DWI convictions
	Total Number	Number Alcohol Related	Non-Fatal	Fatal	Alcohol Related Non-Fatal	Alcohol Related Fatal	Percent of Total Crashes	Percent of Non-Fatal Crashes	Percent of Fatal Crashes			
Camden	146	10	78	3	9	0	6.9	13.0	0.0	78	45	57.7
State Total	209,318	11,920	112,387	1,450	9,267	431	5.7	8.6	30.0	59,513	40,506	55.7

Source: Highway Safety Research Center, NC Alcohol Facts, <http://www.hsrc.unc.edu/ncaf>



## Pneumonia and Influenza

Pneumonia and influenza are diseases of the lungs. Influenza (the “flu”) is a contagious infection of the throat, mouth and lungs caused by an airborne virus. Pneumonia is an inflammation of the lungs caused by either bacteria or viruses. Bacterial pneumonia is the most common and serious form of pneumonia and among individuals with suppressed immune systems it may follow influenza or the common cold (59).

Pneumonia/influenza was the ninth leading cause of death in Camden County in the period 2004-2008, and hospital charges incurred for its treatment totaled \$250,556 in 2008 (60).

Nine deaths were attributed to pneumonia/influenza in the period between 2004 and 2008, computing to an overall mortality rate of 20.7. This rate is essentially the same as the comparable state rate (Table 65).

**Table 65. Pneumonia/Influenza Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	9	20.7	6	37.9	3	15.4	0	0	0	0
State Total	8,599	20.3	3,053	23.9	4,091	18.6	657	23.3	798	15.9

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

Since 1984, the Camden County pneumonia/influenza mortality rate has decreased overall. Though not as dramatic, similar trends were observed at the state level.

Table 66: Pneumonia & Influenza Age-Adjusted Death Rates per 100,000 Population

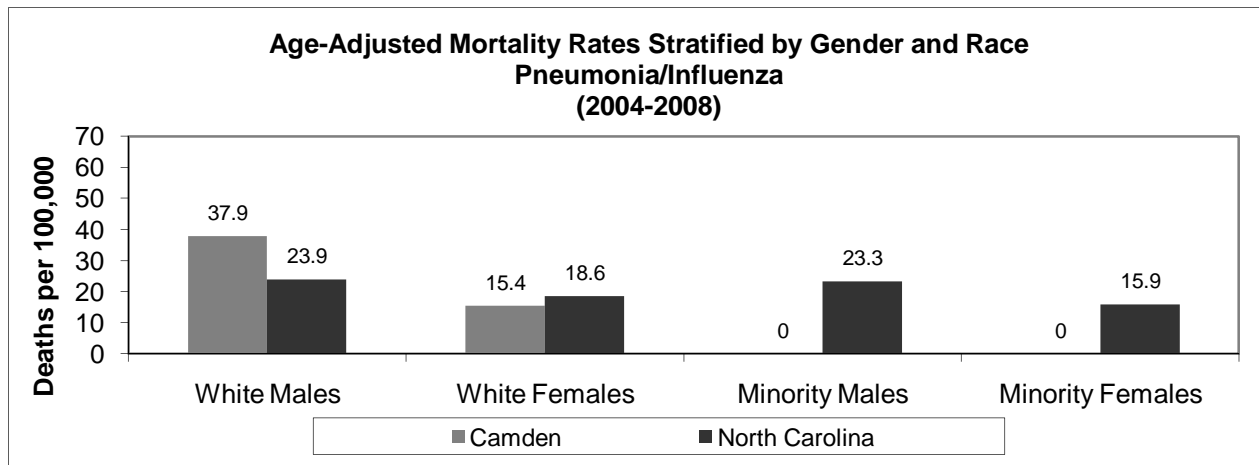
RESIDENCE		2005-09
North Carolina		19.4
<i>Camden</i>		N/A
<b>PEERS</b>	Avery	40.9
	Currituck	59.7
	Graham	N/A
	Polk	12.1

## Gender and Racial Disparities in Pneumonia/Influenza Mortality

For the aggregate period 2004-2008, the numbers of pneumonia/influenza deaths among all race-sex groups in Camden County were below the threshold for meaningful mortality rate comparisons.

At the state level, the mortality rate among minority men (23.3) was only 2.5% lower than that for white men (23.9) and the mortality rate among white women (18.6) was 14.5% higher than the rate among minority women (15.9). Also at the state level, the pneumonia/influenza mortality rate for white men is 22.2% higher than the rate for white women, and the rate among minority men was 31.8% higher than the rate among minority women (Figure 24).

**Figure 24**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Suicide

Between 2004 and 2008, there were seven deaths due to suicide in Camden County, making it the tenth leading cause of death in the county. For the period 2004 through 2008, the suicide mortality rate in Camden County was 12.8, which was slightly higher than the state rate (12.8).

The Healthy Carolinian’s goal for suicide is 8.0 per 100,000 (54) which Camden County exceeds by 37.5% (54).

Nationally, the mortality rate due to suicide is 11.1 per 100,000 (53), 13.3% lower than the current Camden County rate. The Healthy People 2010 goal is 5.0 deaths due to suicide per 100,000 (55). The current Camden County suicide rate is 60.9% higher than the national goal.

**Table 67. Suicide Mortality (2004-2008)**

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	7	12.8	5	21.3	2	9.6	0	0	0	0
State Total	5,343	11.9	3,632	21.8	1,122	6.5	471	9	118	2

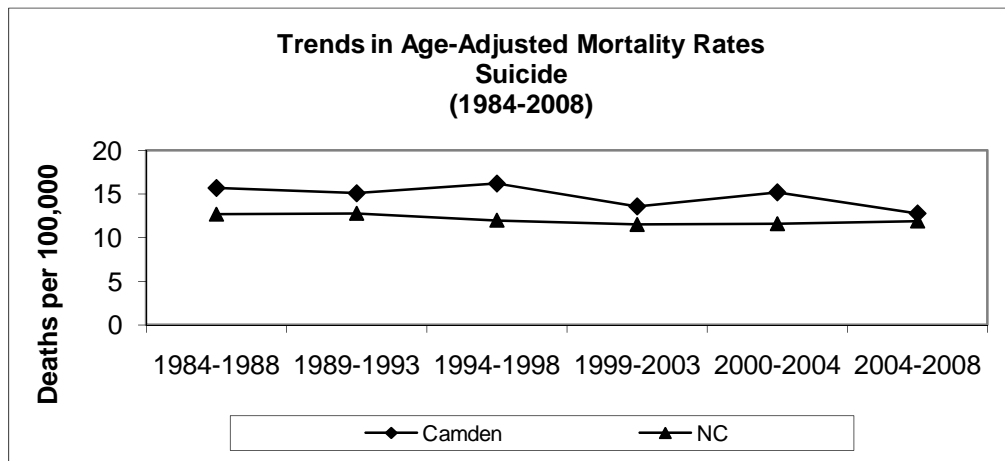
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

Table 68: Suicide Age-Adjusted Death Rates per 100,000 Population

RESIDENCE		2005-09
North Carolina		12.0
Camden		N/A
PEERS	Avery	21.5
	Currituck	18.4
	Graham	N/A
	Polk	N/A

Suicide mortality rates in the state have remained fairly stable since 1984 while the mortality rates in Camden County have fluctuated, probably due to varying, small numbers of events (Figure 25).

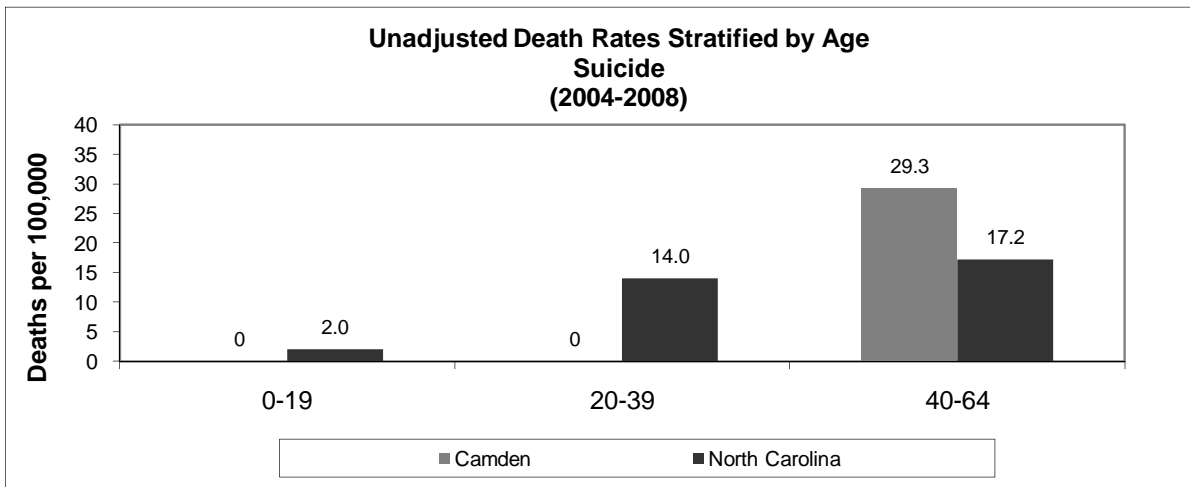
Figure 25



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Compared to the state as a whole, Camden County experiences a greater proportion of suicide deaths among residents who are between 40 and 64 years old; 5 out of the 7 deaths were among county residents in this age category (Figure 26 following page).

**Figure 26**

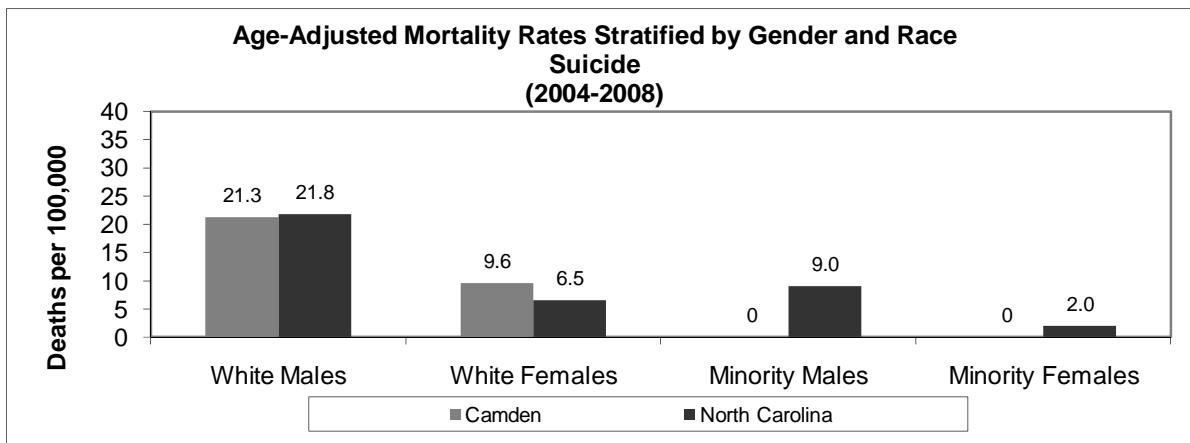


NC State Center for Health Statistics, 2006 County Health Data Book. Mortality. 2004-2008 Ten Leading Causes of Death by County of Residence and Age Group: Ranking, Number of Deaths and Unadjusted Death Rates per 100,000 Population. <http://www.schs.state.nc.us/SCHS/data/databook/>

## Gender and Racial Disparities in Suicide Mortality

The numbers of suicide related deaths in Camden County were below the threshold for meaningful mortality rate comparisons between race-sex groups at the county level. In NC, there are significant racial and gender disparities. The mortality rate for white males (21.8) was 58.7% higher than the rate for minority males (9.0). The rate for white females (6.5) was 69.2% higher than the rate for minority females (2.0). The rate for white males was 70.2% higher than the rate for white females. The rate for minority males was 77.8% higher than the rate for minority females. (Figure 27).

**Figure 27**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Communicable Disease

Health professionals are required to report cases of certain communicable diseases to the North Carolina Department of Health and Human Services through their local health department. Table 69 presents Camden County, and NC average data for several important infectious diseases subject to this requirement.

### Reportable Communicable Disease

There were three cases of salmonellosis and no cases of Hepatitis A, Hepatitis B, or whooping cough for the period 2000-2005 in Camden County. There were no cases of tuberculosis in 2009 at the county level (Table 69).

**Table 69. Communicable Disease Incidence (2000-2005, except as indicated)**

County	Hepatitis A		Hepatitis B		Salmonellosis		Tuberculosis (2009)		Whooping Cough	
	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence	Cases	Incidence
Camden	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a
State Total	920	n/a	1,222	n/a	8,985	n/a	250	2.7	622	n/a
	a		a		a		b	b	a	

Sources: a-NC Communicable Disease Information <http://www.epi.state.nc.us/epi/gcdc/pdf/CDbyDiseasebyYear2000-2005.pdf>  
b-NC Tuberculosis Control. <http://www.epi.state.nc.us/epi/gcdc/tb/ratebycounty.html>

## Sexually Transmitted Disease

Table 70 lists incidence rates for the most prevalent STDs, including HIV/AIDS, in Camden County.

**Table 70. Sexually Transmitted Disease Incidence, Cases per 100,000 (years as noted)**

County	Gonorrhea, 2004-2008				I° & II° Syphilis, 2004-2008				Chlamydia 2007	HIV 2007
	Total		Minority		Total		Minority			
	Number	Rate	Number	Rate	Number	Rate	Number	Total Rate	Total Rate	Total Rate
Camden	30	65.1	20	276.3	0	0.0	0	0.0	204.9	10.8
State Total	79,172	178.4	62,494	552.9	1,384	3.1	934	8.3	345.6	21.9
Source	a	a	a	a	a	a	a	a	b	b

a - NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
b- NC-CATCH <http://www.ncpublichealthcatch.com/ReportPortal/design/view.aspx>

### Chlamydia

Table 70, lists the 2004-2008 chlamydia incidence rate in Camden County as 204.9, a rate 40.7% lower than the comparable state rate.

### Gonorrhea

According to data shown in Table 70, the 2004-2008 Camden County incidence rate for gonorrhea (65.1) was 63.5% lower than the state rate (178.4). The Healthy Carolinians 2010 goal for gonorrhea is 191 cases per 100,000 (54). The Healthy People 2010 target is approximately 19 cases per 100,000 (55). Gonorrhea incidence in Camden County is well below the Healthy Carolinians target, but is 78% above the Healthy People goal.

Minority populations are disproportionately burdened by gonorrhea. The 2004-2008 incidence rate for gonorrhea among minority Camden County residents, was 76.4% higher than the overall Camden County gonorrhea incidence rate. At the state level, the minority rate was 67.7% higher than the overall rate.

The most recently published trend data for gonorrhea, indicating that since 1997-2008 the incidence of gonorrhea has decreased slightly in Camden County and in the state as a whole.

### Syphilis

Primary and secondary syphilis are the communicable stages of the disease and as such are the cases that are reported. No new cases of syphilis were reported in Camden County for the period 2004-2008. Statewide, the 2004-2008 syphilis incidence rate was 3.1 cases per 100,000 (Table 70, cited previously).

Because there were no cases identified, the 2004-2008 syphilis incidence rate in Camden County is above both the Healthy Carolinians goal of approximately 0.3 cases per 100,000 (54) and the Healthy People 2010 target of 0.2 cases per 100,000 (55).

Aggregate data show that the syphilis incidence in the state has fallen since 1997. The local rates are low, however, and based on a very small number of events; they should be interpreted with caution.

### HIV/AIDS

#### HIV/AIDS Incidence

The 2000-2004 HIV incidence rate in Camden County was over 42% higher than the regional rate and 39% higher than the state rate. Between 1996 and 2004, the incidence rates for HIV/AIDS in the Albemarle Region and the state have changed very little, though the regional incidence has decreased slightly and the state incidence rate has increased slightly. The HIV/AIDS incidence rate in Camden County has increased during this time, but the most recent rate is just above the target rate of approximately 1.5 new cases per 100,000 set by Healthy Carolinians (54).

#### HIV/AIDS Mortality

The number of deaths attributable to HIV/AIDS is presented in Table 71. The numbers of AIDS deaths in Camden County are below the threshold for reliable mortality rate comparison. The numbers of HIV/AIDS deaths in the state are also low and the resulting rates should be interpreted with extreme caution.

**Table 71. HIV/AIDS Mortality (2004-2008)**

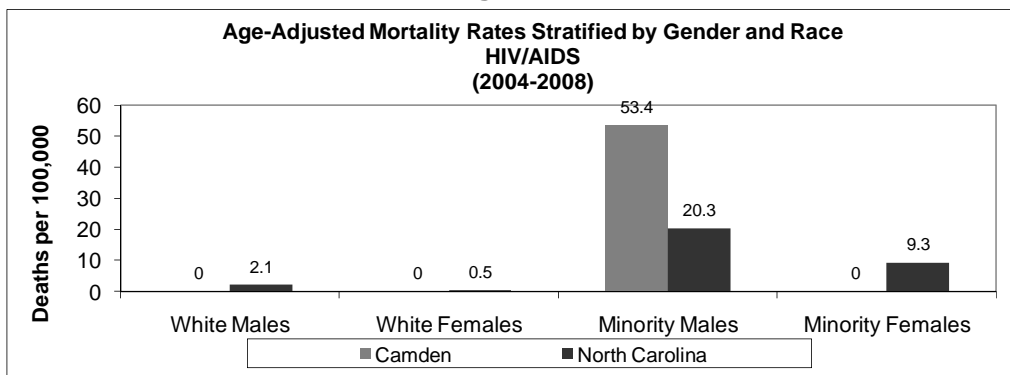
County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Camden	1	2.7	0	0	0	0	1	53.4	0	0
State Total	1,982	4.4	357	2.1	74	0.5	1,013	20.3	538	9.3

Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>  
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

The county, regional, and statewide HIV/AIDS mortality rates rose dramatically between the discovery of the disease in the early 1980s and 1994-1998. Mortality rates have since declined on the state level, but continued to rise in Camden County until the most recent reporting period.

Minority males are disproportionately affected by HIV/AIDS in the state as a whole, with a mortality rate of 20.3 per 100,000, which is 89.7% higher than the rate for white males (2.1) (Figure 23).

**Figure 23**



Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

## Maternal and Child Health

### Adult and Teen Pregnancy and Birth Rates

- The average number of live births for all counties in NC increased every year between 2002 and 2007, and remained fairly stable between 2007 and 2008. This is significantly higher than the comparable Camden County average throughout the reporting period.

According to data presented in Table 72 (following page):

- As monitored by the NC-SCHS, the pregnancy rate is the number of pregnancies per 1,000 women between the ages of 15 and 44 in the referenced population. The overall pregnancy rate in Camden County for the period from 2005 to 2007 was 65., which was 22% lower than the average NC county pregnancy rate of 83.9.
- In Camden County between 2005 and 2007, 14.9% of all live births occurred among minority mothers; of the Camden County live births among girls ages 15-19, 21.9% occurred among minority mothers. These local percentages are both well below the state average.
- In 2006, Camden County had a 26.6% lower percentage of births to Medicaid mothers than the state (38.0% vs. 51.8%).
- In 2006, Camden County had 34.4% fewer births to health department mothers when compared with the NC County average. There were 23.5% fewer births to WIC mothers than the NC county average.

**Table 72. Pregnancies and Births (2005-2007)**

County	Pregnancy, Total (2005-2007)						Pregnancy, Females 15 - 19 (2005-2007)						2006 Percent of Live Births To:		
	Preg Rate <sup>1</sup>	Birth Rate <sup>2</sup>	Percent of Live Births				Preg Rate <sup>6</sup>	Birth Rate <sup>7</sup>	Percent of Live Births				Medicaid Moms	Health Dept. Moms	WIC Moms
			Minority <sup>3</sup>	Low Weight <sup>4</sup>	Late/No Care <sup>5</sup>	Mother Smoked			Minority <sup>3</sup>	Low Weight <sup>4</sup>	Late/No Care <sup>5</sup>	Mother Smoked			
Camden	65.5	65.5	14.9	7.9	10.1	10.1	39.4	35.0	21.9	6.3	25.0	9.4	38.0	13.9	30.6
NC County Avg.	83.9	68.2	27.8	9.2	17.3	11.5	62.6	47.9	40.0	11.2	29.9	14.6	51.8	21.2	40.0
	a	a	a	a	a	a	b	b	b	b	b	b	c	c	c

\* Calculated Value

1--Pregnancies (reported abortions, fetal deaths, and live births) per 1,000 females 15-44.

2--Live Births per 1,000 females 15-44.

3--Based on race of mother.

4--5 lbs 8 ozs or less.

5--Late care defined as first visit after third month. Information often based on maternal recall.

6--Pregnancies (reported abortions, fetal deaths, and live births) per 1,000 females 15-19.

7--Live Births per 1,000 females 15-19

Source: a--NC Health Statistics Pocket Guide. <http://www.schs.state.nc.us/SCHS/data/pocketguide/2007/table8a.html>

b--NC Health Statistics Pocket Guide. <http://www.schs.state.nc.us/SCHS/data/pocketguide/2007/table8b.html>

c-- NC Health Statistics Pocket Guide. <http://www.schs.state.nc.us/SCHS/data/pocketguide/2007/table7c.html>

- According to more recent data from the NC SCHS, the overall pregnancy rate in Camden County in 2008, for women ages 15-44 was 57.9, compared to a state rate of 83.9. Among white women in this age group the county pregnancy rate was 52.4 (NC=78.6); among minority women the county rate was 88.5 (NC=91.2). Among teens aged 15-19, the overall 2008 pregnancy rate was 22.4 compared to a rate of 58.6 statewide. Among white teens, the county rate was 23.3 (NC=47.8); among minority teens the pregnancy rate was 17.9 (NC=77.7) (58)

## Adolescent Pregnancies and Births

- Because of very small numbers of pregnancies, a pregnancy *rate* for adolescents 10-14 years of age has not been calculated for Camden County (Table 73).
- During the period from 2005 through 2008, there were no pregnancies among 10-14 year-olds in Camden County. (58)

**Table 73. Camden County Adolescent Pregnancies (Ages 10-14)**

County	2008										Total Pregnancies Ages 10-14
	Among White Females, Ages 10-14					Among Non-White Females, Ages 10-14					
	Age 10	Age 11	Age 12	Age 13	Age 14	Age 10	Age 11	Age 12	Age 13	Age 14	
Camden	0	0	0	0	0	0	0	0	0	0	0
State Total	0	1	2	20	120	0	1	7	52	171	374
NC County Avg.	0	0	0	0	1	0	0	0	1	2	4

a - NC State Center for Health Statistics. County Health Databooks. <http://www.schs.state.nc.us/SCHS/data/databook/>

## Abortion

- For women between the ages of 15 and 44, the most recently calculated abortion rate in Camden County (2008) was 11.0, well below the overall state abortion rate of 14.4.



- According to data, the annual abortion rates for Camden County women ages 15-44 have fluctuated since 2003 and showed a sharp increase between 2007 and 2008. NC abortion rates have fluctuated less dramatically but are higher than Camden County.
- For teenagers between the ages of 15 and 19; the 2008 abortion rate in Camden County was 11.2, still lower than the statewide teen abortion rate of 12.5 (58).
- Teen abortion rates also fluctuated in Camden County and the state during the reporting period and have shown an overall decrease. Since 2005, teen abortion rates have fluctuated greatly in the county but have shown an overall decrease since 2003. Rates have fluctuated slightly in the state and have shown an overall decrease.

## Pregnancy Risk Factors

- The percentage of high parity births among women aged <30 in Camden County from 2004-2008 was 36.7% lower than the comparable state rate (Table 74). According to NC-SCHS, a birth is high parity if the mother is younger than 18 when she has had one or more births, or aged 18 or 19 and has had two or more births, or is 20-24 and has had four or more births, etc.
- The percentage of high parity births among Camden County women age 30 and older was 20.5% lower than the state rate.
- The percentage of short interval births (less than six months between pregnancies) is 12.6% lower in Camden County than statewide.
- Between 2004 and 2008, approximately 9.9% of babies in Camden County were born to mothers who smoked, a rate slightly lower than the state (11.5%).

**Table 74. High Risk Births (2004-2008)**

	High Parity Births				Short Interval Births		Births to Mothers who Smoke	
	Mothers Under 30		Mothers Over 30		Number	Percent	Number	Percent
	Number	Percent	Number	Percent				
Camden	35	11.4	33	15.9	37	11.1	51	9.9
State Total	74,440	18.0	43,711	20.0	53,431	12.7	72,513	11.5
Source	a	a	a	a	b	b	c	c

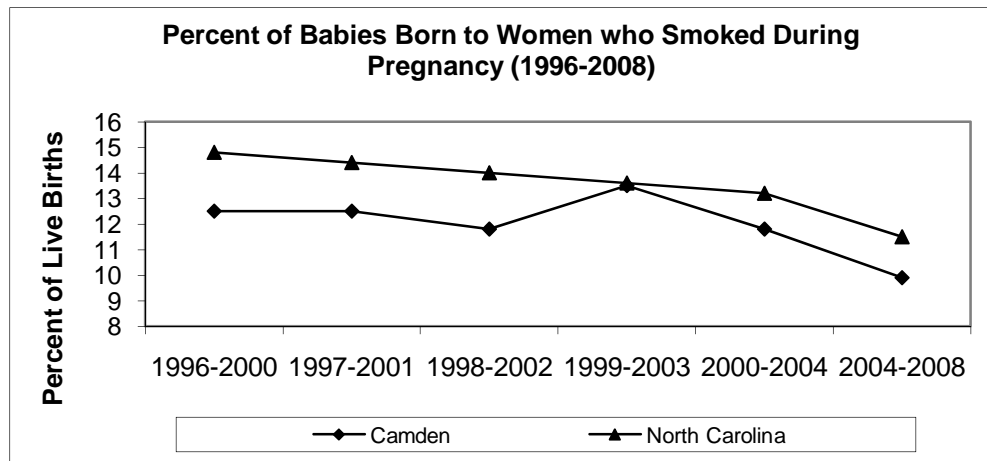
a - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2010 County Health Data Book. 2004-2008 Number At Risk NC Live Births due to High Parity by County of Residence. <http://www.schs.state.nc.us/SCHS/data/databook/>

b - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2010 County Health Databook. 2004-2008 NC Live Births by County of Residence; Number with Interval from Last Delivery to Conception of Six Months or Less. <http://www.schs.state.nc.us/SCHS/data/databook/>

c - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2010 County Health Databook. 2004-2008 Number and Percent of Births to Mothers Who Smoked Prenatally. <http://www.schs.state.nc.us/SCHS/data/databook/>

- The percentage of babies born to Camden County mothers who smoked decreased overall since 1996 and has been below the comparable figure for the state as a whole for most of the reporting period (Figure 29 following page).

Figure 29



Source: NC State Center for Health Statistics. 2010 County Health Data Book. 2000-2004 Number and Percent of Births to Mothers Who Smoked Prenatally. <http://www.schs.state.nc.us/SCHS/data/databook>

- More than 89.5% of pregnant women in Camden County received prenatal care in the first trimester in 2004-2008, a proportion slightly higher than the state rate of 82.1% (Table 75).
- A lower percentage of black women received prenatal care in the first trimester in Camden County than in NC as a whole (73.6% vs. 75.0%). However, the percentage of black Camden County women who received prenatal care in the first trimester was 17.8% lower than the comparable percentage for Camden County women overall (Table 75).

Table 75. Percent of Women Receiving Care in the First Trimester (1997-2008)

	1997-2001		1998-2002		1999-2003		2000-2004		2004-2008	
	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black
Camden	82.5	67.9	84	68.4	87.5	78.5	89.7	79.1	89.5	73.6
State Total	84.0	74.7	84.0	75.1	84.0	75.4	83.7	75.4	82.1	75.0

Source: NC State Center for Health Statistics. County-level Data. County Health Databooks . Women Receiving Prenatal Care in the First Trimester. <http://www.schs.state.nc.us/SCHS/data/databook/>

## Pregnancy Outcomes

### Low Birth Weight and Very Low Birth Weight

- From 2004-2008, the total percentage of low birth weight births (below 2500 grams or 5.5 pounds) was lower in Camden County than in NC as whole (8.3% vs. 9.1%). The percentage of white low birth weight babies in Camden County was the same as the comparable state rate while the percent of minority low birth weight babies was slightly lower in the county than statewide (Table 76).
- For the same period, the overall percentage of very low birth weight births (below 1500 grams or 3.3 pounds) was slightly lower in Camden County than in the state as a whole, and the rate among black women in Camden County was lower than the rate among black women statewide.

**Table 76. Number and Percent of Low and Very Low Birth Weight Births by Race (2004-2008)**

	Low Birth Weight (<2500 grams) Births						Very Low Weight (<1500 grams) Births			
	Total		White		Minority		Total		Black	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Camden	43	8.3	32	7.4	11	13.3	7	1.4	1	1.4
State Total	57,823	9.1	33,941	7.4	23,882	13.6	11,649	1.8	5,198	3.5
Source	a	a	a	a	a	a	b	b	c	c

a - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2010 County Health Data Book. Low Birth Weight Births by Race, 2004-2008. <http://www.schs.state.nc.us/SCHS/data/databook/>

b - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2010 County Health Data Book. Low (<2500 grams) and Very Low (<1500 grams) Weight Births, 2004-2008. <http://www.schs.state.nc.us/SCHS/data/databook/>

c - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2010 County Health Data Book. Low (<2500 grams) and Very Low (<1500 grams) Weight Black Births, 2004-2008. <http://www.schs.state.nc.us/SCHS/data/databook/>

- Since 1996, the percentage of low weight births has shown an overall increase in Camden County. Though less dramatically, the percentage of low weight births has also increased as an average in the Albemarle Region, but remained relatively stable in NC.

## Infant Mortality

According to data in Table 77:

- For 2004-2008, the total Camden County infant mortality rate (5.8) was 31% lower than the statewide infant mortality rate (8.4).
- There were no minority infant deaths in Camden County between 1999 and 2008.
- In 2008 alone, there was one infant death among whites but no infant deaths among minorities in Camden County. In NC that year, the total infant mortality death rate was 8.2. Statewide, the infant mortality rate among minorities was more than twice the infant mortality rate among whites.

**Table 77. Infant (<1 year) Death Rate per 1,000 Live Births (2004-2008)**

County	1999-2003			2000-2004			2004-2008			2008					
	Total	White	Minority	Total	White	Minority	Total	White	Minority	White Infant	White Infant	Minority	Minority	Total	Total
										Deaths	Death Rate	Infant	Infant	Infant	Infant
Camden	2.5	3.0	0.0	2.3	2.8	0.0	5.8	6.9	0.0	1	13.7	0	0.0	1	10.8
State	8.7	6.3	14.9	8.5	6.2	14.4	8.4	6.2	14.3	558	6.0	508	13.5	1,066	8.2
NC County Avg.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5.6	n/a	5.1	n/a	10.7	n/a

Source: NC State Center for Health Statistics, 2008 Selected Vital Statistics Vol. 1, <http://www.schs.state.nc.us/SCHS/vitalstats/volume1/2008/>

## Oral Health

### Child Oral Health

The Oral Health Section of the North Carolina Division of Public Health periodically coordinates a dental assessment screening for kindergarten and fifth-grade schoolchildren. Dental hygienists use a standardized technique to measure the prevalence of decayed and filled teeth among these children. Table 78 presents the results of the 2008-2009 screenings in Camden County and in NC.

Compared to NC county averages in 2008-2009:

- A higher proportion of kindergarteners and fifth graders were screened in Camden County.

- Camden County kindergarteners had a 10.5% higher prevalence of untreated decay, but a slightly lower average number of decayed, missing and filled teeth per child (DMFT) and average number of decayed teeth (DT) per child.
- Camden County fifth graders had a lower prevalence of untreated decay, a slightly lower percentage of children with sealants, and a lower average number of decayed, missing and filled teeth per child (DMFT), and a lower average of decayed teeth (DT) per child.

**Table 78. Child Oral Health Screening Results (2008-2009)**

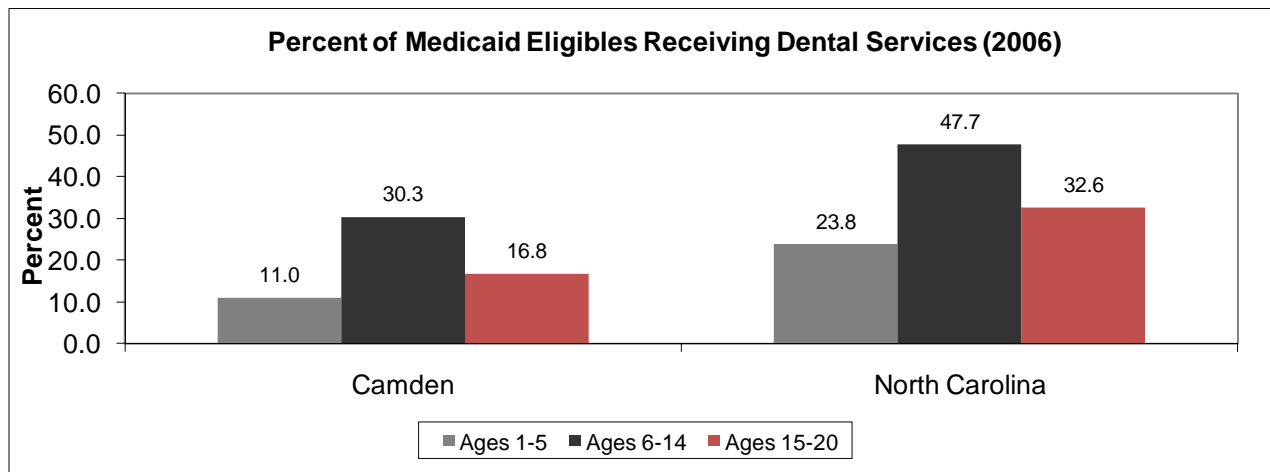
County	Percent Children Screened		Percent Children Cavity Free		Percent of Children w/ Untreated Tooth Decay		Percent of Children with Sealants	Average DMFT/Child <sup>1</sup>		Average DT/Child <sup>2</sup>		Percent of Title XIX Eligibles Receiving Dental Services (2006)		
	Kindergarten	5th Grade	Kindergarten	5th Grade	Kindergarten	5th Grade		Kindergarten	5th Grade	Kindergarten	5th Grade	Ages 0-5	Ages 6-14	Ages 15-20
Camden	97	95			19	2	41	1.15	0.43	0.39	0.02	11.0	30.3	16.8
North Carolina	83	77			17	4	44	1.50	0.56	0.47	0.05	23.8	47.7	32.6
	a	a			a	a	a	a	a	a	a	b	b	b

Source: a-NC DHHS Oral Health Section. County Level Oral Health Status Data. [http://www.communityhealth.dhhs.state.nc.us/dental/assess\\_2.htm](http://www.communityhealth.dhhs.state.nc.us/dental/assess_2.htm)  
 b-Annie E. Kasey Foundation. Kids County Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>

Compared to NC averages, a smaller percentage of Camden County Medicaid eligible youth of all ages received dental services in 2006 (Figure 30).

There is no dentist in the county. Residents have to travel to neighboring Pasquotank County or Virginia for this service. It was noted during the workgroup that a 20-25 minute ride is average for this and other health care services. There is a Dental Clinic housed at Camden County Health Department. The clinic is open on Tuesday and Thursday afternoons. Dr. Regis Dandar sees children birth through 12<sup>th</sup> grade. Criteria include; any parental concerns, lack of dental home, and obvious dental need. Fees are based on income; a sliding fee scale is used. Medicaid, Health Choice, and insurance are billed.

**Figure 30**



Source: Annie E. Kasey Foundation. Kids Count Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>

## Adult Oral Health

Camden County residents are surveyed about their dental health status and dental health behaviors in the state’s annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of the nine-county North East Region II sample. However, the small number of 2005 participants (n=510) and 2004

participants (n=479) across the sample of which the county is a part yields data too limited to interpolate reliably to a single county, so it is not presented here.

Adult dental health issues were assayed in the 2010 Camden County Community Health Survey, and those results are presented in Chapter Four of this report.

## Mental Health and Substance Abuse

Table 79 presents data on utilization of mental health, developmental disability and substance abuse services (MH/DD/SAS) by Camden County residents.

- The number of Camden County residents served by state mental retardation centers and substance abuse treatment centers increased slightly between 2008 and 2009.
- The number of people served in state psychiatric hospitals decreased significantly in Camden County and statewide during the same period.
- The number of people served by the local MH/DD/SAS management entity/area program in Camden County has decreased overall since 2006.

**Table 79. Mental Health, Developmental Disability, Substance Abuse Service Utilization (years as noted)**

County	Number of Persons Served									
	Mental Retardation Centers		Alcohol and Drug Abuse Treatment Centers		State Psychiatric Hospitals		Area Programs			
	2008	2009	2008	2009	2008	2009	2006	2007	2008	2009
Camden	0	2	11	6	8	2	207	229	241	198
State Total	1,409	1,404	4,284	4,812	14,643	9,643	322,397	315,338	306,907	309,155

Source

Log Into North Carolina (LINC) database, <http://linc.state.nc.us>

While the data presented in Table 80 are out of date, they present interesting historical information on hospitalizations of Camden County residents for mental disorders and substance abuse. For the period in question (1996-1998), lower *numbers* of Camden County residents were hospitalized for either problem compared to the Albemarle Region and the average NC county. These numbers, however, compute to hospital utilization *rates* that though still lower in Camden County approach the rates in the region and the average NC county. During the three-year aggregate period 1996-1998, 299 Camden County residents were hospitalized for mental health disorders, and 167 were hospitalized for alcohol and drug abuse.

**Table 80. Hospitalizations for Mental Disorders and Substance Abuse (1996-1998)**

County	Per 10,000 Population			
	Hospitalizations for Mental Disorders		Hospitalizations for Alcohol/Drug Abuse	
	Number	Rate	Number	Rate
Camden	299	157.0	167	87.7
Albemarle Average	1,017	196.7	440	87.9
State Total	581,222	n/a	281,708	n/a
NC County Avg.	5,812	260.4	2,817	126.3

Source NC State Center for Health Statistics, 1999 County Health Databook

Albemarle Hospital Emergency Department utilization for mental health issues totaled 444 patients seen in the Emergency Department from October 1, 2009 - September 30, 2010. The majority of patients were seen for substance abuse, alcohol related issues and suicidal ideations.

East Carolina Behavioral Health Services (ECBH) provides mental health services to several counties including Camden. It is important to note that mental health issues and service availability is an important community issue highlighted during the Camden County Community Health Assessment Data Presentation/Workgroup. During the workgroup, mental health services in this area were not well known. It was stated that ECBH staff were going to each county to provide presentations describing the mental health services available and how to utilize them.

It was decided that mental health services and resources need more recognition to the general public and the East Carolina Behavioral Health should be made aware of these findings so they may provide more awareness to the public. At this time, the partnership decided mental health resources are sufficient in the community and it will not be a priority focus area for our HCOTA.

Camden County School System is working to secure a licensed practitioner (for mental health/counseling). The position will be housed within one of the schools full-time. This position will provide counseling to students and family at no cost to the school or student/family.

0.9% of survey respondents have been told they have a mental illness by a health professional.

## Obesity

### Adult Obesity

Camden County residents are surveyed about their height, weight and eating behaviors in the state's annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of the nine-county North East Region II sample. However, the small number of 2005 participants (n=510) across the sample of which the county is a part yields data too limited to interpolate reliable to a single county, so it is not presented here.

Adult dietary and exercise behaviors and diagnoses of overweight and obesity were assayed in the 2010 Camden County Community Health Survey, and those results are presented in Chapter Four of this report.

### Childhood Obesity

The North Carolina Healthy Weight Initiative, using the North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), collects height and weight measurements from children seen in North Carolina Division of Public Health-sponsored WIC and Child Health Clinics, as well as some school-based Health Centers (62). This data is used to calculate Body Mass Index (BMI) in order to gain some insight into the prevalence of childhood obesity.

$$\text{BMI} = (\text{weight in kilograms}) / (\text{height in meters})^2$$

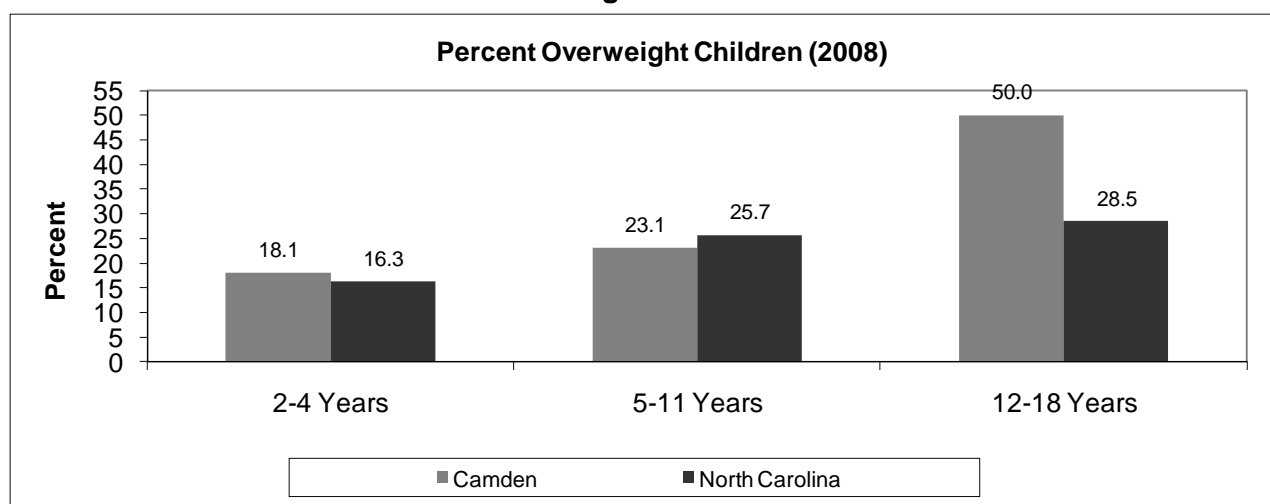
Children with BMIs in the 95<sup>th</sup> percentile or above are considered overweight, while children with BMIs that are between the 85<sup>th</sup> and 94<sup>th</sup> percentiles are considered "at-risk" of becoming overweight. Caution should be exercised when using these data, since the survey sample is relatively small, especially in

some age groups, and may not be representative of the countywide population of children. For example, the 2008 Camden County sample was composed of 116 2-4 year-olds, 26 5-11 year-olds, and 4 12-18 year-olds (62). Across the nation during the years 2003-2006, 17.0% of children aged 6-11 and 17.6% of children 12-19 are considered overweight or obese (62).

According to NC-NPASS data for children who are overweight (Figure 31):

- Camden County has a higher proportion of 2-4 year-olds who are overweight than the state as a whole.
- Camden County has a lower proportion of 5-11 year-olds who are overweight than the region and the state as a whole.
- Camden County has a higher proportion of 12-18 year-olds who are overweight than the region and the state as a whole. However, this number is based on data from four children and thus highly unreliable.

**Figure 31**



North Carolina Nutrition and Physical Activity Surveillance System\* (NC-NPASS) 2008.

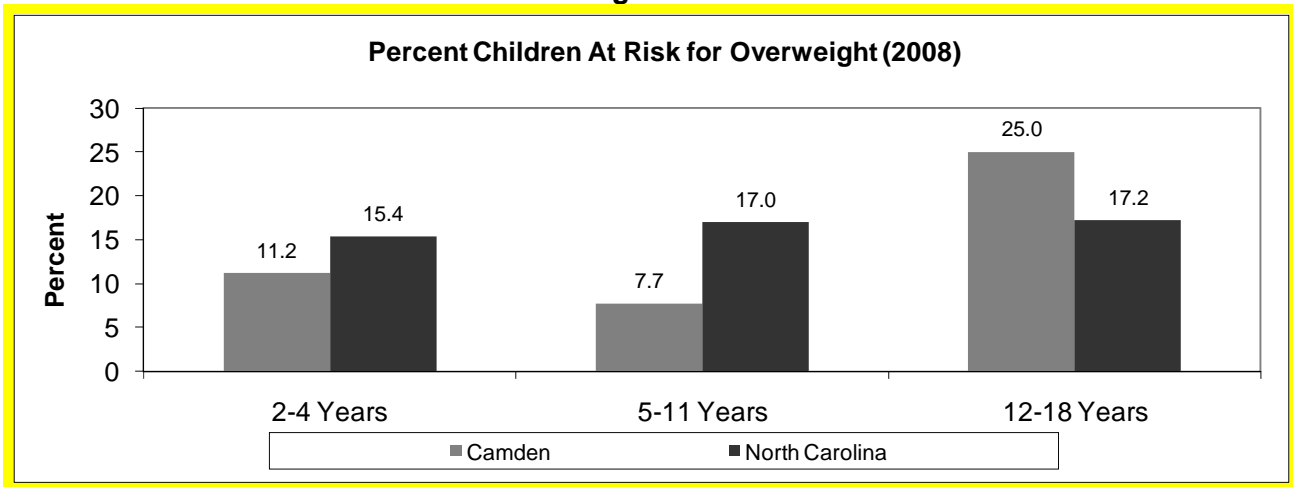
<http://www.eatsmartmovemorenc.com/Data/Data.html>

\*Data is limited to data on children seen in North Carolina Public Health Sponsored WIC and Child Health Clinics and some School Based Health Centers

According to NC-NPASS data for children who are *at risk* of becoming overweight (Figure 32)

- Camden County has a lower proportion of 2-4 year-olds at risk than the state as a whole.
- Camden County has a lower proportion of 5-11 year-olds at risk than the state as a whole.
- Camden County has a higher proportion of 12-18 year-olds at risk than the state as a whole. However, this number is based on data from four children and thus highly unreliable.

**Figure 32**



North Carolina Nutrition and Physical Activity Surveillance System\* (NC-NPASS) 2008.

<http://www.eatsmartmovemorenc.com/Data/Data.html>

\*Data is limited to data on children seen in North Carolina Public Health Sponsored WIC and Child Health Clinics and some School Based Health Centers

Obesity will continue to be a focus for Healthy Carolinians of the Albemarle. Priorities will include; lack of physical activity, and poor eating habits.

22.4% of survey participants have been told they are overweight or obese by a health professional.

## Asthma

One way the burden of asthma in a community can be assessed is by reviewing hospital records. According to hospital records from 2004 that tally information about patients from Camden County regardless of the location of their hospitalization (Table 83):

- The total hospitalization rate due to asthma (including children and adults) in 2008 was 37.7% lower in Camden County (71.9) than the state as a whole (115.4). The recent county rate is well below the Healthy Carolinians goal of 118.
- For children age 0-14, the Camden County asthma hospitalization rate of 125.2 is 17.6% lower than the state rate of 151.9 per 100,000. The Camden County asthma hospitalization rate for children is well below the Healthy People 2010 target of 173 (55).

**Table 83. Asthma Hospitalization Rates (2008)**

County	Asthma Hospitalizations Per 100,000 (2008 Hospital Discharge Reports)			
	Total		Ages 0-14 Years	
	Number	Rate	Number	Rate
Camden	7	71.9	2	125.2
State Total	10,644	115.4	2,778	151.9

Source

NC State Center for Health Statistics, 2010 County Health Databook.  
<http://www.schs.state.nc.us/SCHS/healthstats/databook/>



Albemarle Hospital ER Utilization for Asthma diagnosis from Oct 1, 2009 – Sept 30, 2010 totaled 642 patients seen. Of those, 46 were admitted or 7% and 1% transferred out.

In 2000, The North Carolina School Asthma Survey was performed statewide in NC by a group of researchers from the School of Public Health at the University of North Carolina in Chapel Hill. The purpose of the survey was to assess the prevalence of asthmatic symptoms and risk factors in school-aged children. The survey assessed school-age children in Camden County, and according to the results of this survey (63):

- 10.1% of school children surveyed had been diagnosed with asthma.
- 21.3% of children surveyed had experienced undiagnosed wheezing.
- The total proportion of surveyed children who experienced wheezing was 31.4%.
- 13% of Camden County children have missed school, 17% have limited activities, and 21% experience sleep disturbances due to asthma.

Albemarle Pediatric Asthma Coalition (APAC) has had an active role in reducing the asthma epidemic in the region. They have standardized the use of the Asthma Action Plan for pre-school children and school-aged children. APAC has provided asthma education and case management services for families who have a child living with asthma. Targeted public awareness campaigns have included billboards, promotional signs and banners, pinwheel displays, public proclamations for Asthma Awareness Month and World Asthma Day have been accomplished in the region.

9.8 of survey participants have been told they have asthma by a health professional.

The Air Quality Index (AQI) is a tool used to report levels of ozone, particles and other pollutants in the air to the public. The AQI scale is divided into five color-coded categories, each corresponding to a different level of health concern ranging from green (good) to purple (very unhealthy). Greater AQI values correspond to greater concentrations of air pollution and indicate greater health danger.

The air quality color codes are:

AQI Color Code	Air Quality	AQI Number
Green	Good	0 to 50
Yellow	Moderate	51 to 100
Orange	Unhealthy for Sensitive Groups	101 to 150
Red	Unhealthy	151 to 200
Purple	Very Unhealthy	201 to 300

The AQI color codes are used for both air quality forecasts and for air quality reporting. The forecast, available year-round in the Triad and Charlotte, and April 1 through October 31 in Asheville, Fayetteville, Hickory, and the Triangle, predicts anticipated pollution levels using the AQI color code. Air quality reports give either current pollution levels detected by monitors or air pollution levels that have already occurred, usually during the previous day. For reports of recent air quality levels in many areas of North Carolina, visit the [DAQ ozone and particulate matter monitoring website](#) or call 1-888-AIRWISE (1-888-247-9473).

Camden County does not participate in flying flags. However, the above website and phone number are resources available for Camden County residents.

# **Chapter Four:** **Community Health Survey & Stakeholder Interview Methodology**

## **Methodology Community Health Survey (Primary data)**

Interview locations were randomly selected using a modified two-stage cluster sampling methodology. The survey methodology is an adaptation of the Rapid Needs Assessment (RNA) developed by the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) for surveying populations after natural disasters. The WHO/CDC RNA approach was modified to utilize mobile GIS software, handheld computers and GPS receivers. For the Albemarle Community Health Assessment, the assessment area included seven counties and data was needed for each county. Therefore a stratified two-stage cluster sampling method was employed. Statistical power analysis suggested that 80 surveys per county would yield acceptable precision of estimates. Census blocks were selected as the type of geographic cluster for the first stage of the two-stage sample. To ensure sufficient households for second stage sampling, only census blocks with at least ten households were included in the sampling frame. The sample was selected utilizing a Survey Sampling Tool extension to the ESRI ArcView GIS software and developed by the NC PHP&R. The sample selected included four households in each of 20 census blocks in each of seven counties, for a total of 560 surveys.

To complete data collection in the field, survey teams generally consisted of two persons: one to read the survey questions and one to enter the responses into a handheld computer. Survey teams were comprised of health department staff and volunteers recruited from each of the seven assessment counties. Survey protocol followed procedures established for RNAs and Community Health Assessments whereby surveys were conducted during work hours and early evening hours. When target households resulted in refusals or not-at-homes, survey teams proceeded on to the next household on their route and within the designated survey cluster.

A training session was provided for survey teams on March 15, 2010, and the surveys were conducted over several weeks. Survey data were analyzed using the CDC's statistical analysis software Epi-Info version 3.5.1 using the complex sample frequencies analysis procedure, which produces frequencies and means weighted based on census block population size. When appropriate, responses were stratified by the age, gender, race, education and income of the respondents. In the end, 560 surveys were analyzed. The survey instrument and results are provided in English in Appendix A. Surveys were available in Spanish and interpreters were available for the Hispanic population participating in the survey.

## 2010 COMMUNITY HEALTH SURVEY

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ALBEMARLE REGIONAL HEALTH SERVICES  
Partners in Public Health

### Camden County

Hello, I am \_\_\_\_\_ and this is \_\_\_\_\_ representing the Camden County Health Department. (*Show badges.*) You are being asked to participate in a health survey for our county because your address was randomly selected. The purpose of this survey is to learn more about the health and quality of life in Camden County, North Carolina. The Camden County Health Department, Healthy Carolinians of the Albemarle and Albemarle Health will use the results of this survey to help develop plans for addressing the major health and community issues in Camden County. All the information you give us will be completely confidential and will not be linked to you in any way.

The survey is completely voluntary. All of your answers are confidential. It should take no longer than 30 minutes to complete. If you don't live here at this house, please tell me now.

Would you be willing to participate?

If they want to confirm this survey is legitimate, please ask them to call the Health Department.

- Camden County Health Dept. → 252-338-4460

Additionally, the numbers for the local law enforcement are provided here:

- Camden County Sheriff's Office → 252-338-5046

The purpose of this survey is to learn more about health and quality of life in the Albemarle Region of North Carolina. The local health departments of Albemarle Regional Health Services, Albemarle Hospital, Bertie Memorial and Chowan Hospitals-University Health Systems, Gates Partners for Health, Healthy Carolinians of the Albemarle and Three Rivers Healthy Carolinians will use the results of this survey and other information to help develop plans for addressing the health problems of the region and its seven constituent counties: Pasquotank, Perquimans, Camden, Chowan, Currituck, Bertie and Gates. Thank you for taking the time to complete this Community Health Survey. **If you have already completed this survey, or if you don't live in Camden County, please STOP here.**

**Your answers on this survey will not be linked to you in any way.**

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## PART 1: Quality of Life Statements

**The first part of this survey is about the quality of life in Camden County. After I read the statement, please tell me whether you strongly disagree, disagree, agree or strongly agree with it.**

<b>Quality of Life Statements</b>	Strongly Disagree	Disagree	Agree	Strongly Agree
<b>Question 1</b> <b>There is a good health care system in Camden County.</b> (Think about health care options, access, cost, availability, quality, etc.)	8.8%	<b>51.3%</b>	33.8%	3.8%
<b>Question 2</b> <b>Camden County is a good place to raise children.</b> (Think about the availability and quality of schools, child care, after school programs, places to play, etc.)	0%	6.3%	<b>57.5%</b>	35.0%
<b>Question 3</b> <b>Camden County is a good place to grow old.</b> (Think about elder-friendly housing, access/ways to get to medical services, elder day care, social support for the elderly living alone, meals on wheels, etc.)	2.5%	8.8%	<b>68.8%</b>	20.0%
<b>Question 4</b> <b>There are plenty of ways to earn a living in Camden County.</b> (Think about job options and quality of jobs, job training/higher education opportunities, etc.)	<b>45.0%</b>	42.5%	10.0%	1.3%
<b>Question 5</b> <b>Camden County is a safe place to live.</b> (Think about safety at home, in the workplace, in schools, at playgrounds, parks, shopping centers, etc.)	1.3%	3.8%	<b>72.5%</b>	22.5%
<b>Question 6</b> <b>There is plenty of support for individuals and families during times of stress and need in Camden County.</b> (Examples include neighbors, support groups, faith community outreach, agencies, organizations, etc.)	1.3%	8.8%	<b>76.3%</b>	10.0%
<b>Question 7</b> <b>Camden County has clean air.</b>	0%	6.3%	<b>73.8%</b>	20.0%
<b>Question 8</b> <b>Camden County has clean water.</b>	2.5%	20.0%	<b>66.3%</b>	11.3%

## **PART 2: Community Health, Behavioral, and Social Problems**

*The next three questions will ask your opinion about the most important health, behavioral and social problems, and community issues in Camden County.*

### ***SHOW QUESTION PICK LIST***

#### **Question 9**

**Using this list, please tell us the five (5) most important health problems in Camden County. (Problems that you think have the greatest overall effect on health in the community.)**

- 28.9% Cancer**
- 23.8% Diabetes**
- 21.3% Heart Disease**
- 16.3% Obesity/overweight**
- 15.0% Poor oral/dental health**

#### **Question 10**

**Using this list, please tell us the five (5) most important “unhealthy behaviors” in Camden County. (Unhealthy behaviors that you think have the greatest overall effect on health and safety in the community.)**

- 60.0% Alcohol Abuse**
- 36.3% Drug Abuse**
- 16.3% Not going to the dentist**
- 20.0% Smoking/tobacco use**
- 20.0% Unhealthy Eating**

#### **Question 11**

**Using this list, please tell us the five (5) most important “community social issues” in Camden County. (Social issues that you think have the greatest overall effect on the quality of life in the community.)**

- 27.5% Inadequate/unaffordable housing**
- 23.8% Lack of affordable health insurance/health care**
- 26.3% Lack of health care providers**
- 23.8% Underemployment/lack of well-paying jobs**
- 26.3% Poverty**

## **PART 3: Community Service Problems and Issues**

*Now I am going to ask you: In the past 12 months have you needed any of these specific community services but had difficulty finding or using the service? I will name several, so if you did not need this service, tell me that and we'll skip to the next one.*

## Question 12

Tell me if you needed this service in the past 12 months.

**IF NO, SKIP TO NEXT SERVICE**

If YES, tell me whether you had one of the following problems with this service: (if you had no problem with this service, please tell me so)

### Adult day care/respite care

0% Lack of information

0% Cost

0% Service not available

0% Language/Cultural barriers

0% Lack of transportation

37.6% No problem with this service

**91.4%** Did not need this service

### Assistance with housing costs/subsidized housing

2.9% Lack of information

0% Cost

1.9% Service not available

0% Language/Cultural barrier

0% Lack of transportation

6.9% No problem with this service

**88.2%** Did not need this service

### Assistance with food costs/food stamps

3.6% Lack of information

0.2% Cost

5.5% Service not available

0% Language/Cultural barrier

0% Lack of transportation

7.7% No problem with this service

**82.9%** Did not need this service

### Health Promotion/Wellness programs

0.7% Lack of information

0% Cost

1.2% Service not available

0% Language/Cultural barrier

0% Lack of transportation

9.5% No problem with this service

**88.5%** Did not need this service

### Medical case management for an ongoing health problem

0.7% Lack of information

0% Cost

0.3% Service not available

0% Language/Cultural barrier

0% Lack of transportation

11.3% No problem with this service

**84.5%** Did not need this service

### Legal services

0% Lack of information

0% Cost

0% Service not available

0% Language/Cultural barrier

0% Lack of transportation

9.8% No problem with this service

**87.0%** Did not need this service

### Emergency medical care

0% Lack of information

4.4% Cost

0.7% Service not available

0% Language/Cultural barrier

0% Lack of transportation

19.8% No problem with this service

**71.9%** Did not need this service



**Hospital care**

2.9% Lack of information  
1.5% Cost  
0.9% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
28.5% No problem with this service  
62.9% Did not need this service

**Pregnancy care**

0% Lack of information  
0% Cost  
0% Service not available  
0% Language/Cultural barrier

0.6% Lack of transportation  
2.3% No problem with this service  
93.2% Did not need this service

**Enrolling in Medicaid or Medicare**

1.4% Lack of information  
0% Cost  
1.9% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
12.9% No problem with this service  
83.7% Did not need this service

**Mental health care or counseling**

0.3% Lack of information  
0% Cost  
0.8% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
0.9% No problem with this service  
98.0% Did not need this service

**Drug or alcohol treatment program**

0.3% Lack of information  
0% Cost  
0% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
3.8% No problem with this service  
95.9% Did not need this service

**Rehabilitation from an injury or permanent disability**

0% Lack of information  
0.9% Cost  
0.7% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
16.7% No problem with this service  
81.6% Did not need this service

**Home health care**

0% Lack of information  
0% Cost  
0% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
8.9% No problem with this service  
87.9% Did not need this service

**Nutrition service**

0% Lack of information  
0% Cost  
0% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
3.2% No problem with this service  
93.6% Did not need this service

**Purchasing medical equipment**

2.9% Lack of information  
0.9% Cost

0% Lack of transportation  
12.5% No problem with this service

0% Service not available  
0% Language/Cultural barrier

**77.6%** Did not need this service

**Getting prescription medications**

0% Lack of information  
9.5% Cost  
1.0% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
**62.6%** No problem with this service  
**23.6%** Did not need this service

**Smoking cessation**

0% Lack of information  
0.8% Cost  
0.6% Service not available  
0% Language/Cultural barrier

0% Lack of transportation  
0% No problem with this service  
**98.7%** Did not need this service

**Dental care**

**0%** Lack of information  
**6.9%** Cost  
**1.6%** Service not available  
**0%** Language/Cultural barrier

**0%** Lack of transportation  
**53.4%** No problem with this service  
**38.1%** Did not need this service

## PART 4: Personal Health

*The following questions ask about your own personal health. Remember, this survey will not be linked to you in any way.*

### Question 13

How would you rate your own personal health?

3.6% Excellent   24.8% Very Good   **44.2%** Good   20.8% Fair   6.6% Poor

### Question 14

Do you currently have any of the following kinds of health insurance or health care coverage?

*(Pick all the answers that apply.)*

**38.8%** Health insurance *my* employer provides  
**20.0%** Health insurance *my spouse's* employer provides  
0% Health insurance *my school* provides  
**2.5%** Health insurance *my parent or my parent's* employer provider  
11.3% Health insurance I bought for myself  
**7.5%** Medicaid  
**30.0%** Medicare  
**2.5%** Veteran's Administration benefits  
Other: \_\_\_\_\_  
**11.3%** I currently do not have any kind of health insurance or health care coverage

### Question 15

During the past 12 months, was there any time that you did not have any health insurance or health care coverage?

**12.8%** Yes   \_\_\_ No

### Question 16

**What type of medical provider(s) do you visit when you are sick?**

*(Pick all the answers that apply.)*

- |                                      |  |
|--------------------------------------|--|
| <u>90.0%</u> Doctor's office         | <u>0%</u> Company nurse                    |
| <u>3.0%</u> Health department        | <u>0%</u> Community or Rural Health Center |
| <u>0.9%</u> Hospital clinic          | <u>15.9%</u> Urgent Care Center            |
| <u>13.5%</u> Hospital emergency room | ____ Other: _____                          |
| <u>0%</u> Student Health Services    |  |

### Question 17

**In what cities are the medical providers you visit located?**

*(Pick all the answers that apply.)*

- |                             |                        |                             |
|-----------------------------|------------------------|-----------------------------|
| <u>0%</u> Ahoskie           | <u>0%</u> Franklin     | <u>0%</u> Suffolk           |
| <u>28.2%</u> Chesapeake     | <u>0%</u> Gatesville   | <u>65.6%</u> Virginia Beach |
| <u>0%</u> Dare County       | <u>0.3%</u> Greenville | <u>0%</u> Williamston       |
| <u>0.3%</u> Edenton         | <u>0%</u> Hertford     | <u>0%</u> Windsor           |
| <u>72.3%</u> Elizabeth City | <u>6.4%</u> Norfolk    | ____ Other: _____           |

### Question 18

**Where do you usually get advice on your health?**

*(Pick all the answers that apply.)*

- |  |   |
|--|---|
| <u>82.2%</u> Doctor's office               | <u>2.9%</u> Urgent Care Center                        |
| <u>4.0%</u> Health department              | <u>31.5%</u> Family                                   |
| <u>0%</u> Hospital clinic                  | <u>12.1%</u> Friends                                  |
| <u>0%</u> Hospital emergency room          | <u>4.9%</u> Media (television, news, radio, magazine) |
| <u>0%</u> Student Health Services          | <u>13.6%</u> internet or other computer-based info    |
| <u>1.0%</u> Company nurse                  | ____ Other: _____                                     |
| <u>0%</u> Community or Rural Health Center |   |

### Question 19

**About how long has it been since you last visited a doctor for a routine ("well") medical checkup?**

***Do not include times you visited the doctor because you were sick or pregnant.***

- 82.9% Within the past 12 months
- 5.3% 1-2 years ago
- 6.9% 3-5 years ago
- 4.9% More than 5 years ago
- 0% I have never had a routine or "well" medical checkup.

### Question 20

**About how long has it been since you last visited a dentist for a routine ("well") dental checkup?**

***Do not include times you visited the dentist because of a toothache or other emergency.***

- 44.2% Within the past 12 months

- 26.5% 1-2 years ago
- 7.4% 3-5 years ago
- 18.2% More than 5 years ago
- 3.7% I have never had a routine or “well” dental checkup.

### Question 21

**If one of your friends or family members needed counseling for a mental health, substance abuse, or developmental disability problem, whom would you suggest they go see?**

- 0.7% Children’s Developmental Services Agency/Developmental Evaluation Center
- 5.8% Counselor or therapist in private practice
- 22.3% Doctor
- 5.8% Emergency Room
- 0% Employee Assistance Program
- 12.2% Local Mental Health Facility
- 14.4% Minister/pastor
- 0% School counselor
- 0% Vocational Rehabilitation/Independent Living
- 55.6% I don’t know
- Other: \_\_\_\_\_

### Question 22

**How would you describe your day-to-day level of stress?**

- 8.7% High
- 41.6% Moderate
- 49.7% Low

### Question 23

**In the past 12 months, how often would you say you were worried or stressed about having enough money to pay your rent/mortgage?**

- 9.8% Always
- 2.9% Usually
- 18.8% Sometimes
- 23.6% Rarely
- 44.2% Never

### Question 24

**On how many of the past 7 days did you drink alcohol of any kind? (Beer, Wine, Spirits)**

- 8.1% 1 day
- 8.6% 2 days
- 7.0% 3 days
- 1.6% 4 days
- 3.8% 5 days
- 0% 6 days
- 0% 7 days
- 14.3% I didn’t drink alcohol on any of the past 7 days
- 55.6% I never drink alcohol

### Question 25

**During that same 7-day period, how many times did you have five (5) or more alcoholic drinks (Beer, Wine, Spirits) in a single day?**

- 91.85% 0 times
- 6.4% 1 time
- 1.8% 2 times
- 0% 4 times
- 0% 5 times
- 0% 6 times

0% 3 times

0% 7 times

### Question 26

**Do you smoke cigarettes?**

15.4% Yes

**58.9%** I have never smoked cigarettes

25.7% I used to smoke but have quit

### Question 27

**How many cigarettes do you smoke per day?**

*(Please check only one (1) answer.)*

**89.3%** Doesn't smoke

1.8% Less than half a pack per day

8.1% Between half a pack and one (1) pack per day

0.9% More than one (1) pack a day

0% Two (2) packs a day

0% Three (3) packs a day

### Question 28

**Are you regularly exposed to second-hand smoke from others who smoke?**

21.8% Yes

**78.2%** No

### Question 29

**If you answered "yes" to the question 28, where are you regularly exposed to secondhand smoke? *(Pick all answers that apply.)***

0% In restaurants

1.5% At home

**8.0%** At work

6.8% In the car

\_\_\_\_ Other: \_\_\_\_\_

### Question 30

**How often do you currently use smokeless tobacco (chewing tobacco, snuff, Snus®, "dip")?**

13.2% Not at all

5.4% Less than once a week

3.6% Once a week

**33.4%** 2-3 times a week

18.2% 4-6 times a week

15.9% Daily

### Question 31

**During the past 7 days, other than your regular job, how often did you engage in physical activity for at least a half-an-hour?**

- 23.4% None
- 5.4% Less than once a week
- 3.6% Once a week
- 33.4%** 2-3 times a week
- 18.2% 4-6 times a week
- 15.9% Daily

### Question 32

If you answered “none” to question 31, why don’t you engage in physical activity?

- 1.2% My job is physical or hard labor
- 5.1% I don’t have enough time for physical activity
- 11.5%** I’m too tired for physical activity
- 7.4% I have a health condition that limits my physical activity
- 0.3% I don’t have a place to exercise
- 0.6% Weather limits my physical activity
- 0.3% Physical activity costs too much (equipment, shoes, gym expense)
- 0.3% Physical activity is not important to me
- \_\_\_\_ Other: \_\_\_\_\_

### Question 33

Not counting juice, how often do you eat fruit in an average week?

- 6.3% None
- 50.0%** 1-5 servings
- 38.8% 6-10 servings
- 2.5% 11-15 servings
- 2.5% More than 15 servings

### Question 34

Not counting potatoes and salad, how often do you eat vegetables in an average week?

- 3.8% None
- 23.8% 1-5 servings
- 56.3%** 6-10 servings
- 13.8% 11-15 servings
- 2.5% More than 15 servings

### Question 35

Are grocery stores in or near your neighborhood?

- 50.4%** Yes
- \_\_\_\_ No

### Question 36

Are fresh fruits and vegetables readily available at nearby grocery stores?

- 46.1%** Yes
- \_\_\_\_ No

### Question 37

On average, about how many meals a week do you eat out?

- 16.3% None
- 81.3%** 1-5 times
- 2.5% 6-10 times
- 0% More than 10 times

### Question 38

Have you ever been told by a doctor, nurse, or other health professional that you have any of the following?

- 9.8% Asthma
- 9.6% Depression
- 15.3% Diabetes
- 43.5% High blood pressure
- 44.2%** High cholesterol
- 0.9% Mental Illness
- 22.4% Overweight/obesity

**MEN'S HEALTH QUESTIONS.** Answer the following two questions only if you are a man age 40 or older. *If you are a man, but younger than age 40, skip to question 46. If you are a woman, skip to question 41.*

### Question 39

Do you get an annual prostate exam?

- 20.4%** Yes
- \_\_\_\_\_ No, why not?
  - I. 0.9% Lack of Information
  - II. **3.8%** Cost
  - III. 0% Service Not Available
  - IV. 0% Language or Cultural Barrier
  - V. 0% Lack of Transportation
  - VI. 1.9% Instructed by a health professional that an annual prostate exam was not necessary

### Question 40

How long has it been since your last prostate exam?

- 16.2%** Within the past 12 months
- 0.8% 1-2 years ago
- 2.9% 3-5 years ago
- 1.7% More than 5 years ago
- 4.3% I don't know/don't remember
- 0% I have never had a prostate exam

**WOMEN'S HEALTH QUESTIONS. Answer the following four (4) questions only if you are a woman. If you are a man, skip to question 45.**

**Question 41**

**If you are age 40 or older, do you get a mammogram every 1-2 years?**

- 34%** Yes    \_\_\_ N/A because I'm under age 40 (*now skip to question 43*)  
\_\_\_ No, why not?
- I.    **2.9%** Lack of Information
  - II.   **0.3%** Cost
  - III.   **0%** Service Not Available
  - IV.   **0%** Language or Cultural Barrier
  - V.    **0%** Lack of Transportation
  - VI.   **0.3%** Instructed by a health professional that a mammogram every 1-2 years was not necessary

**Question 42**

**How long has it been since your last mammogram?**

- 22%** Within the past 12 months
- 9.8%** 1-2 years ago
- 4.4%** 3-5 years ago
- 0.3%** More than 5 years ago
- 0%** I don't know/don't remember
- 0%** I have never had a mammogram

**Question 43**

**Do you get a Pap test at least every 1-3 years?**

- 49.2%** Yes  
\_\_\_ No, Why?
- I.    **0%** Lack of Information
  - II.   **0.6%** Cost
  - III.   **0%** Service Not Available
  - IV.   **0%** Language or Cultural Barrier
  - V.    **0%** Lack of Transportation
  - VI.   **5.1%** Instructed by a health professional that a pap test every 1-3 years was not necessary

**Question 44**

**How long has it been since your last Pap test?**

- 32.7%** Within the past 12 months
- 10.4%** 1-2 years ago
- 7.1%** 3-5 years ago
- 1.2%** More than 5 years ago
- 0%** I don't know/don't remember
- 0%** I have never had a pap test



Question 45

**FOR MEN AND WOMEN: If you are a man or woman age 50 or older, have you ever had a test or exam for colon cancer?**

**40.2%** Yes    \_\_\_\_ No    \_\_\_\_ N/A because I'm under age 50

**PART 5: Adolescent (age 9-17) Behavior.**

*Answer the following three (3) questions only if you are the parent or guardian of a child aged 9-17. If you are not the parent or guardian of a child in this age range, skip to question 49.*

Question 46

**Do you think your child is engaging in any of the following high-risk behaviors?**

*(Check all answers that apply.)*

<u>2%</u> Alcohol	<u>0%</u> Gang violence
<u>2.4%</u> Drugs	<u>0%</u> Reckless driving/speeding
<u>6.6%</u> Sex	<u>0%</u> Eating disorder (e.g. anorexia or bulimia)
<u>1.2%</u> Tobacco	<b><u>11.9%</u></b> My child is not engaging in any high risk behaviors.

Question 47

**Are you comfortable talking to your child about the above behaviors?**

**20.0%** Yes    \_\_\_\_ No

Question 48

**Do you or your child need more information about any of the following issues?**

*(Check all answers that apply.)*

<u>0%</u> Alcohol	<u>0%</u> Reckless driving/speeding
<u>0%</u> Drugs	<u>0%</u> Eating disorder (e.g. anorexia or bulimia)
<u>0%</u> Sex	<u>0%</u> Mental health issues (e.g. depression, anxiety)
<u>0%</u> Tobacco	<u>0%</u> Fitness/nutrition
<u>0%</u> STDs	____ Other: _____
<u>0%</u> HIV	<b><u>4.1%</u></b> My child does not need information about any of the above
<u>0%</u> Gangs	

**PART 6: Emergency Preparedness**

*The next three questions ask about how prepared you and your household are for an emergency.*

Question 49

**Does your household have working smoke and carbon monoxide detectors?**

*(Check only one)*

40.9% Yes, smoke detectors only      0% Yes, carbon monoxide detectors only  
51.2% Yes, both                              8.0% No

**Question 50**

**Does your household have a Family Emergency Plan?**

62.3% Yes                      36.9% No

**Question 51**

**Does your household have a basic emergency supply kit? If yes, how many days do you have a supply for?**

36.2% No      16.6% 3 days      34.5% 1 Week      7.7% 2 weeks      4.8% More than 2 weeks

**Question 52**

**Did you get your H1N1 Flu vaccine?**

36.2% Yes, why?

- 14.9% Feel I am at risk, or a household member is at risk
- 4.7% I know someone who has been sick
- 15.2% My doctor recommended it
- 3.8% I always get the flu vaccine

61.5% No, why not?

- 0% I couldn't afford it
- 7.1% It was not available
- 9.4% I feel the vaccine is not safe
- 10.7% My physician does not recommend its use
- 1.0% H1N1 is not serious enough or I am not at risk
- 3.7% Prefer to wait and get vaccine later
- 0% The type available is not suitable for my age or medical condition
- 11.8% I never get vaccinated against flu
- 10.0% It was not convenient

**PART 7: Demographics**

*Please answer this next set of questions so we can see how different types of people feel about local health issues.*

**Question 53**

**Do you work or go to school outside Camden County?**      44.1% Yes      67.7% No

**Question 54**

**How old are you?**

<u>10.5%</u> 18-24	<u>10.0%</u> 40-44	<u>8.8%</u> 60-64
<u>2.5%</u> 25-29	<u>10.0%</u> 45-49	<u>5.0%</u> 65-69
<u>12.5%</u> 30-34	<u>6.2%</u> 50-54	<u>6.3%</u> 70-74

5.0% 35-39

6.2% 55-59

11.3% 75 or older

### Question 55

**What is your sex?**

36.3% Male

63.7% Female

### Question 56

**What is your race or ethnicity?**

18.0% African American/Black

3.0% Asian/Pacific Islander

0% Hispanic/Latino

0% Native American

78.0% White/Caucasian

3.0% Other: \_\_\_\_\_

### Question 57

**What is your marital status?**

73.1% Married

6.1% Widowed

0.8% Separated

8.6% Divorced

11.4% Never married

\_\_\_\_\_ Other: \_\_\_\_\_

### Question 58

**What is the highest education level you have completed?**

*(Check only one (1) answer.)*

14.2% Less than high school

29.3% High school diploma or GED

8.9% Associate's Degree

23.0% Some college but no degree

14.9% College degree (Bachelor's degree)

6.9% Graduate degree (Masters or Doctoral degree)

\_\_\_\_\_ Other: \_\_\_\_\_

### Question 59

**What is your employment status?**

*(Check all answers that apply.)*

22.2% Employed full-time

7.4% Employed part-time

3.7% Unemployed

26.0% Retired

9.1% Disabled; unable to work

5.5% Student

22.6% Homemaker

### Question 60

**What was your total household income last year, before taxes? (This is the total income, before taxes, earned by all people over the age of 15 living in your house.)**

10.3% Less than \$20,000

16.2% \$20,000 to \$29,999

21.9% \$30,000 to \$49,999

15.9% \$50,000 to \$74,999

5.2% \$75,000 to \$100,000

5.2% Over \$100,000

9.4% No Answer

Question 61

**How many individuals make up your household?**

12.0% 1 person

**40.1%** 2 people

27.6% 3 people

15.1% 4 people

4.7% 5 people

0.3% 6 people

0% 7 people

0.3% 8 people

0% 9 people

Question 62

**Are you the primary caregiver for any of the following?**

*(Check all answers that apply.)*

**1.0%** Disabled child (under age 18)

0.9% Disabled adult (age 18 or older)

0% Senior adult (age 65 or older)

0% Foster child (under age 18)

0% Grandchild (under age 18)

**THE END!**

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**Thank you very much for completing the Community Health Survey!**

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## Community Stakeholder Interviews Methodology

In May and June 2010, two UNC-Chapel Hill Master of Public Health graduate students, as part of their practicum, conducted nine telephone interviews with community leaders in Camden County. Working from county-specific lists of names identified by the ARHSAT, the interviewees were selected for participation by the coordinator and members of Healthy Carolinians of the Albemarle. Interviewees received a letter preceding the phone calls inviting them to participate in the community survey. To emphasize the importance of the invitation, the letter was signed by the Local Health Director and the Healthy Carolinians of the Albemarle Coordinator. The interviewer contacted thirteen community leaders and nine participated in the interview.

Interview subjects represented agencies in key sectors of the community such as local health and human services, business, government, education, and law enforcement. Each interview was conducted according to a script of questions that asked each interviewee to describe the services provided by their agency, the population they served, barriers that community members faced when attempting to access those services, and what the agencies did to help their clients access their services. Respondents also were asked general opinion-type questions about Camden County as a whole. These questions were about services that were needed in the area and about the county's strengths and the challenges it was facing. At the end of the interview respondents were read eight statements about Camden County and asked whether they agreed or disagreed with the statements. Interviewees were all provided with assurance that no personally identifiable information, such as name or organizational affiliations, would be connected to their responses. A copy of the interview protocol and script appears in Appendix B.

Interview data was initially recorded in narrative form in Microsoft Word. Themes in the data were identified and representative quotes were drawn from the data to illustrate the themes. Interviewees were assured that personal identifiers such as names or organizational affiliations would *not* be connected in any way to the information presented in this report. Therefore, quotes included in the report may have been altered slightly to preserve confidentiality.

### Interview Participants

Interviewees worked or volunteered for the following kinds of agencies or organizations (some subjects had multiple affiliations or worked for the same agency):

- Camden County Government
- Tourism and Recreation Organizations
- Health Services Organization
- Church Affiliations

### Interview Results

#### Available Services

Respondents felt that the services available in Camden County were adequate to meet the needs of the community. Standard county services were available to all county residents, including fire and rescue, youth leadership programs, law enforcement and safety events such as National Night Out, 4H, public health, social services, tourism, hiking and biking trails, shopping facilities, county water, and other standard county services as required by law.

## Unmet Service Needs

Two respondents felt that the county had the basic services that it needed, but one individual stated that “we just need to improve on what we have.” Other services that were identified in the interview were:

- Lack of medical/healthcare facilities-1 respondent
- Lack of mental health facility and services-1 respondent
- Additional commercial/industrial development to improve tax base-1 respondent
- Recreational facilities, services, and programs -6 respondents
  - Exercise Classes
  - More recreation opportunities for senior citizens
  - Cultural opportunities
  - More access to the waterways
- Additional Daycare-1 respondent
- Affordable Housing-1 respondent
- Need a new high school (current school is way over capacity)-1 respondent
- Nearing capacity to produce water-1 respondent
- Don't know-1 respondent
- Nothing-2 respondents
  - Just need to improve on what we have.

## Client Populations Served

Respondents felt that the services provided by their agencies or organizations are available to and used by all county residents, with the exception of the services targeted at the youth and elderly populations. There are some services targeted to the low-income population, such as the public health clinic.

The main change in client population that was mentioned was that the county was growing and becoming a bedroom community to the Norfolk area, so the income level was increasing slightly. It was also mentioned that there were more retirees moving into the area.

## Barriers to Service Access

Most respondents felt that there were no barriers to their services. However, one respondent mentioned that there were no bilingual staff members on site although interpreting services could be accessed through NCDC. Another stated that in one older building, elevators were not available for wheelchair access. The goal is to eventually have a new building to meet these needs.

## Community Strengths

Interviewees were asked to identify Camden County's greatest strengths.

- The people in the community-3 respondents
  - You can depend on people in the community to come together when there is a need.
- Small rural character of the county-4 respondents
- School system-3 respondents
  - One of the strongest school systems in the area
  - Many people want to move here because of the school system
- Quality of life-3 respondents
  - Proximity to Hampton Road

- Low crime rate-2 respondents
  - No gangs
- Recreational areas-1 respondent
  - Dismal swamp

## Community Challenges

According to the interview subjects, the major challenge that Camden County is facing is the low tax base due to the lack of industry in the county. This impacts the funding that is available to provide services to county residents. Other concerns included:

- Low tax base in the county due to a lack of industry-6 respondents
  - People live in Camden County but often work somewhere else.
  - Camden County has become a bedroom community.
- Economy-3 respondents
- Lack of Jobs-2 respondents
- Schools are at capacity-2 respondent
- Population Growth-1 respondent
- People don't get involved in the community-1 respondent
- Potential for the Navy to locate a landing field in the agricultural area of the county-1 respondent
  - Potential for deafness in county residents
- No major grocery stores-1 respondent
- No media outlets-1 respondent
  - It is difficult to get the word out about any issue
- No community gathering space-1 respondent
- Several areas don't have county water still-1 respondent
- An organized plan for acquiring cultural and entertainment attractions-1 respondent

## Community Health Problems

When asked about the major health problems and health concerns in Camden County, respondents mentioned individual diseases/conditions as well as broader public health concerns. The responses to the question were diverse although there were several who mentioned the lack of healthcare facilities and providers. Other answers included:

- Cancer-1 respondent
- Lack of healthcare facilities and providers-3 respondents
- Lack of care facilities for the elderly-1 respondent
- Lack of sewer facilities-2 respondents
  - The ground does not support septic systems well
  - Some septic tanks are failing
- Obesity and related health issues-2 respondents
  - Lack recreational facilities and opportunities to address this issue
  - Lack of knowledge about nutrition and wellness practices.
- None-2 respondents

## Quality of Life

None of the interviewees indicated that they participated in the Camden County Community Health Survey; therefore the responses below are based on the comments of all nine interviewees.

### 1) There is a good health care system in Camden County.

- Agree-4 respondents
- Disagree-5 respondents
  - No medical facilities outside of Elizabeth City

### 2) Camden County is a good place to raise children.

- Agree-9 respondents
  - Five individuals agreed strongly with this statement due to the small community, teachers in the schools, and good parks and recreational opportunities.

### 3) Camden County is a good place to grow old.

- Agree-7
  - Many generations of my family have lived here
- Agree/Disagree-1
  - Good community environment
  - Lack of medical support
- Disagree-1
  - Especially if you don't have local family to care for you

### 4) There are plenty of ways to earn a living in Camden County.

- Agree/Disagree-1 respondent
- Disagree-8 respondents
  - Farming community. People have to travel to other areas for work.

### 5) Camden County is a safe place to live.

- Agree-9 respondents
  - 2 individuals agreed strongly with this statement due to the low crime rate.

### 6) There is plenty of support for individuals and families during times of stress and need in Camden County.

- Agree-7 respondents
  - 2 respondents agreed strongly with this statement.
  - Community actively responds to needs of individuals who need support
  - Especially through churches and community service organizations
- Disagree-1 respondent
- Don't know-1 respondent



**7) Camden County has clean air.**

- Agree-9 respondents
  - No pollutants from industry

**8) Camden County has clean water.**

- Agree-8 respondents
  - Only if you have the county water.
  - Water is not available throughout the county and it has been tested and proven safe.
- Don't know-1 respondent

**Final Thoughts**

Camden County is a very great place to live and has been since the colonial times!

# **Chapter Five:** **Acting on the CHA Results**

## What do Camden County citizens say about the health of their community?

Top community responses for the following categories:

### The 5 most important “health problems”:

- Cancer
- Diabetes
- Heart Disease
- Obesity
- Dental Health

### Actual Leading Causes of Death:

- Total Cancer
- Heart Disease
- Unintentional Non-Motor Vehicle Injuries
- Cerebrovascular Disease
- Chronic Lower Respiratory Disease

### The 5 most important “unhealthy behaviors”:

- Alcohol Abuse
- Drug Abuse
- Not going to dentist
- Smoking
- Unhealthy eating

### The 5 most important “community social issues”:

- Inadequate/unaffordable housing
- Lack of affordable health care/insurance
- Lack of health care providers
- Underemployment/lack of well-paying jobs
- Poverty

October 15, 2010, the Healthy Carolinians of the Albemarle Partnership met to identify the leading on community health problems for Perquimans, Pasquotank, Camden, and Currituck Counties. Data gathered from the community surveys, stakeholder interviews, secondary data, and work group comments were presented and discussed. In attendance were: Pamela Hurdle, Cathie Williams, Pamela Etheridge, Tanya Miller, Catholene Cole, John Lamberson, Rich Olson, Deb Conran, Ann Roach, Stacy Fulcher (in for Yvonne Mullen), Fae Deaton, Arina Boldt, Hattie Sharpe, Zary Ortiz, Susan Barco, Ashley Mercer, Mary Walker, Dana Hamill, and Amy Underhill.

An overview was given highlighting each of the Healthy Carolinians of the Albemarle counties, Pasquotank, Perquimans, Currituck, and Camden. Strengths and weaknesses from the secondary data and information from the primary survey results, Stakeholder interviews, and Data Analysis Workgroups were compared to the secondary data. After the data presentation, participants were divided into groups according to the county they represented. The group worked to identify 5-10 problems as service gaps and/or education/awareness issues for their county using problem worksheets. The problems identified by the counties were as follows

### The following priority areas were identified for Camden County:

1. Obesity-lack of physical activity and poor eating habits.
2. Chronic Disease-including heart disease, cancer, high blood pressure, cerebrovascular disease, diabetes, and smoking.

### **Priority Areas:**

- Heart Disease
- Diabetes-even though Diabetes is not in the top leading 5 causes of death for Camden County, nor does the county rate exceed the state rate, HCOTA chose to keep this disease as an area of focus.
- Obesity
- Smoking-Tobacco use
- High blood pressure
- Cancer
- Cerebrovascular Disease
- Mental Health

### **Other areas of concern brought up during workgroup;**

- At the high school, the baseball and football field are the same, and there is no track.
- The ability to communicate in this county is difficult, there are no local media sources, and news can't get out. The school system is the best source to get news/information out. This leaves out people who do not have kids in school. We have a webpage, but it isn't used often.
- The county use to do a Community Newsletter, staff and funding were cut, so we no longer have that resource.
- There is no "central location" in this county. The ballfield and the courthouse are used as the central location areas.
- The county doesn't have a large space for a senior center, and there is no community center.
- There is no infrastructure for new growth; no sewer, water hook-up, etc. The county is trying to put resources there for this infrastructure to increase new growth/building.
- Resource sharing is an issue.
- We don't get many grants; we are the lowest funded school system in the state.
- We have too many positive numbers to receive grant funding.

### **Next Steps**

The next step Healthy Carolinians of the Albemarle plans to take is the development of the community action plans, which are due in June 2011. The Action Plans will reflect the priority health issues, strategies, and steps to implement change along with our target populations, and resource networking with the various community partners. This is a critical component that the partnership must take in selecting activities that are reasonable and relatively easy to implement and align with the 2020 Healthy People Objectives in Pasquotank, Perquimans, Camden, and Currituck Counties. Healthy Carolinians of the Albemarle Partnership members will utilize the information gathered during the community assessment process and the prioritization process to clearly define our community's health priorities, actions, and expected results. Healthy Carolinians of the Albemarle will meet on January 21, 2011 to begin this process. Partnership meetings will take place the third Friday of each month throughout this process and through the completion of the recertification process. All partnership members, as well as chairpersons from the two HCOTA subcommittees, Albemarle Fitness and Nutrition Council and Action to Benefit Chronic Disease, will be involved in completing new or revised action plans based on the prioritization of health needs. The completed action plans will include a description of each health issue/problem and will specify the proposed actions and community organizations that will provide and coordinate the intervention activities. The action plans will be developed after carefully considering all the factors that cause and perpetuate the problem they address. The plans will also identify how progress towards the outcome will be measured.

## **Dissemination Plan**

Healthy Carolinians of the Albemarle plans to disseminate the Community Health Assessment information through presentations to county and city governments, local civic groups, faith organizations, and business leaders. HCOTA will make flyers available to participants of the community health survey highlighting key issues for that population. With the help of Albemarle Regional Health Services, there are plans to make the document available on the ARHS website, as well as working with other agencies to provide links to the information. ARHS also plans to work with the local newspapers to provide news releases to the public about the findings made in each county. Copies of the assessment will be placed in the local libraries, local health departments, as well as in the libraries of Elizabeth City State University, College of the Albemarle, and Mid-Atlantic Christian University. HCOTA members will have copies of the assessment at their disposal to use in the community.

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# Chapter 7: Appendices

## Appendix A:

### Camden County Health Services Inventory

#### Cooperative Extension

##### **Camden County Cooperative Extension**

120 NC Highway 343 N  
Camden, NC 27921  
252-338-1919  
FAX 252-338-0277

Making healthy choices isn't always easy. North Carolina Cooperative Extension's educators help people sort fact from fad, providing research-based programs that promote a lifetime of good health.

#### Dental Care

##### **Public Health Dental Hygienist**

Oral Health Section of North Carolina Public Health

Provides oral health assessments, education and referrals for targeted school age children in Chowan, Camden, Currituck, Pasquotank, and Perquimans. Also provides oral health education services upon request for all age groups.

#### Family Practice

##### **Albemarle Family Practice**

160 Hwy 158  
Camden, NC 27921  
252-334-9522

#### Health Department

##### **Albemarle Regional Health Services**

160 US 158 Bldg. B  
Camden, NC 27921

252-338-4460  
FAX 252-338-4475

Albemarle Regional Health Services is the seven-county regional Public Health agency that serves 132,978 residents in rural, northeastern North Carolina. For over 68 years, the communities of the Albemarle region have been the recipients of quality Public Health services. The Public Health professionals and programs of Albemarle Regional Health Services are dedicated to disease prevention and the promotion of a healthy environment to reduce morbidity, mortality, and disability through quality service, education, and advocacy. Funding for Health Department programs come from the County, State, Federal and special grants. Foreign

language assistance is available for individuals who do not speak English. Below is a general list of programs and services:

### **Clinical Services**

- ◆ **Adult Health Clinic-** Comprehensive physical assessments and clinical services are provided for all adults in an effort to detect and prevent chronic diseases, which may cause disability or premature mortality.
- ◆ **Child Health Clinic-** Primary child health services are provided in an effort to detect problems so appropriate interventions can begin as early as possible.
- ◆ **Immunizations-** Immunizations are provided to children and adults in an effort to prevent communicable diseases such as polio, pertussis, tetanus, mumps, measles, rubella, diphtheria, and hepatitis. Adult immunizations include the annual influenza and pneumonia campaign, in addition to all recommended adult immunizations.
- ◆ **Communicable Disease Program-** provides detection and surveillance for diseases which are transmitted person to person or are considered to be a health threat to individuals and the public.
- ◆ **Family Planning-** helps women and men maintain optimal reproductive health and assists families in determining the number, timing, and spacing of their children.
- ◆ **Maternal Health-** Maternal Health Care services are provided in an effort to reduce infant mortality and ensure all pregnant women receive the highest level of health care. High Risk Perinatal Clinic was established to improve the pregnancy outcomes of women with pregnancy complications.
- ◆ **Breast and Cervical Cancer Control Program (BCCCP)-** provides access to screening services for financially and medically eligible women.

### **Additional Programs**

- ◆ **WIC Women Infant and Children Program-** Nutritional support program for infants, children and pregnant, postpartum and breastfeeding women.
- ◆ **Sexually Transmitted Diseases Clinic-** STD and HIV diagnosis, treatment, and counseling are available on a walk-in-basis. There are no fees associated with STD services.
- ◆ **Public Health Preparedness and Response-** work is focused on the communities in order to keep the public safe and prepared for any disaster. This is achieved by coordinating with local emergency management partners, response agencies, and medical partners. ARHS focuses specifically on Public Health related disaster and emergency events, including but not limited to, pandemics, disease outbreaks, bioterrorism, and natural disasters.
- ◆ **Albemarle Regional Diabetes Care Program-** offers individualized counseling, nutrition education, and disease management.
- ◆ **Interpretive Assistance-** Interpretive services are available to ARHS clients to enhance communication during direct service delivery.

### **Environmental Health**

Albemarle Environmental Management Systems affords the community services to ensure health and safety while reducing the spread of communicable diseases.

- ◆ Sewage inspection
- ◆ Swimming Pool Inspection
- ◆ Communicable Disease Investigation
- ◆ Food & Lodging Inspection
- ◆ Management Entity
- ◆ Lead Investigation

## **Home Health & Hospice**

### **Albemarle Home Care**

311 Cedar Street  
Elizabeth City, NC 27909  
252-338-4066  
FAX 252-338-4069  
Toll Free 1-800-478-0477

### **ResCare Home Care**

905 Halstead Blvd Unit 15  
Elizabeth City, NC 27909  
252-331-2708

[www.ResCareHomeCare.com](http://www.ResCareHomeCare.com)

## **Hospitals**

### **Albemarle Hospital**

1144 N Road St  
Elizabeth City, NC 27909  
252-335-0531

### **Chesapeake General Hospital**

736 Battlefield Blvd  
Chesapeake, VA 23320  
757-312-8121

## **Mental Health**

### **Alcohol Anonymous**

Call 252-338-1849 or 1-800-350-2538 for meeting  
schedules and contact information, or visit

[www.aanc32.org](http://www.aanc32.org)

### **Mobile Crisis Team**

Integrated Family Services PLLC  
1-866-437-1821

24 hours a day/ 7 days a week

[www.integratedfamilyservices.net](http://www.integratedfamilyservices.net)

The Mobile Crisis Team helps people in crisis who have: Mental Health Issues, Developmental Disabilities, and Substance Abuse Issues.

### **Port Human Services**

305 East Main Street  
Elizabeth City, NC 27909  
252-335-0803  
FAX 252-413-0932

Port Human Services is a private, non-profit organization that provides a full continuum of substance abuse and mental health services to the citizens of Eastern North Carolina.

## **Hospitals**

### **Albemarle Hospital**

1114 N Road St  
P.O Box 1587  
Elizabeth City, NC 27909  
252-384-4665

### **Chesapeake General Hospital**

736 N Battlefield Blvd  
Chesapeake, VA 23320  
804-547-8121

## **Mental Health**

### **Mobile Crisis Team**

Integrated Family Services PLLC  
1-866-437-1821  
24 hours a day/ 7 days a week  
[www.integratedfamilyservices.net](http://www.integratedfamilyservices.net)

The Mobile Crisis Team helps people in crisis who have: Mental Health Issues, Developmental Disabilities, and Substance Abuse Issues.

### **Port Human Services**

Crisis Hotline: 866-488-PORT (7678)  
[www.porthumanservices.org](http://www.porthumanservices.org)

Port Human Services is a private, non-profit organization that provides a full continuum of substance abuse and mental health services to the citizens of Eastern North Carolina.

## **Support Services**

### ***~Food Pantry~***

#### **Camden Food Pantry**

188 S. 343  
Camden, NC 27921  
252-336-4765

#### **Food Bank of the Albemarle Food Pantry**

109 Tidewater Drive  
Elizabeth City, NC 27909  
252-335-4035  
Call for hours of operation



**Mt. Zion Food Pantry**

118 South Hwy 343  
Camden, NC 27921  
252-335-5772

**New Sawyer's Creek Baptist Church**

312 Sleepy Hollow Rd  
Camden, NC 27921  
252-335-7759

***~Housing Assistance~***

**Economic Improvement Council (Main Office)**

P.O Box 549  
Edenton, NC 27932  
252-482-4459

**Camden County call: 252-338-7720**

**Northeastern Community Development Corporation**

154 US Highway 158 East  
Camden, NC 27921  
252-338-5466

[www.northeasterncdc.org](http://www.northeasterncdc.org)

***~In Case of Crisis~***

**Salvation Army**

602 N. Hughes Blvd  
Elizabeth City, NC 27909  
252-338-4129

**The American Red Cross**

905 Halstead Blvd.  
Elizabeth City, NC  
252-338-2185

***~Social Services~***

**Camden County Department of Social Services**

117 N.C. 343  
Camden, NC 27921  
252-331-4787

**Appendix B:**  
**ARHS Community Health Assessment**  
**Community Leader Telephone Interviews**  
**Interview Protocol**  
**Camden County**

**Pre-Interview Phase**

***Introductory Phone Call***

Say: “Hello, my name is \_\_\_\_\_ and I’m working for the UNC School of Public Health on a health assessment project with the local health departments of Albemarle Regional Health Services and their community health partners throughout the region. The goals of the project are to learn more about health and quality of life – and to identify the special strengths and challenges – in each county of the region.

We have just completed a broad community survey and currently are in the process of interviewing people like you who lead organizations that serve the needs of people in each county. A short time ago you should have received a letter from the Camden County sponsors of this project inviting you to participate in one of these interviews. I hope you have had a chance to read the letter and think about how you can help the community by participating. Would you be willing to participate in an interview?”

***[NOTE: At this point the subject may want more information about the interview. You may tell the subject that the interview will take approximately a half-hour to complete and will include questions about what his or her agency or organization does and who it serves, as well as opinion-type questions about the strengths and challenges of healthcare and other resources in the community.]***

If their answer is **NO**: thank them for their time and tell them that the final results of the project will be made available to the public around the end of the year. [Of course if your invitation is by email, you will not wait for a yes or no answer; you will assume the answer will be “YES” and move on in your message as in the following paragraph.]

If their answer is **YES**: assure them that the interview will take place at their convenience. They may suggest using the present time; if not, ask on what date and at what time it would be convenient to call them back for the interview. If to this point the subject has not asked for more information about the activity, please now provide the information from the **NOTE** above. Be sure to get correct phone information (i.e., do not

assume that the number on the roster is the number they will want to use for the interview) and try to accommodate their timing needs. This *may* require you to call them back in the evening or on a weekend. If they offer you choices or other kinds of flexibility, you may then schedule the call to your convenience. Thank them for agreeing to participate and tell them you look forward to talking with them on: [repeat the day/time of the interview].

### ***Introductory Email***

Write: “Dear [proper name/title of prospective participant],

My name is \_\_\_\_\_ and I’m working for the UNC School of Public Health on a health assessment project with the local health departments of Albemarle Regional Health Services and their community health partners throughout the region. The goals of the project are to learn more about health and quality of life – and to identify the special strengths and challenges – in each county of the region.

We have just completed a broad community survey and currently are in the process of interviewing people like you who lead organizations that serve the needs of people in each county. A short time ago you should have received a letter from the Camden County sponsors of this project inviting you to participate in one of these interviews. I hope you have had a chance to read the letter and have decided to participate.

The interview will take approximately a half-hour to complete and will include questions about what your agency or organization does and who it serves, as well as personal opinion-type questions about the strengths of and challenges to health and healthcare in Camden County.

I want to be sure that the interview can take place on a day and at a time that is convenient for you. Will you please reply to this message with a brief note suggesting some days -- and times on those days -- when it would be convenient for me to call you for the interview? Please also provide the phone number you would like me to use for the call. [It is permissible for the interviewer to suggest some possible time slots in the name of efficiency, but the suggestion should be in the form of a question (e.g., “Would it be convenient for me to call you on.....”, rather than “I’d like to call you on.....)].

If you would like additional information, please feel free to contact me at the address above.

Thank you sincerely for your participation in this project. Your input will be very helpful in the effort to identify health issues, services and service gaps in Camden County. I look forward to hearing from you!

[Sign name]

## Interview Phase: Call Protocol; Interview Guide

Say: “Hello, my name is \_\_\_\_\_ and we spoke [or exchanged email messages] a short time ago about your participation in a telephone interview about health and quality of life in Camden County. This is the time you suggested that I call to conduct that interview. Is this still a convenient time for you?”

If the answer is **NO**, apologize for the inconvenience and ask them to suggest a day and time to which to reschedule the interview. It is possible that the subject may have changed his/her mind about participating. If the subject declines to reschedule, thank them for their time and tell them that, should they be interested, the results of the project will be made public around the end of the year.

If the answer is **YES**, say:

“Thank you again for agreeing to participate in this interview. Our conversation will take approximately 30 minutes to complete, but I don’t want you to feel rushed. Please feel free to take as much time as you need it to say what you want to say.”

“What we discuss will be kept confidential. Nothing you say will have your name or organization attached, and the responses we gather in interviews will be combined and then summarized. It is possible that we may use some quotes from the interviews, but they will be modified as necessary so that neither the person who said them nor his/her organization can be identified.”

“Are you ready? Let’s begin.”

---

### A. The first questions are about your agency or organization and its clients:

- 1) What services does your agency provide for county residents?
- 2) Please describe county residents who *currently* are most likely to use your services (age, gender, race, income level, etc.).
- 3) In the *past 5 years* have there been any *changes* in the composition of the people who use your services? If yes, please describe.
- 4) What do you think are the barriers residents encounter in accessing your services?
- 5) What does your agency do to try to meet the special needs of people who use your services (e.g., language/cultural issues, cost, transportation, etc.)?
- 6) Is there anything else you’d like to tell me about your organization?

**B. The following open-ended questions also relate to Camden County as a whole.**

- 1) What services/programs are needed now that are not currently available?
- 2) Overall, what would you consider to be Camden County's greatest strengths?
- 3) What do you feel are the major challenges Camden County is facing?
- 4) Looking *specifically at health*: what do you think are the most important health problems/health concerns in Camden County?
- 5) What factors do you believe are causing these health problems or concerns?
- 6) What do you think could be done to solve or overcome these health problems or concerns?

**C. Did you participate in the recent Camden County Community Health Survey? *NOTE to interviewer: If NO, please ask subject to answer the following questions (Section D) which were on the survey; if YES, conclude with the last question (Section E):***

**D. The next questions are about Camden County as a whole. Please tell me if you *agree or disagree* with the following statements about Camden County [prompt for details, especially for very strong positive or negative responses]:**

- 1) There is a good health care system in Camden County.
- 2) Camden County is a good place to raise children.
- 3) Camden County is a good place to grow old.
- 4) There are plenty of ways to earn a living in Camden County.
- 5) Camden County is a safe place to live.
- 6) There is plenty of support for individuals and families during times of stress and need in Camden County.
- 7) Camden County has clean air.
- 8) Camden County has clean water.

**E. That concludes the formal interview. Are there any other thoughts you'd like to share?**

**Thank you for your time!**