



ALBEMARLE REGIONAL HEALTH SERVICES
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2010

Community Health Assessment

Currituck County

ALBEMARLE REGIONAL HEALTH SERVICES

Partners in Public Health



A University Health Systems Affiliate



BERTIE MEMORIAL HOSPITAL
CHOWAN HOSPITAL



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Albemarle Regional Health Services,
Albemarle Hospital Foundation,
Chowan Hospital Foundation, and
Bertie Memorial Hospital Foundation

December 1, 2010

Dear Citizens of Currituck 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 Currituck 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", with a long horizontal flourish extending to the right.

Jerry L. Parks, MPH
Health Director

2010 Currituck Community Health Assessment Table of Contents

Introduction	pg.1
Community Health Assessment Purpose	pg.1
Secondary Data Methodology	pg.2
Community Health Assessment Acknowledgements	pg.3
Chapter One: Currituck County Community Profile	pg.9
Geography	pg. 10
History	pg. 12
Demographics	pg. 13
Socioeconomic Climate	pg. 17
Poverty	pg. 20
Housing	pg. 21
Children and Families.....	pg. 22
Transportation	pg. 24
Education	pg. 25
Crime and Safety	pg. 28
Environmental Health	pg. 31
Chapter Two: Access to Care	pg. 34
Health Care Professionals.....	pg. 35
Hospitals and Health Centers.....	pg. 37
Long-term Care Facilities	pg. 40
Mental Health Services and Facilities	pg. 40
Medical Insurance	pg. 41
Chapter Three: Health Statistics	pg. 46
Understanding Health Statistics.....	pg. 47
Leading Causes of Death	pg. 50
Maternal and Child Health	pg. 75
Communicable Disease	pg. 78
Oral Health.....	pg. 80
Mental Health and Substance Abuse	pg. 82
Obesity.....	pg. 83
Asthma.....	pg. 85

Chapter Four: Community Health Survey & Stakeholder Interviews..... pg. 87

Primary Survey Methodology pg. 88

Survey Results..... pg. 89

Stakeholder Comments..... pg. 105

Chapter Five: Acting on Community Health Assessment Results..... pg. 110

Health Priorities..... pg. 111

Next Steps pg. 112

Dissemination Plan..... pg. 112

Chapter Six: References pg. 114

Chapter Seven: Appendices..... pg. 119

Appendix A: Health Resources Inventory pg. 120

Appendix B: Community Stakeholder Interview Protocol pg. 125

Introduction

Why conduct a Community Health Assessment?

Local public health agencies in North Carolina are required to conduct a comprehensive Community Health Assessment once every four years. This Community Health Assessment, which describes 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 North Carolina 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 NC Public Health Preparedness and Response 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 will have 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 three Healthy Carolinians coalitions in the region 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 were also asked questions about their personal health and health behaviors. All responses were kept confidential and not linked directly to the respondents in any way.

Secondary Data Methodology

In order to learn about the specific factors affecting the health and quality of life of Albemarle Region residents, two UNC-Chapel Hill students, as a part of their practicum, and an MPH class 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

Currituck County Community Health Assessment 2010

- 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

As applicable, Currituck 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 Currituck County, the NC-CATCH system identified Alexander, Davie, Stokes, and Yadkin as peer counties. Therefore, in addition to North Carolina statistics, these four counties were used for comparison throughout part of the assessment process.

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

Throughout this report, there will be text written in blue. This is to indicate discussions during the Community Health Assessment Data Presentation/Workgroup to the citizens of the county, Primary Survey Data, 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

Currituck County Community Health Assessment 2010

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 connections 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 that were placed in the reusable bags that were 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 counties

- ◆ 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 that were

Currituck County Community Health Assessment 2010

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

- ◆ 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, as well as 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 that were 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 that were 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 that were 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 handled all media releases, including press releases and news articles regarding the

Currituck County Community Health Assessment 2010

Community Health Assessment. She also provided feedback 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, 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 Health 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 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

Currituck County Community Health Assessment 2010

regarding the services provided through Albemarle Health which were placed in the reusable bags that were 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 Health 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 that were 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

Albemarle Regional Health Services

Representative for all seven counties

- ◆ 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 picking the most important health priorities for the Healthy Carolinians Partnership.

Primary Survey Collection Volunteers Currituck County

Amy Underhill

Ann Roach

Ashley Mercer

Gayle Olson

Georgia Kight

Kaley Goodwin

Shelia Gregory

Currituck County Community Health Assessment 2010
Stephanie Minton
Sherry Lynn

In October, key community leaders met to review and analyze the secondary and primary data, as well as the stakeholder comments. This meeting took place over the course of three hours and the main purpose was to help the CHA Team to identify the strengths and weaknesses of the county, identify available resources, and identify gaps in resources.

Data Analysis Workgroup

Dan Scanlon – County Manager
Amy Underhill – ARHS
Georgia Kight – Currituck County Citizen
Shelia Gregory – Currituck Cooperative Extension
Kathy Romm – Department of Social Services
Mary Gilbert – Currituck County Employee

Chapter One

Currituck County Community Profile

Currituck County Community Profile

Location and Geography

Currituck County is located in northeastern North Carolina, in the Coastal Plain region of the state. It is characterized by swamp in the west and beaches of the Outer Banks region in the east. The county contains miles of waterfront along the North River, the Albemarle Sound, the Currituck Sound, and the Atlantic Ocean. Currituck waterfront also includes the Intracoastal Waterway that provides sheltered passage for commercial and pleasure craft. The nearest metropolitan area is Norfolk, VA which is located 36 miles to the north. The county is 185 miles east of Raleigh, and 230 miles northeast of Wilmington.

Currituck County's western border is shared with Camden County. To the north, the county borders the VA state line and to the south the Albemarle Sound (Figure 1).

There are four townships in Currituck County. Poplar Branch is the most populated township in the county. Currituck Township is the county seat (1).

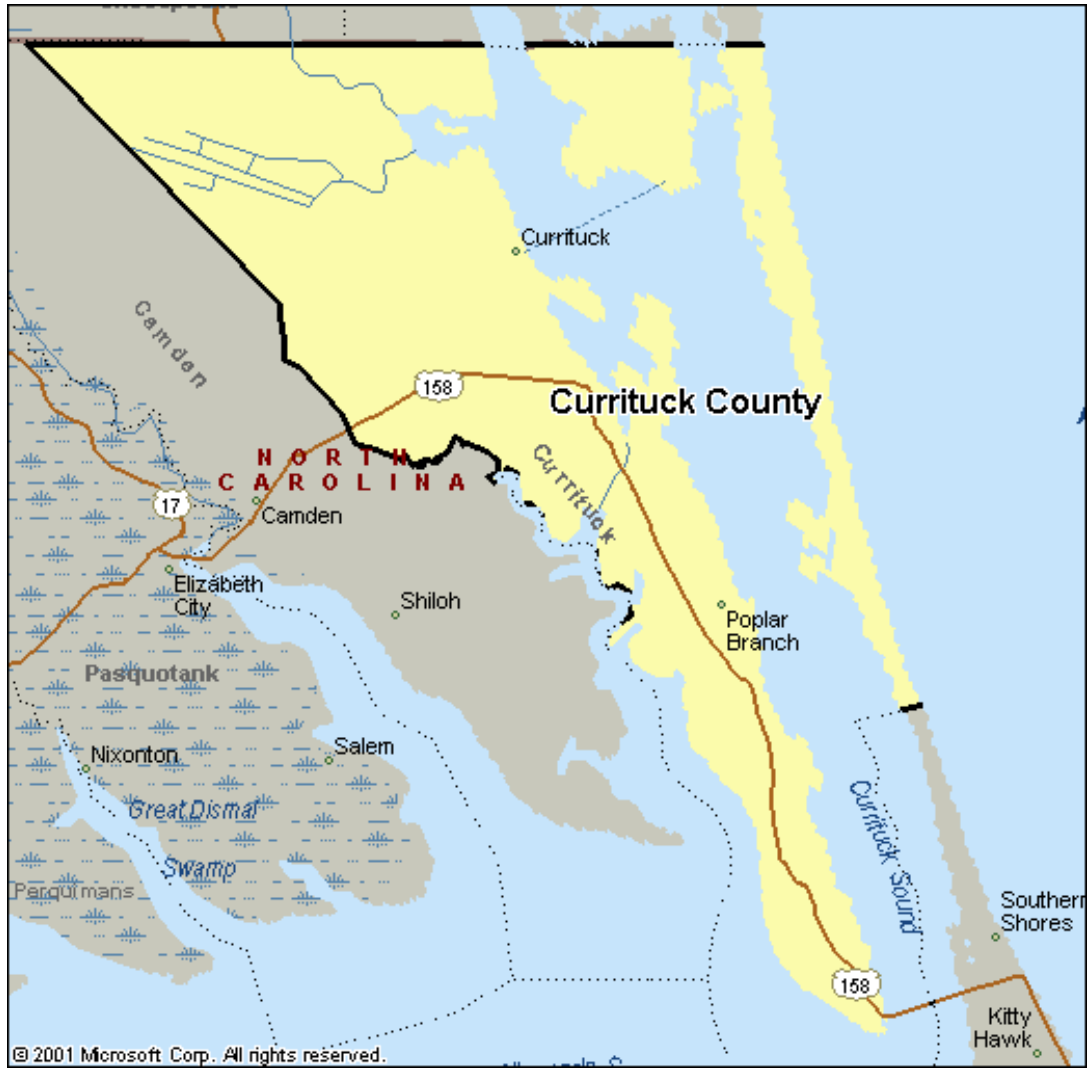
The nearest interstate highway is Highway 95, 110 miles west of the county. US Highways 158 and 168 run through Currituck County. Highway 158 goes south to the Albemarle Sound and northwest to Elizabeth City. It joins US Highway 64, which leads to the Outer Banks going east and Raleigh going west. Highway 168 goes north into VA.

The nearest airport offering commercial passenger service is Norfolk Airport, located 36 miles north in Norfolk, VA. US Highway 64 provides access to the Raleigh-Durham International Airport located 190 miles to the west. Currituck Regional Airport, which is owned and operated by the county, serves commuter and recreational fliers. Norfolk, VA is the closest stop on any passenger railway system (2); the nearest Greyhound Lines stop is also in Norfolk, VA (3).

The county land area is approximately 526 square miles of which 262 square miles are land and 264 square miles are water. The county has 283 miles of paved roads as of 2007. Approximately 50% of Currituck County residents live within 10 miles of a four-lane highway (4).

The elevation of the county ranges from sea level in the eastern section to 23 feet in Moyock. Currituck County has a relatively mild climate with an annual mean temperature of around 59.5 degrees. The average annual precipitation is around 47 inches (5).

County Map



History

From the official Currituck County website (6):

Established in 1668, Currituck County was one of the first areas settled in the US. An original North Carolina county, Currituck County was one of the five original ports.

In the early 1700s, Currituck County's original Courthouse was constructed. The building was replaced in 1842 and remodeled in 1898, and currently houses the governmental administrative offices. In 1776, the Colonial Legislature granted permission to build a jail in Currituck County. The Currituck Jail and Historic Courthouse are two of the oldest county buildings in NC.

In the early part of the 1800s, Currituck County became known for its fishing villages and peaceful way of life. The Albemarle Chesapeake Waterway, which opened in 1859, became a vital water passage from Maine to Florida. Known today as the Intracoastal Waterway, it separates Currituck County's southern mainland from the northern mainland. Marinas and restaurants serve the pleasure and commercial vessels that navigate the Intracoastal Waterway.

By the late 1800s, Currituck County gained a reputation as a "sportsman's paradise." Wealthy industrialists were attracted to the county for its abundance of wildlife and numerous hunt clubs, including the Pine Island Club and Currituck Shooting Club.

The Whalehead Club at Currituck Heritage Park is often referred to as the "Crown Jewel of the Outer Banks." It was constructed in 1925 by wealthy industrialist Edward C. Knight, Jr. at a cost of \$400,000. Corolla Island, the original name of the Whalehead Club, was built by Mr. Knight and his wife, Marie Louise, as their private residence. They chose the location along the Currituck Sound to satisfy their passion for waterfowl hunting. In October 1992, the Whalehead Club and 28.5 acres of land were purchased by Currituck County. This home, located in Corolla, is open from Easter through Thanksgiving weekend for tours.

Near the Whalehead Club stand two additional restored structures: the Currituck Beach Lighthouse and the Lighthouse Keeper's House. The Lighthouse, first lit in the mid-1800s, warned ships hugging the chain of barrier islands along the North Carolina Coast. The red brick lighthouse is made up of over one million bricks and towers 163 feet. Because the village of Corolla was an isolated community, the Keeper's House was provided for the keeper and his family. Tours of the lighthouse are held daily during the summer season. Currituck Heritage Park, which is located in Corolla and includes the Whalehead Club, historic bridge, and boathouse, is the future home of the Outer Banks Center for Wildlife Education.

USA Today selected Corolla as one of the top ten beaches in the nation and described Currituck beaches as some of the "best undiscovered beaches on the East Coast." Named for an Algonquin Indian term meaning, "The Land of the Wild Goose," Currituck County is abundant with waters, marshes, and woods. Hunting, fishing, water sports, and other recreational activities make the County a perfect retreat for the sports enthusiast. The County is a blend of a past that is rich in heritage with a vision for a progressive tomorrow.

Demographics

Population Characteristics

- In 2009, Currituck County had an estimated permanent population of 23,502 persons.
- Like the state as a whole, Currituck County's population is increasing. Between 2000 and 2009, the Currituck County's population increased by 29.2% while the average NC County population grew by 16.6%.
- In 2009, the median age of Currituck County residents was 41.89 years, more than four years older than the median age for the state, 37.06 (Table 1).
- The Currituck County population is predominately white, with minorities making up only 9.5% of the population in 2008; in NC minorities represent 26.1% of the total population (Table 1).
- In 2009 people over the age of 65 made up 15% of the population in Currituck County, but 12.7% of the total NC population (Table 3).
- Children under the age of five represented 5.0% of the Currituck County population in 2009, compared to 6.8% statewide (Table 3, subsequent page).

Table 1. General Demographic Characteristics (years as noted)

County	2010 Tier Desig	Total Population (July, 2009)	% Pop Change 2000-2009	2009								
				No. Males	No. Females	Median Age	No. Under 5 Years	No. 65 Years and Older		Race (2008)		% Hispanic or Latino, Any Race
								Male	Female	% White	% Other	
Currituck	2	23,502	29.2	11,577	11,925	41.89	1,166	1,671	1,855	90.5	9.5	2.2
State Total	n/a	9,382,610	16.6	4,599,180	4,783,430	37.06	635,977	501,956	687,329	73.9	26.1	7.4
NC County Avg.	n/a	93,826	n/a	45,992	47,834	n/a	6,360	5,020	6,873	n/a	n/a	n/a
Source	b	c	c	c	c	c	c	c	c	a	a	a
<small>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</small>												

Table 2. Population Growth Comparison (1990-2020)

County	Number of Persons							
	1990	2000	% Change 1990-2000	2009	% Change 2000-2009	2010 (Est.)	2020 (Est.)	% Change 2010-2020
Currituck	13,736	18,190	24.5	23,502	22.6	23,218	20,363	-12.3
State Total	6,632,448	8,046,485	17.6	9,382,610	14.2	9,519,300	10,879,960	12.5
NC County Avg.	66,324	80,465	n/a	93,826	n/a	95,193	108,800	n/a
Source	a	a		b	b	b	b	
a - Log Into North Carolina (LINC) database, http://linc.state.nc.us . Some % change figures were calculated.								
b - NC Office of Budget and State Management, County Estimates, http://www.osbm.state.nc.us								

- Between 2000 and 2009 the population in Currituck County grew 43.2% faster than the state as a whole (Table 2). However that rate is slowing and it is projected that the population in Currituck County will be decreasing, rather than increasing by 2020.
- Currituck County remains entirely (100%) rural.

Table 3. Population Distribution by Age, Percent (2009)

County	Percent of Total								
	Total Population	0-4 Years	5-19	20-24	25-34	35-44	45-54	55-64	65+
Currituck	23,502	5.0	18.8	5.6	12.0	13.5	17.2	13.0	15.0
State Total/Average	9,382,610	6.8	19.9	7.2	13.2	14.7	14.3	11.2	12.7
Source	NC Office of Budget and State Management, County Estimates, http://www.osbm.state.nc.us								
	Calculated based on figures in the previous table								

- The largest age segment of the population in Currituck County, as well as North Carolina, is the group aged 5-19-years representing 18.8% of the Currituck County population and 19.9% of the NC population.
- The adult age group 45-54 is the next largest segment of the population in Currituck County at 17.2%. Statewide, the next largest segment of the population is the adult age group 35-44 at 14.7%.
- Currituck County has a larger proportion of people aged 45-74, and a smaller proportion of people aged 0-9 and 20-44.

Currituck County Community Health Assessment 2010

- Though all segments of the elderly population are growing, the fastest growing segment is the group aged 65-74. The total county population represented by this age group is expected to grow by 51.7% between 2000 and 2030.

Table 4. Currituck County Demographic Profile by Age and Sex (2009)

Age Group	Currituck County						North Carolina		
	Number			Percent			Percent		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	23,502	11,577	11,925	100.0	49.3	50.7	100.0	49.0	51.0
Under 5	1,166	606	560	5.0	2.6	2.4	6.8	3.5	3.3
5 to 9	1,310	686	624	5.6	2.9	2.7	6.5	3.3	3.2
10 to 14	1,491	746	745	6.3	3.2	3.2	6.4	4.3	2.1
15 to 19	1,608	830	778	6.8	3.5	3.3	7.0	3.6	3.5
20 to 24	1,322	669	653	5.6	2.8	2.8	7.2	3.8	3.5
25 to 34	2,811	1,346	1,465	12.0	5.7	6.2	13.2	6.7	6.5
35 to 44	3,181	1,509	1,672	13.5	6.4	7.1	14.7	7.4	7.4
45 to 54	4,043	2,026	2,017	17.2	8.6	8.6	14.3	6.9	7.3
55 to 64	3,044	1,488	1,556	13.0	6.3	6.6	11.2	5.3	5.9
65 to 74	2,119	1,069	1,050	9.0	4.5	4.5	7.0	3.2	3.8
75 to 84	1,042	464	578	4.4	2.0	2.5	4.1	1.7	2.4
85 to 94	322	119	203	1.4	0.5	0.9	1.5	0.5	1.0
95+	43	19	24	0.2	0.1	0.1	0.2	0.03	0.1

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

Table 5. Population Distribution by Race/Ethnicity (2008)

County	Number and Percent												
	Total	White		Black		Native American		Asian		Other		Hispanic Origin	
		Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Currituck	24,216	21,915	90.5	1,816	7.5	97	0.4	121	0.5	266	1.1	533	2.2
State Total	9,380,884	6,932,473	73.9	2,026,271	21.6	121,951	1.3	178,237	1.9	121,951	1.3	694,185	7.4

- As detailed in Table 5 Currituck County population is primarily white, with minorities making up only 9.5% of the population in 2008.
- Currituck County has a significantly lower proportion of African Americans than NC as a whole. The proportion of Latino residents is also considerably lower than the statewide figure.
- While the data in this chart has not been updated since the 2000 Census, it was estimated that in 2009, there were 570 Hispanic/Latino individuals living in

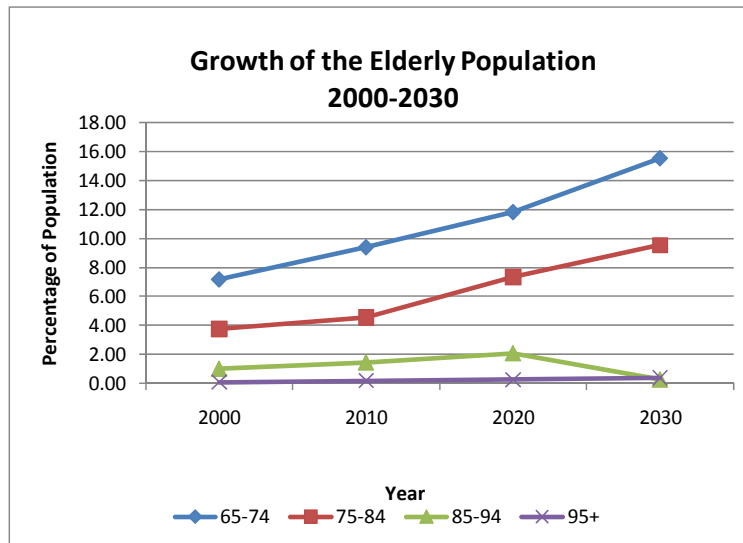
Currituck County accounting for 2.2% of the population. Statewide it is estimated that there are 717,612 Hispanic/Latino individuals living in NC in 2009 accounting for 7.4% of the population (7).

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 here to join their adult children or to retire.

- As demonstrated in Figure 1, the population of adults in Currituck 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. The total county population represented by this age group is expected to grow by 51.7% between 2000 and 2030. The percent of the population aged 75-84 could increase by 60.6%, the segment aged 85-94 could increase by 37.5% and the segment 95 and older could increase by as much as 76.9% over the same period.

Figure 1



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

- Work group participant comments and primary survey respondents noted that Currituck County is a good place to grow old mainly due to the senior resources, including three active Senior Citizen Centers placed strategically across the county.

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 foreign-born immigrants from Southeast Asia.

Although there has been an increase in the number of foreign-born residents in Currituck County, the rate of increase has slowed since a spurt in the mid-seventies. The most recent increase shown, for 1995-2000, is less than in the state as whole.

- As of the 2000 Census, there were 254 foreign-born residents in Currituck County, making up 1.4% of the total county population at that time.
- Over 60% of the Currituck County residents who were foreign-born entered the US before 1980.
- Only 13% of foreign-born residents entered Currituck County after 1994, compared to 76% statewide.

Socioeconomic Climate

Income

According to data in Table 6, in 2009 Currituck County residents had a per capita income \$11,089 (32.2%) lower than the state average.

- The median household income in Currituck County, however, was 17.3% *lower* than in the average NC County.

Table 6. 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
Currituck	2	\$23,364	-\$11,089	\$50,774	-\$10,646
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. https://edis.commerce.state.nc.us/docs/countyProfile/NC/37053.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.

- Retail trade is the largest industry in Currituck County, accounting for 20.8% of the labor force. Statewide, healthcare/social assistance is the largest industry, accounting for 14.8% of the labor force.
- Accommodation/food services are the second largest industry in Currituck County, employing 14.1% of the labor force. Statewide, retail trade is the second largest industry (11.7%).

Table 7. Major Employers in Currituck County, Third Quarter 2009

Employer	Industry	Number Employed
Currituck County Board of Education	Education and Health Services	500-999
Currituck County Finance Office	Public Administration	250-499
Presidential Airways, Inc	Trade, Transportation, & Utilities	100-249
Twiddy & Co Of Duck, Inc	Financial Activities	100-249
Food Lion, Llc	Trade, Transportation, & Utilities	100-249
Resort Realty	Financial Activities	100-249
Corolla Classic Vacations, LLC	Financial Activities	100-249
C/O Sentara Health Center	Education & Health Services	100-249
Southland Trade Corp	Trade, Transportation, & Utilities	100-249
Sun Realty Nags Head, Inc	Financial Activities	50-99

Source: Employment Security Commission of NC, Labor Market Information, Industry Information: North Carolina's Largest Employers.
 25 Largest Employers by County. <http://esesc23.esc.state.nc.us/d4/QCEWLargeEmployers.aspx>

Unemployment

Table 8. Annual Unemployment Rate (2000-2010)

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Currituck	2.8	3.0	3.0	3.2	2.9	3.0	3.3	3.2	4.5	7.0	10.3
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

Source- NC Employment Security Commission <http://esesc23.esc.state.nc.us/d4/LAUSSelection.aspx>

- In September 2010, 507 members of the Currituck County civilian labor force were unemployed (8).
- Unemployment rates have historically been below the state rate, and have fluctuated since 2000 with the lowest unemployment rate of 2.8 in 2000. Since this time the rate has displayed an overall increasing trend, with an unemployment rate of 10.3 during the first quarter of 2010. The most recent Currituck County unemployment rate, 4.1 as of September 2010, is much below the state rate of 11.7 (Table 8).

Business Closings and Layoffs

According to data catalogued by the NC Employment Security Commission (9) from newspaper reports and data submitted to the commission, between 2006 and 2010 (to date) there were three reported business closings in Currituck County. One company 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 Currituck County has been consistently below the comparable state rate since 1990 (Table 9).
- The Currituck County poverty rate has decreased overall by almost half between 1980 and 2008 (from 18.3% to 9.7%).

Table 9. Annual Poverty Rate (1980-2008)

County	1980	1990	2000	2008
Currituck	18.3	10.1	10.7	9.7
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>

Children in Poverty

- Since 2006, Currituck County has demonstrated lower proportions of persons in poverty under the age of 18, when compared to the state. (Table 10, following page).
- Corroborating this evidence for less child poverty in Currituck County than the average NC County is data from the NC Child Advocacy Institute (10) on the percentage of school children receiving free or reduced school lunches. In 2005 24% of Currituck County school-aged children were enrolled in a free or reduced cost school lunch program; in 2007 that percentage had increased to 26.4%. However, this is the second lowest rate in the state. These county figures compare to the statewide figures of 48% (2005) and 54.8% (2007).

Table 10. Percentage of Persons 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
Currituck	9.9	14.5	12.5	10.1	14.5	12.6	9.7	15.6	13.5
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>

Food Stamps

- Between 2000 and 2009 the number of people on food stamps has steadily increased in Currituck County (Table 11).

Table 11. Food Stamp Recipients (2000-2009)

County	Average Monthly Number of Food Stamp Recipients									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Currituck	765	681	809	824	1,161	1,082	1,171	1,243	1,387	1,754
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

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

- Over the past several years Currituck County has had approximately half the percentage of children (under age 18) receiving food stamps as the average NC county. While this proportion has fluctuated previously, more recently it has increased in both Currituck County and the state.

Affordable Housing

According to data from the NC Rural Economic Development Center:

- 21.2% of the Currituck County population at the time was living in “unaffordable” housing; this compares to 20.7% statewide (11). The Census Bureau defines unaffordable housing as housing that costs more than 30% of the total household income.
- No Currituck 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).

- Despite the decrease in the percentage of housing represented by mobile home units, Currituck County had a higher percentage of mobile homes than the state as a whole in 2000.

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 web pages and associated links lists three single-family HUD-sponsored homes in Currituck County and thirteen in the entire Albemarle Region (12).
- There is no HUD Public and Indian Housing Authority located in Currituck County. HUD PHA offices in the Albemarle Region are in Ahoskie (Hertford County), Edenton (Chowan County), Elizabeth City (Pasquotank County), and Hertford (Perquimans County) (13).
- The only privately owned HUD-subsidized rental housing property in Currituck County listed on the HUD website is a group home for the mentally disabled in Poplar Branch (14).

The US Department of Agriculture catalogues information about rental properties available in rural areas (15). According to the USDA, the multi-family housing web site provides an online guide to Government assisted rental projects.

- 16.9% of survey respondents said they were always worried about having enough money to pay for their rent or mortgage.
- 29.7% said they never worried about having enough money to pay for their rent or mortgage.

Children & Families

Single-Parent Families

- The number and percent of homes with single parents increased between 1990 and 2000 in Currituck County and the state.
- When compared to the state, Currituck County has a significantly lower percentage of single parent homes.
- The percentage of homes with single fathers in Currituck County increased by 50% during this period, and the comparable state percentage increased by 65%. Nevertheless, in 2000, the percentage of homes headed by a single male in Currituck County was still higher than the state average.
- The percentage of homes with single mothers in Currituck County increased by 65% over the period.

Child Care Programs

- Between 2006 and 2007 the number of children in regulated child care increased in both Currituck County and the average NC county (Table 12).
- Of the children in regulated care in Currituck County, 47% received a subsidy in 2005, a rate 27% higher than the NC state average. That Currituck County figure also represented an in-county increase of 12% from 2001.
- The number of children in foster care in Currituck County increased between 2006 (44 children) and 2007 (50 children). However, it decreased again in 2008 (46 children). The number of children in foster care decreased significantly in North Carolina between 2006 and 2008.

Table 12. Subsidized Child Care (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)
Currituck	470	485	42%	47%	0	44	50	46
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	30	158
Source	b	b	a	a	a	b	b	a

a - NC Child Advocacy Institute, Data and Statistics, 2005 Children's Index County Profiles, <http://www.aecf.org/cgi-bin/cliks.cgi>

b - 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. NC's Star Red 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 points one through five. 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 from 11-13 points, a three-star facility from 8-10 points, a two-star facility from 5-7 points, and a one-star facility from 3-4 points.

According to the NC Division of Child Development Child Care Facility Search Site (16) there are 23 child care facilities in Currituck County that are licensed to operate in North Carolina in the following categories:

- Five Star Family Child Care Home License—1 facility
- Four Star Center License – 3 facilities
- Four Star Family Child Care Home License – 2 facilities
- Three Star Center License – 4 facilities
- Two Star Center License—2 facilities
- Two Star Family Child Care Home License—3 facilities
- One Star Center License – 1 facility
- One Star Family Child Car Home License – 3 facilities
- GS 110-106 – 4 facilities

Transportation

InterCounty Public Transportation Authority (ICPTA) 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. Mobility options include riders being secured in their wheelchair.

In 2010, among Currituck County residents, ICPTA provided 48 trips to the elderly and disabled. 2,428 trips were provided to the general public this includes going to work, school, grocery store, etc.

Commuting Patterns

Commuting patterns can be an indicator of the employment opportunities within a county. In Currituck County commuting patterns seem to point to a lack of jobs within the county, or the presence of “better” jobs in neighboring counties of North Carolina or Virginia.

- The percentage of Currituck 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 higher percentage of the Currituck 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, rural county bordering another state.
- The majority of workers in Currituck County (and NC) drive alone to work, and the number of people driving alone to work increased between 1990 and 2000. Conversely, the number of workers carpooling, using public transportation, working at home, or walking to work declined in Currituck County during this time. All means of transportation to work increased in NC in the last decade.

- 40.9% of survey respondents work or go to school outside of Currituck County.

Education

Educational Attainment and Investment

According to data presented in Table 13:

- In 2007-2008 Currituck County had a 9.9% greater number of high school graduates than the NC county average.
- According to 2008 End of Grade (EOG) Test results, both third and eighth graders in the Currituck 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 Currituck County school system (1465) was 24 points lower than the NC average (1489).
- In 2008-2009 the rate of acts of school violence in Currituck County schools (14.90) was 49.1% higher than the NC system-wide average (7.59).
- The 2007-2008 total-per-pupil expenditure (i.e. per-pupil expenditure from state, federal, and local sources) in the Currituck County school system (\$8,630) ranked 47th among school systems in the state.

Table 13. 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)	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)
Currituck	77.7		\$8,630	47	78.2	61.5	81.8	71.2	1465	14.90
NC County Avg. Source	70.0 b	26.0 c	\$8,045 b	n/a b	73.2 c	54.5 c	68.2 c	54.2 c	1489 d	7.59 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/cliiks.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 drop out rate in NC and Currituck County has varied, but has shown an overall increase between 2002 and 2008 (Table 15).
- The drop-out rate in Currituck County increased 13.1% between 2002 and 2008, and between 2004 and 2005 the local rate exceeded the average NC county rate.
- According to the latest figures, the high school drop – out rate in Currituck County (4.8) is 4.0% lower than the NC rate (5.0).

Table 15. High School Drop-Out Rate (2002-2008)

County	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Currituck	4.2	6.0	5.8	4.7	4.0	4.8
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/>

% High School Dropout Information Grades 9-12 Peer Counties
Table 14

RESIDENCE		2007
North Carolina		5.3
<i>Currituck</i>		<i>4.0</i>
PEERS	Alexander	5.7
	Davie	4.8
	Stokes	5.0
	Yadkin	3.9

Schools and Enrollment

Primary and Secondary Schools

- There are a total of 10 public schools in the Currituck County School District; six elementary schools, two middle schools, one high school, and an Early College Campus. (17,18). There are no charter schools (17,18).
- During the 2007-2008 school year, 4,207 students were enrolled in the public school system in Currituck County. The enrollment in Currituck County public schools has consistently increased since 2003, while public schools in the average NC County have also experienced increased enrollment (Table 16).
- There are 135 homeschooled children in the county.

Table 16. Public School Enrollment (SY2003-SY2008)

County	Number of Students				
	2003-04	2004-05	2005-06	2006-07	2007-08
Currituck	3,884	4,100	4,269	4,254	4,207
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 Currituck County residents, as well as others in the Albemarle region with locations in Edenton (Chowan County), Elizabeth City (Pasquotank County), and Manteo (Dare County). COA was the first comprehensive community college in the state of North Carolina (19).
- 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 (20).
- Mid-Atlantic Christian University (MACU) is a small (<200 students) private, co-educational four-year college located in Elizabeth City (Pasquotank County) offering associate and baccalaureate degrees. MACU is supported by the Fellowship of Churches of Christ and Christian Churches (21).
- Elizabeth City State University (ECSU) is a four-year state university located in Elizabeth City (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 (22).

Crime and Safety

Crime Rates

Table 17 (below) shows the actual number of index crimes by type that occurred in Currituck County between 2000 and 2009.

- The index crime rate in Currituck County has fluctuated since 2004, with a low of 2,351.4 in 2008. Most recently the index crime rate was still 30.7% lower than the comparable 2009 statewide index crime rate.
- The violent crime rate in Currituck County also fluctuated between 2004 and 2009. The county rate is 51.6% lower than the state rate.
- The property crime rate decreased somewhat in Currituck County between 2004 and 2009 and was lower than the rate for North Carolina as a whole during this time.

Table 17. Number of Index Crimes Reported in Currituck County (2000-2009)

Type of Crime	2000	2001	2002	2003	2004	2005	2006	2007	2008
Violent crime	22	10	16	18	18	23	13	10	20
<i>Murder</i>	1	1	1	0	1	2	1	1	1
<i>Rape</i>	3	0	1	3	1	2	2	0	3
<i>Robbery</i>	4	3	3	7	9	13	6	2	5
<i>Aggravated assault</i>	14	6	11	8	7	6	4	7	11
Property crime	231	146	187	248	288	292	296	214	227
<i>Burglary</i>	75	56	77	104	135	135	152	79	119
<i>Larceny</i>	138	72	100	130	126	131	115	126	102
<i>Motor vehicle theft</i>	18	18	10	14	27	26	29	9	6

Source

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

➤ Primary survey respondents and work group participants were all in agreement that Currituck County is a safe place to live and a good place to raise children.

- Of the 15,515 registered sex offenders living in North Carolina in July, 2010, 34 were residing in Currituck County (23).
- Between 2006 and 2010, no clandestine drug lab busts occurred in Currituck County as compared to an increasing rate in the state as whole, from 197 in 2006 to 206 in 2009 (24).

- As of 2010, there were no gangs in Currituck County. This number is down from one in 2004 (25).
- In 2008, 199 people in Currituck County were charged with driving while intoxicated (DWI). Of those charged, 130 were convicted, for a conviction rate of 65.3% which is 14.7% higher than the statewide conviction rate of 55.7% (26).

Juvenile Crime

- The number of complaints of undisciplined youth decreased and delinquent youth increased in Currituck County between 2004 and 2009. The number of complaints of undisciplined and delinquent youth decreased in the average NC county during this same time period.
- The rate of undisciplined youth in Currituck County was lower than the NC state rate in 2009; the local rate of delinquent youth was 32.1% higher than the comparable state rate.
- The 11 Currituck County youth sent to secure detention in 2009 was slightly lower than the 12 sent to secure detention in 2004.
- No Currituck County juvenile was sent to a youth development center in 2009.

Domestic Violence

- According to data from the NC Court System there were 90 *ex parte* orders issued in Currituck County in FY 2008-2009 related to domestic violence complaints; these *ex parte* orders resulted in 31 restraining orders upon hearing (27). These numbers represent an increase from the year 2000 when 16 restraining orders and 38 *ex parte* orders were issued.
- According to data from the NC Coalition against Domestic Violence, one domestic violence homicide has occurred in Currituck County between 2007 and 2009 (28).

Elder Maltreatment

The Currituck County Department of Social Services provided local data on elder abuse. According to this data, in FY2005-06 the agency received 22 referrals for elder abuse, neglect or exploitation; of these, 10 were accepted and five were eventually substantiated. In previous fiscal years, cases were substantiated as follows: six of 23 reported in FY2004-05, one of 25 reported in FY2003-04, one of 16 reported in FY2002-03 and three of 22 reported in FY2001-02.

Child Maltreatment

- The annual *number* of substantiated child abuse cases in Currituck County fluctuated between 2003 and 2007 (Table 18). (A case of child abuse is substantiated if the investigation finds proof that abuse did in fact occur.)
- The highest number of substantiated cases in the past five years occurred in FY 2004-05.

Table 18. Child Abuse Investigations, Children aged 0-17, Number (2003-2007)

County	2003-2004		2004-2005		2005		2006		2007	
	Reports Made	Number Substantiated	Reports Made	Number Substantiated	Reports Made	Number Substantiated	Reports Made	Number Substantiated	Reports Made	Number Substantiated
Currituck	335	112	211	155	366	54	356	105	332	67
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 Currituck County child abuse substantiated *rate* also fluctuated between 2001 and 2005, but decreased overall by 52% during this period.
- The local rate of reports investigated, as well as the rate of substantiated cases has been higher than the comparable state rate in each of the past available reporting periods except 2005.

Table 19. Children Placed by DSS (2005-2009)

County	2005	2006	2007	2008	2009
Currituck	13	25	25	36	23
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>.

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

Perquimans, Chowan, Gates Landfill

Perquimans, Chowan and Gates counties formed a partnership in 1989 that operates as a department of the local health department (now ARHS) as the Perquimans Chowan Gates (PCG) Landfill Commission. These counties operate a jointly-owned transfer station in Belvidere plus thirteen convenience sites for collecting solid waste, recyclables, and special wastes. The transfer station serves the residential, commercial and industrial sectors of the community. These facilities safely expedite the removal of solid wastes from the area to the privately owned East Carolina Environmental Landfill in Bertie County. PCG also provides yard waste chipping and an inert debris landfill at its facility. This partnership strives to provide environmentally preferable handling of special wastes such as pesticide containers, waste motor oil, paints, gasoline, used appliances, scrap tires, electronic wastes, antifreeze, and other materials. PCG has operated junk car and abandoned mobile home removal programs with the assistance of state grants.

Perquimans Chowan Gates Convenience Centers Map

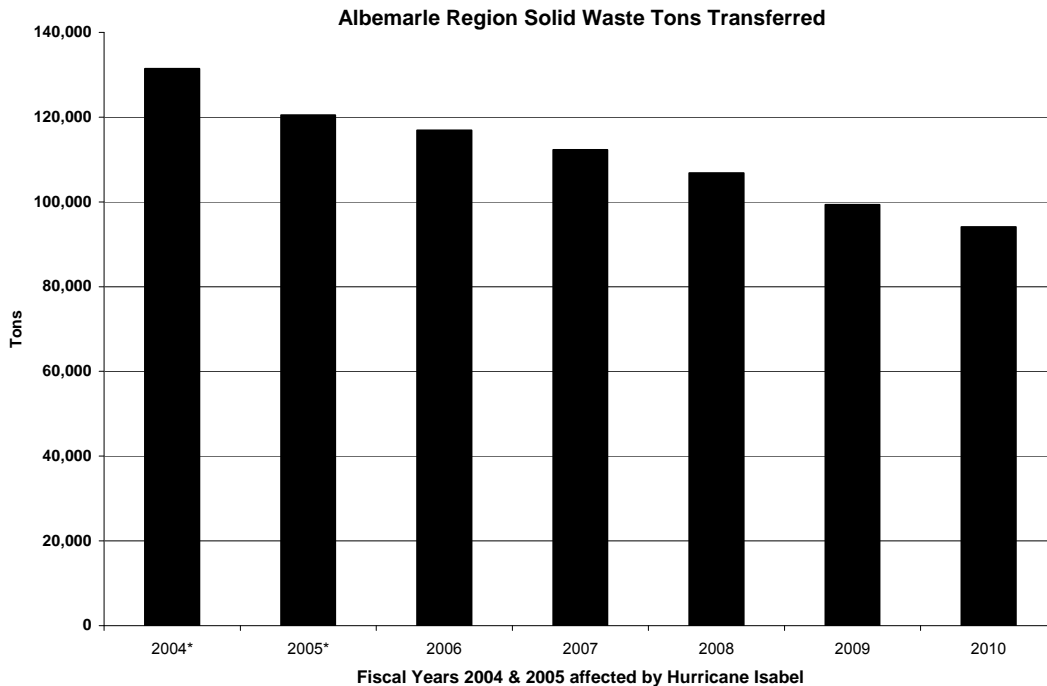


Albemarle Regional Solid Waste Management Authority

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 land filled 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.

Currituck County Transfer Station located in Maple accepts commercial, industrial, and household waste.

- Primary survey respondents had favorable responses on the quality of air and water in Currituck County.



The use of onsite wastewater systems, also known as septic systems, is the most common method of wastewater collection and treatment in the county. ARHS 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.

On-Site Waste Water Program

Currituck	2007	2008	2009
Construction Authorizations - New	172	151	123
Construction Authorizations – Repair	50	56	59
Improvement Permits Denied	6	21	12
Improvement Permits Issued	278	590	216
Other Site Visits	240	291	332

Air Quality

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).

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

Chapter Two Access to Care

Access to care

Health Care Resources

Access and utilization of healthcare 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.

- The number of health care professionals in Currituck County has remained about the same during the past decade with few of the most essential health care professionals; physicians, registered nurses, and dentists.
- In 2008 there were only 2.6 physicians per 10,000 people, extremely low when compared to the state's 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 Currituck County in 2008 there were 29 registered nurses per 10,000 people and a state average of 95.1 registered nurses per 10,000 people. In 2008 4 dentists served Currituck County, with a ratio of 1.7 dentists per 10,000 people which is much lower than the state average of 4.3 per 10,000 people.
- 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. Another factor includes the county's proximity to large cities in Virginia. Citizens of Currituck County can easily drive to Chesapeake, Virginia Beach, or Norfolk which are sometimes closer than in-county facilities to receive care.

Dentist per 10,000 Population Peer Counties

Table 20.

RESIDENCE		2006
North Carolina		4.4
<i>Currituck</i>		<i>1.7</i>
PEERS	Alexander	1.4
	Davie	2.6
	Stokes	1.5
	Yadkin	1.1

Active Health Care Professionals: Currituck County 2000, 2004, 2008 and NC 2008 Table 21.

Physicians	2000	2004	2008	NC 2008
Total Physicians	6	6	6	19,542
Primary Care Physicians	5	4	4	8,347
<i>Family Practice</i>	2	2	2	2,684
<i>General Practice</i>	0	0	0	122
<i>Internal Medicine</i>	2	1	1	2,922
<i>Obstetrics/Gynecology</i>	1	1	1	1,026
<i>Pediatrics</i>	0	0	0	1,593
Other Specialty	1	2	2	11,149
Physicians per 10,000 Population	3.3	2.8	2.6	21.2
Primary Care Physicians per 10,000 Population	2.7	1.9	1.7	9.0
Dentists and Dental Hygienists	2000	2004	2008	NC 2008
Dentists	1	4	4	3,987
Dental Hygienists	1	1	3	4,963
Dentists per 10,000 Population	0.6	1.9	1.7	4.3
Nurses	2000	2004	2008	NC 2008
Registered Nurses	65	48	68	87,743
Nurse Practitioners	3	2	0	3,150
Certified Nurse Midwives	0	0	3	225
Licensed Practical Nurses	28	24	30	17,888
Registered Nurses per 10,000 Population	35.7	22.8	29.0	95.1
Other Health Professionals	2000	2004	2008	NC 2008
Chiropractors	1	2	2	1,317
Optometrists	1	1	0	983
Pharmacists	3	4	4	8,578
Physical Therapists	1	3	6	4,643
Physical Therapy Assistants	1	2	2	2,182
Podiatrists	0	0	0	278
Psychologists	0	0	0	1,844
Psychological Associates	1	1	1	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				

- 33.5% of survey respondents receive medial care in Chesapeake, Virginia
- 17% in Dare County
- 14.3% in Elizabeth City
- 20.4% in Virginia Beach, Virginia
- Only 13% receive medial care in Currituck County
- 83.7% for survey respondents visit a Doctors Office when they are sick
- 10.5% visit the Hospital Emergency Room
- 19.9% visit the Health Department
- 2.5% visit an Urgent Care Center

Hospitals and Health Centers

Because there is no hospital in Currituck County, residents must utilize facilities elsewhere in the region, such as those cited below.

Albemarle Hospital

Albemarle Hospital, located in Elizabeth City, NC (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 population of more than 130,000 people. 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 the Community Care Clinics, which serve the region's indigent, underinsured, and uninsured residents (29).

Bertie Memorial Hospital

Bertie Memorial Hospital is a non-profit, six-bed facility, located in Windsor, NC, and is part 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 (30).

Chesapeake Regional Medial 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 Currituck 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 (31).

Chowan Hospital

Chowan Hospital, an 89-bed facility located in Edenton, NC (Chowan County) is part 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 (32).

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 offers free monthly cancer support groups and cooking classes, funding for community screenings, medical exams, and diabetes education and detection classes. 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, NC (Dare County) 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. (33).

Roanoke-Chowan Hospital

Roanoke-Chowan Hospital is a 114-bed, not-for-profit hospital located in Ahoskie, NC (Hertford County). The hospital services approximately 39,000 residents in Hertford County and three neighboring counties. 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, NC) 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 (34).

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 North Carolina accessible to Currituck County residents is Pitt County Memorial Hospital (35), a 745-bed hospital and academic medical center located in Greenville, NC, approximately 45 miles southwest of Windsor, NC. 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 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 North Carolina 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.

Community Health Center

The Albemarle Hospital Foundations runs 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 run specialized preventive care outreach programs, targeting the Hispanic and African American populations (36).

Local Health Department

The Currituck County Health Department is part of 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 Currituck County at 2795 Caratoke Highway in Currituck, NC. Comprehensive services include Women's

Preventive Health, Adult Health, Communicable Diseases programming, 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, and Public Health Preparedness and Response. Currituck County Health Department houses Albemarle Home Care for Currituck County at the same location (37).

Long-Term Care Facilities

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 (38). According to the Medicare Nursing Home Compare system, there is one nursing home in Currituck County. This nursing home provides 100 beds to Currituck County residents. This number of beds in long-term care facilities has not changed since 2005. The number of beds in the state has increased only slightly over the same period.

Nursing Homes

- Sentara Nursing Center-Barco, NC
100 beds

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 over 626 adult care homes in North Carolina. 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. In Currituck County, there are no adult care homes or family care homes as of 2010.

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. The mission is to work in partnership with people who face significant challenges related to substance abuse, mental illness, and/or developmental disability. Their 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, and Washington.

- It is important to note that mental health issues and service availability is an important community issue highlighted during the work groups, CHA presentation and data results. At this time Healthy Carolinians of the Albemarle partnership decided mental health resources are sufficient in the community and it will not be a priority focus area for HCOTA. It was decided that mental health services and resources need more recognition and the East Carolina Behavioral Health should be made aware of these findings so they may provide more awareness to the public.
- See Appendix A for a complete list of Health and Social Resources in Currituck County.

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 Currituck County, the percentage of 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, 2003, and 2004. It was the same as the state rate in 2005 (Table 22).
- Since 1999 the percent of the population without health insurance was highest in Currituck County in 2003 at 20.9%.

Table 22. Percent of Population without Health Insurance (1999-2007)

County	1999	2000	2001	2002	2003	2004	2005	2006-07	State Rank 2004	State Rank 2005
Currituck	18.3	15.1	17.0	18.2	20.9	20.8	18.6	19.4	68	49
NC County Avg.	16.3	15.6	17.7	19.0	19.4	17.5	18.6	19.5	n/a	n/a
Source	a	a	a	b	b	b	c	d	b	b

a - NC State Center for Health Statistics. County Health Databooks. <http://www.schs.state.nc.us/SCHS/data/databook/>
 b - Sheps Center for Health Services Research <http://www.shepscenter.unc.edu/>
 c-NC-CATCH. <http://www.ncpublichealthcatch.com/ReportPortal/design/view.aspx>
 d-NC IOM. County Level Estimates of Non-Elderly Uninsured. http://www.nciom.org/data/co-level_uninsured_estimates-2008-2.pdf

Table 23. 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
Currituck	20.9	11.0	24.7	20.8	11.2	24.3	18.6	9.3	21.8
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 Currituck County residents eligible for Medicaid has remained relatively stable from 2005-2008, but the number of those eligible has increased slightly during this period.
- When compared to the NC county average, a 34.8% smaller proportion of Currituck County residents were eligible for Medicaid in 2008.
- Currituck County spends 38% less per capita on Medicaid than the average NC county. Currituck County ranks near the bottom of NC counties (96th) with regard to per capita Medicaid spending.

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 took effect 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 Currituck County children enrolled in Medicaid grew between 2004 and 2007, while the number and percent of county children enrolled in NC Health Choice decreased (Table 24).
- The number of Currituck County children enrolled in Medicaid increased 18.1% between 2004 and 2007, which is virtually the same as the state rate of increase which was 18.3%.
- The number of Currituck County children enrolled in NC Health Choice decreased by 15.9% over the period cited, while the state level decreased by 2.3%.

Table 24. Currituck County Children Enrolled in Medicaid and Health Choice (2004, 2007 unless otherwise noted)

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
Currituck	1,118	21	289	6	1,365	n/a	243	4.4
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 August 2005, there were 785,153 Medicaid recipients enrolled in Carolina ACCESS statewide, which represents 74% of all Medicaid recipients eligible to participate (50)
- As of July 2006, there were 1,241 Medicaid recipients in Currituck County enrolled in Carolina ACCESS or ACCESS II, which represents 70% of all Medicaid recipients in the County eligible to participate (39).
- According to data provided by the state (40), there were (as of August, 2006) five Medicaid medical providers in Currituck County, one of which was participating in ACCESS I and two of which were participating in 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.

- Currituck County Medicaid clients participate in ACCESS I and ACCESS II.

Hospital Emergency Department Utilization by Medicaid Patients

Recent local data, provided by University Health Systems of Eastern North Carolina on behalf of Bertie Memorial Hospital and Chowan Hospital, tracks emergency department utilization by Medicaid patients for the period from 2002 through 2005 (41).

According to these data, Medicaid patient visits to the emergency department of Bertie Memorial Hospital increased 29.5% overall between 2002 and 2005. At Chowan Hospital, visits by Medicaid patients *decreased* by just under 2% over the same four year period.

Overall, Medicaid patients comprised 28% of all emergency department visits Bertie Memorial Hospital from 2002 through 2005; at Chowan Hospital, the comparable figure was 29%, although Medicaid patient utilization of the emergency department there actually peaked in 2003.

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

- At the time of this document there was no available information from Albemarle Hospital in regards to Emergency Department Utilization by Medicaid Patients.

Medicaid/Medicare Dual Eligibility

- The number and percentage of dually eligible Medicare/Medicaid beneficiaries in Currituck County increased overall between 1999 and 2001 in the under-65 group. The numbers of dually eligible beneficiaries decreased over the same period in all the other age groups.
- With the exception of the most recent percentage of 65 to 74 year-olds in Currituck County dually eligible for Medicare/Medicaid, the Currituck County percentages are consistently below the comparable state percentages.
 - 17.5% if survey respondents have no health insurance coverage
 - 22.5% have Medicare
 - 7.5% have Medicaid
 - 17.5% purchased their own medical insurance
 - 26.3% provided by their employer

Chapter Three Health Statistics

Health Statistics

Methodology

Routinely collected mortality and morbidity surveillance data and behavior survey data can be used to describe the health status of Currituck County residents. These data, which are readily available in the public domain, typically use standardized definitions, thus allowing comparisons among county, state, and national figures. There is, however, some error associated with each of these data sources. Surveillance systems for communicable diseases and cancer diagnoses, for instance, rely on reports submitted by health care facilities across the state and are likely to miss a small number of cases.

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. 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. It is important to understand 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 Currituck 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 at an 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 Currituck 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.

Leading Causes of Death

Table 29 shows the leading causes of death in Currituck 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 Currituck County rate exceeds the comparable rate for the state as a whole.

Table 29. Age-Adjusted Mortality Rates for the Leading Causes of Death in Currituck County, North Carolina and the United States (2004-2008)

Cause of Death	Currituck County		North Carolina	United States (2006)
	Number	Rate	Rate	Rate
1. Total Cancer	222	186.4	192.5	187.0
2. Heart Disease	206	182.2	202.2	211.0
3. Chronic Lower Respiratory Disease	60	50.5	47.8	41.6
4. Pneumonia and Influenza	57	57.3	20.3	18.8
5. Cerebrovascular Disease	42	38.9	54.4	45.8
6. Unintentional Non-Motor Vehicle Injury	30	27.4	28.4	40.6
7. Unintentional Motor Vehicle Injuries	30	26.8	18.6	16.2
8. Suicide	21	17.5	11.9	11.1
9. Alzheimer's Disease	20	21.3	28.7	24.2
10. Kidney Disease	19	18.6	18.8	15.1
11. Chronic Liver Disease and Cirrhosis	18	13.5	9.1	9.2
12. Diabetes	15	12.5	25.2	24.2
13. Septicemia	13	12.2	14.2	11.4
14. Homicide	2	1.5	7.2	6.2
15. HIV/AIDS	1	0.7	4.4	4.0
Total Deaths All Causes (some causes not listed)	911	811.8	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

State and National Mortality Rate Comparisons

*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 Currituck 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 Currituck County, the state as a whole, and the United States:

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

- **Chronic Lower Respiratory Disease**-by 53.5%
- **Pneumonia and Influenza**-by 64.6%
- **Unintentional Motor Vehicle Injuries**-by 30.6%
- **Suicide**-by 32.0%
- **Chronic Liver Disease and Cirrhosis**- by 32.6%

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

- **Chronic Lower Respiratory Disease**-by 17.6%
- **Pneumonia and Influenza**-by 67.2%
- **Unintentional Motor Vehicle Injuries**-by 39.6%
- **Suicide**-by 36.6%
- **Kidney Disease**-by 18.8%
- **Chronic Liver Disease and Cirrhosis**-by 31.9%
- **Septicemia**-by 6.6%

Gender Disparities in Mortality

The mortality data cited in this section were obtained from the North Carolina State Center for Health Statistics.

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.

For all deaths combined, Currituck County males have a 37.3% higher mortality rate than females.

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

- **Total Cancer**-by 33.8%
- **Trachea, Bronchus, and Lung Cancer**-by 35.4%
- **Heart Disease**-by 57.7%
- **Chronic Lower Respiratory Disease**-by 45.0%
- **Pneumonia and Influenza**-by 22.8%
- **Cerebrovascular Disease**-by 1.8%
- **Unintentional Non-Motor Vehicle Injuries**-by 39.2%
- **Unintentional Motor Vehicle Injuries**-by 80.4%
- **Kidney Disease**-by 44.4%
- **Septicemia**-by 32.2%

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

- **Alzheimer's Disease**-by 26.5%
- **Chronic Liver Disease and Cirrhosis**-by 16.2%

Racial Disparities in Mortality

Racial disparities in mortality are discussed in detail in the discussion of specific diseases and health conditions in the sections that follow. Note that because the numbers of deaths in the minority population due to certain causes are quite small, the caveat set forth in the previous section on gender disparities in mortality will be applied: mortality rates will *not* be analyzed for racial disparities for any cause of death for which there were five or fewer aggregate white or minority deaths during the period in question.

For all causes of death, the age-adjusted mortality rate among minorities (892.0) in Currituck County for the period from 2004 through 2008 is 9.3% higher than the overall age-adjusted mortality rate for whites (809.2).

In addition, following the previously described guideline, for the period from 2000 through 2004 mortality rates in Currituck County were **higher among minorities than among whites** for:

- **Heart Disease**-by 18.2%
- **Total Cancer**-by 5.7%
- **Pneumonia and Influenza**-by 10.4%

Applying the minimum event rule, there are no major causes of death in Currituck County for which mortality rates are higher among whites than minorities.

Cancer

Total Cancer

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 (42). Cancers of all kinds are sometimes grouped together in a parameter called “total cancer”. Total cancer was the leading cause of death in Currituck County for the period from 2004-2008. In 2008 in Currituck County hospital charges associated with cancer diagnoses totaled \$1,515,502 (43).

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

Total Cancer Incidence

- Table 30 shows age-adjusted total cancer incidence rates for the period from 2003 through 2007, as well as incidence rates for colorectal, lung, breast, and prostate cancers.
- For all cancers combined, there were 517 newly diagnosed cases in Currituck County between 2003 and 2007. The incidence rate for all cancers in Currituck County (452.5) is below the average rate for North Carolina as a whole. Nationally, the age-adjusted cancer incidence rate for all types of cancer in 2006 was 461.8 (44). Incidence rates for individual cancers will be presented and discussed subsequently.

Table 30. 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
Currituck	517	452.5	49	44.4	101	89.4	83	132.5	78	146.9
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>

Total Cancer Mortality

Cancer of all kinds resulted in 222 deaths in Currituck County between 2004 and 2008. The county mortality rate for all types of cancer for that period was 186.4 deaths per 100,000, below the state rate of 192.5.

The Healthy Carolinians 2010 total cancer mortality rate goal is 166.2 (45), a target currently exceeded by 10.8% in Currituck County. The county also exceeds the Healthy People 2010 target of 159.3 (46) by 14.5%. The national mortality rate for all types of cancer was 187.0 in 2006, with cancer ranking as the second leading cause of death (44). For 2004-2008, Currituck County was slightly below the national rate while North Carolina exceeded the national rate.

Table 31. 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
Currituck	222	186.4	109	223.7	95	161.1	14	360.9	4	78.3
State Total	85,206	192.5	35,288	232.6	31,591	155.2	9,699	293	8,628	169.7

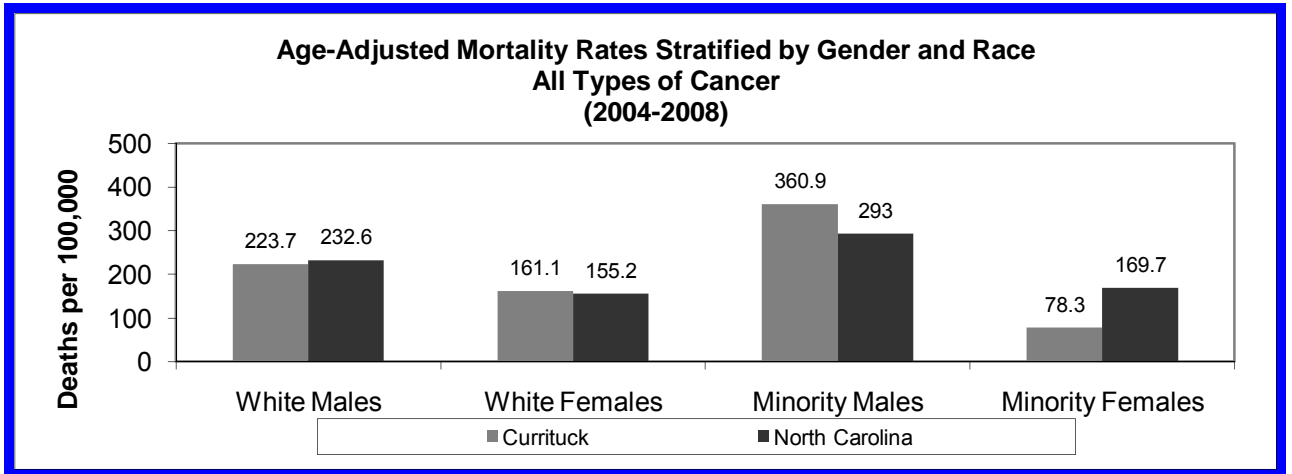
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

Gender and Racial Disparities in Total Cancer Incidence and Mortality

Figure 2 compares the age-adjusted mortality rates due to all types of cancer for Currituck County. The data represent aggregate deaths between 2004 and 2008 among white males, minority males, white females, and minority females. Within each stratified group the total cancer mortality rates are similar. In Currituck County minority males have a 38.0% higher rate of death due to cancer than white males. Minority females have a 51.4% lower rate of death due to cancer than white females.

Among white men in Currituck County, the mortality rate due to all types of cancer is 28.0% higher than the rate for white women, and the mortality rate for minority men is 78.3% higher than the rate for minority women.

Figure 2



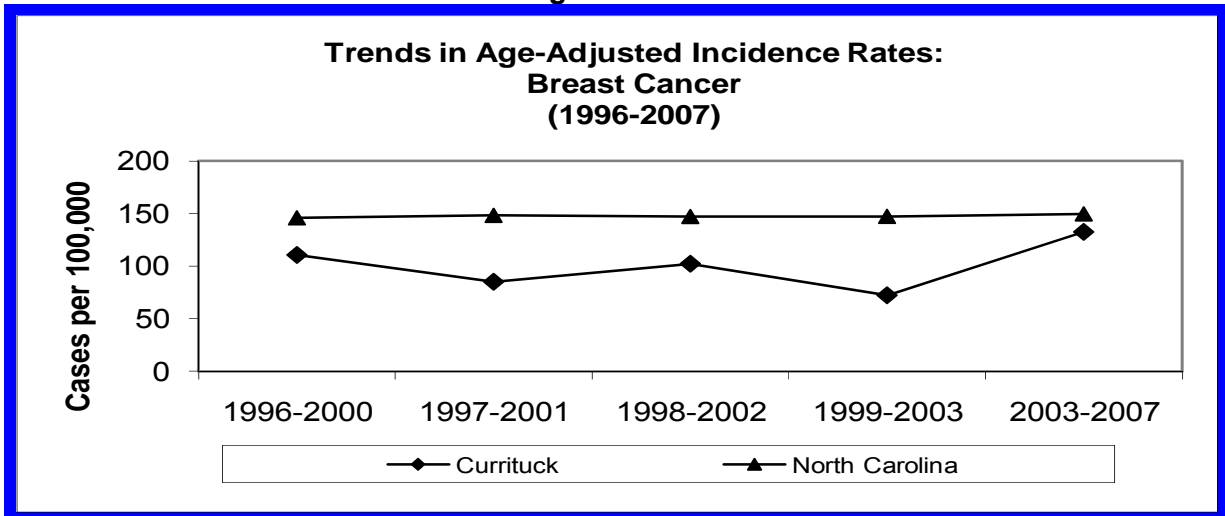
- Relay for Life is a fun-filled overnight event designed to celebrate survivorship and raise money for research and programs of your American Cancer Society. During the event, teams of people gather at schools, fairgrounds, or parks and take turns walking or running laps. Each team tries to keep at least one team member on the track at all times. Many Currituck County citizens participate and donate their time in the Relay for Life event each year. This has become an annual event in May that honors cancer survivors, and is a memorial for those who have lost the battle. Relay for Life generates funds for research that have helped in the prevention, early diagnosis, and cures for cancer.

Breast Cancer

Breast Cancer Incidence

- Between 2003 and 2007, breast cancer was the second most commonly diagnosed cancer in Currituck County, with 83 new cases diagnosed during the cited period (Table 30, 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) (61).
- Since 1995, breast cancer incidence rates have fluctuated more in Currituck County than in the state as a whole. While the number of new breast cancer cases has increased slightly overall in the state, the county incidence rates have more recently increased, with the county rate falling just below the state level.

Figure 3



Breast Cancer Mortality

- Between 2004 and 2008, eight women died of breast cancer in Currituck County representing an age-adjusted mortality rate of 13.5 per 100,000. During this time, 6,301 people died of breast cancer in the state representing a mortality rate of 25.0.

The Healthy Carolinians 2010 goal for breast cancer is a mortality rate of 22.6 per 100,000 (59). The Healthy People 2010 target rate is 22.3 per 100,000 females (46). The current Currituck County rate is already below these goals.

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

Racial Disparities in Breast Cancer Mortality

Because of a small number of breast cancer deaths in Currituck County, it is not possible to make meaningful mortality rate comparisons at the county level.

- 29.3% of women surveyed get their annual mammogram. 24.6% had their last mammogram within the last year and of those who did not get a mammogram only 3.9% said it was due to cost.

Programs and Services

- Albemarle Regional Health Services offers the Breast and Cervical Control Program. The North Carolina Breast and Cervical Cancer Control Program (NC BCCCP) provides free or low-cost breast and cervical cancer screenings and follow-up to eligible women in North Carolina.
- Albemarle Regional Health Services received grant money from Albemarle Hospital Foundation to offer mammogram and Pap test to women under age 49 who are underinsured or who have no health insurance.

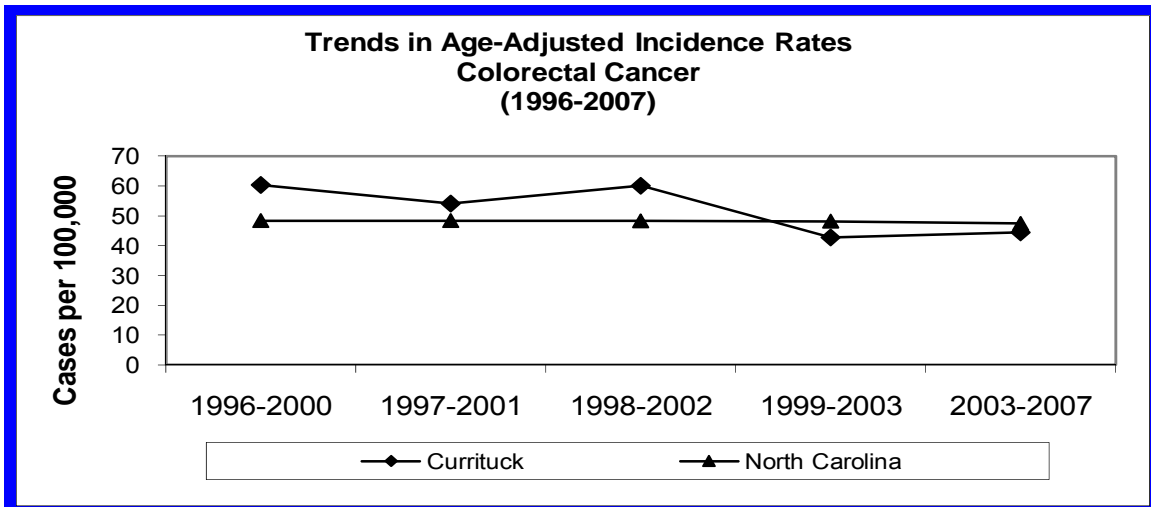
Colon and Rectal Cancer

Colorectal Cancer Incidence

Cancers of the colon and rectum accounted for 49 new cancer diagnoses in Currituck County between 2003 and 2007, making it the fourth most commonly diagnosed cancer in the county (Table 30, cited previously). During that period, the local incidence rate (44.4) for colon and rectal cancer was 6.3% lower than the rate for the state as a whole (47.4). In 2008, hospital charges attributable to colorectal cancers in Currituck County residents totaled over \$363,118 (42).

The Currituck County colorectal cancer incidence rate has fluctuated more than the state rate but seems to have stabilized somewhat between the last two reporting periods and currently is slightly below the state rate. (Figure 4).

Figure 4



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:

Colorectal Cancer Mortality

- The colorectal cancer mortality rate in Currituck County was lower than the rate for the state as a whole for the period between 2004 and 2008 (Table 32). During this period, 15 people in Currituck County died from colorectal cancer, representing an age-adjusted mortality rate of 13.5 per 100,000.
- Of the four major cancer types, colorectal cancer had the lowest national mortality rate: 17.1 per 100,000 in 2006 (58). The current mortality rate for Currituck County is 21.1% lower than 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 (45). Currituck County is 17.7% lower than this target.

Table 32. 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
Currituck	15	13.5	9	20.6	5	8.7	1	21.9	0	0
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](http://www.schs.state.nc.us/SCHS/healthstats/databook/2004-2008%20NC%20Resident%20Race%20and%20Sex-Specific%20Age%20Adjusted%20Death%20Rates,%20Standard=Year%202000%20Census%20Data)

Gender and Racial Disparities in Colorectal Cancer Mortality

In Currituck County between 2000 and 2004, the numbers of colorectal cancer deaths among white women and minorities were below the threshold for meaningful local mortality rate comparisons on the state level, however, the colorectal cancer mortality rate among minority men was 28.1% higher than the rate among white men; the mortality rate for minority women is 30.4% higher than the rate for white women.

The state mortality rates among white men are higher than the comparable rates for white women by 30.4%. The state mortality rate among minority males is 28.1% higher than among minority females.

- 37.6% of survey respondents have had a colonoscopy.

Prostate Cancer

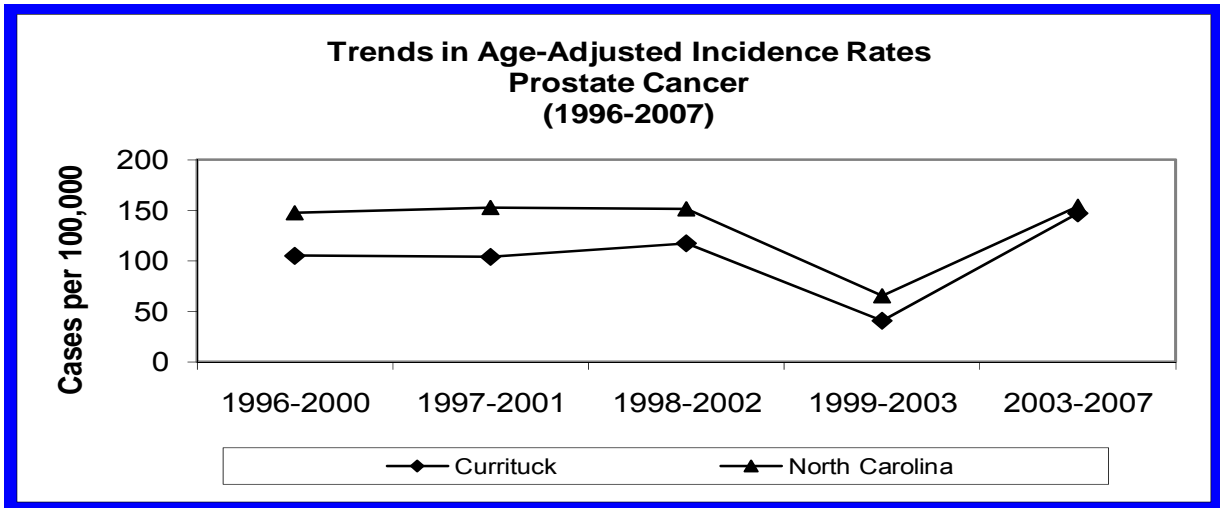
Prostate Cancer Incidence

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) (44). Between 2003 and 2007,

prostate cancer had the highest age-adjusted incidence rate of any cancer in Currituck County and in NC.

Between 2003 and 2007, the incidence rate of prostate cancer in Currituck County increased 72.2% to 146.9 cases per 100,000. The incidence rate is currently 4.5% lower than the state (153.8 per 100,000). During the most recent reporting period, there were 78 new cases of prostate cancer diagnosed in the county. Nearly \$83,130 was spent treating Currituck County prostate cancer patients in 2008 (42).

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>

Prostate Cancer Mortality

The 2004-2008 prostate cancer mortality rate in Currituck County was virtually the same as the state as a whole (27.6 vs. 27.3) (Table 33). During that period, 11 males in Currituck County died from prostate cancer.

The Healthy People 2010 prostate cancer goal is 28.8 deaths per 100,000 males (45), a rate Currituck County currently is below (27.6). Nationally, prostate cancer has the second highest mortality rate among the four main cancers.

Table 33. Prostate Cancer Mortality (2000-2004)

County	Overall Rate		White Males		Minority Males	
	Number	Rate	Number	Rate	Number	Rate
Currituck	11	27.6	10	28.3	1	26.2
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/>

Racial Disparities in Prostate Cancer Mortality

The number of prostate cancer deaths among minority males in Currituck County in the period from 2004 through 2008 was below the threshold for meaningful mortality rate comparisons between race-sex groups at the county level.

At the state level the difference in prostate cancer mortality rates between whites (21.8) and minorities (56.3) is similarly profound (Table 33) with minorities having a 61.3% higher mortality rate due to prostate cancer compared to whites.

- 22.1% of the respondents get their annual prostate exams.

Programs and Resources

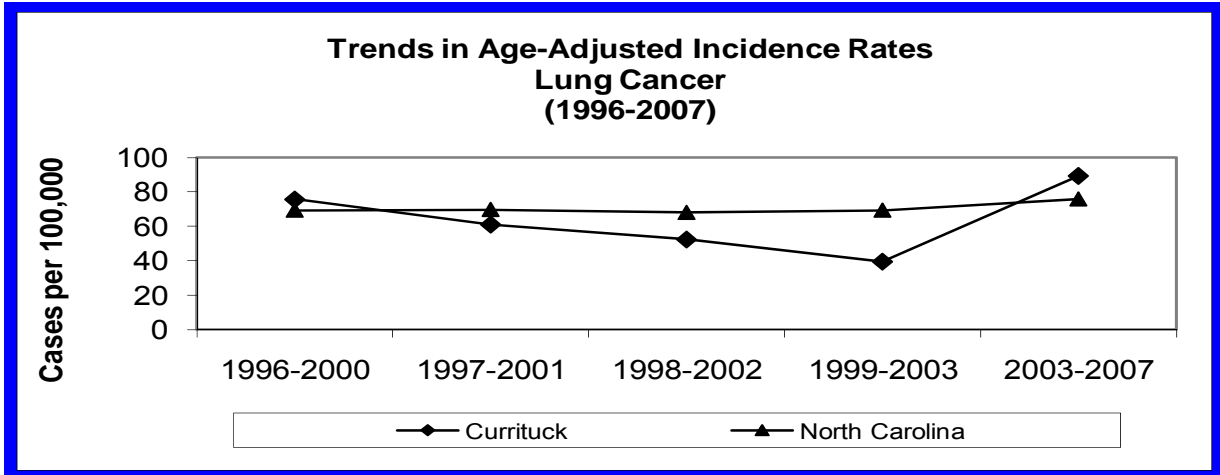
- Albemarle Hospital offers a monthly American Cancer Society Man to Man Prostate Cancer support group.

Lung Cancer

Lung Cancer Incidence

- Between 2003 and 2007, 101 new cases of trachea, bronchus, and lung cancer were diagnosed in Currituck County. The resulting aggregate incidence rate of 89.4 per 100,000 was above the state rate (75.8) by 15.2%. In 2004, hospital charges for the treatment of lung cancer in Currituck County residents totaled \$148,494 (42).
- In the 1997-2001 reporting period, Currituck County lung cancer incidence rates fell below the state level and continued this pattern until the most recent reporting period (Figure 6) where again county rates rose above state rates.

Figure 6



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 in Currituck County was higher than the statewide rate (65.5 vs. 59.1) (Table 34). Between 2004 and 2008, a total of 82 people died of lung cancer in Currituck County.
- Nationally, lung cancer is the leading cause of cancer deaths, with a mortality rate of 51.7 per 100,000 in 2006 (44). Currituck County's current lung cancer mortality rate exceeds the national rate by 21.1%.

The Healthy People 2010 goal is to reduce the lung cancer mortality rate to 44.9 per 100,000 (59). Currituck County currently exceeds this target rate by 31.5%.

Table 34. Lung 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
Currituck	82	65.5	44	78.3	33	54.9	4	113.6	1	16.4
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

Gender and Racial Disparities in Lung Cancer Mortality

The numbers of lung cancer deaths among minority males and females were below the threshold for meaningful mortality rate comparisons between race-sex groups for the period 2004-2008. Comparisons are valid on state levels where mortality rates for minority males exceeds the rate for white males by 9.6%. However, the mortality rate for white females is 26.1% higher than the rate for minority females.

Data indicates that gender disparities may be more pronounced than racial disparities on the state level. Statewide, the lung cancer mortality rate for white men is 44.0% higher than the rate for white women and the rate for minority men is 62.6% higher than rate for minority women.

Programs and Resources

- Lung Cancer Social Support and Advocacy Group meets monthly at the Currituck County Senior Center.

Heart Disease and Stroke

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 (42). 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 gives some indication of the burden of heart disease in Currituck County. Between 2004 and 2008, the hospital discharge rates for all circulatory diseases, as well as heart disease and cerebrovascular disease individually, declined overall. However, together, the two diseases remain to account for more hospitalizations than any other condition. Consequently, costs due to these two conditions were greater than any other condition, together accounting for \$2,664,439 in hospital charges in Currituck County in 2008 (43).

It should be noted that the usefulness of this 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 35 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
Cardiovascular and Circulatory Diseases	8.1	6.2	6.4	6.9	5.7
Heart Disease	5.5	4.6	4.5	4.6	4.0
Cerebrovascular Disease	1.6	1.0	1.1	1.4	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 fifth leading causes of death among Currituck County residents. During the 2004-2008 time period, 206 Currituck County residents died of heart disease and 42 died of stroke.
- 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 36).

Table 36. Heart 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
Currituck	206	182.2	122	264.8	64	111.8	11	342.1	9	155.5
State Total	87,332	202.2	35,043	248.4	33,582	154.1	9,370	289.1	9,337	186.1

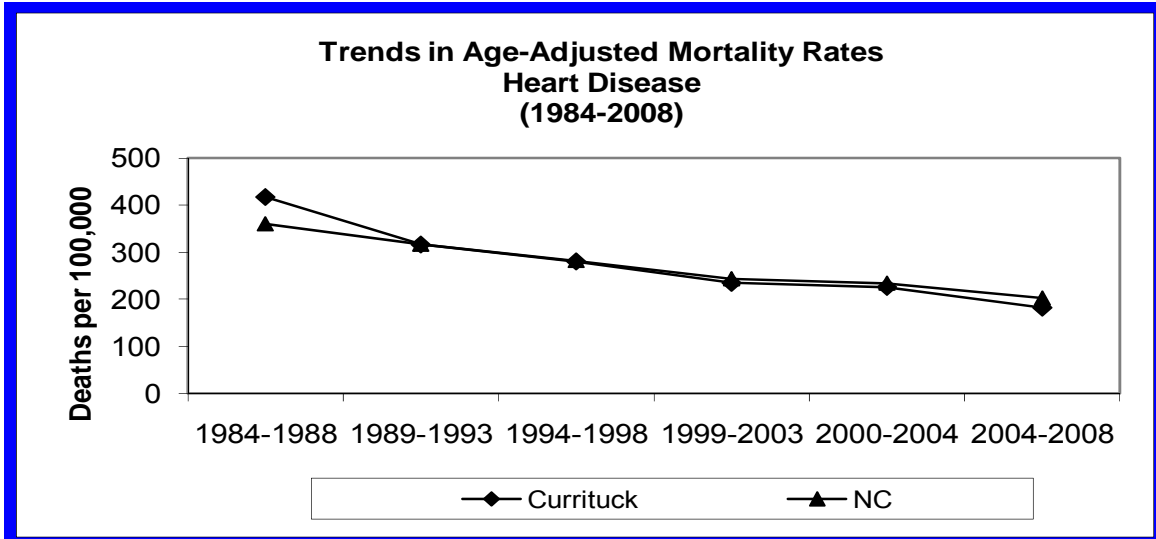
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

The Healthy Carolinians 2010 goal is to reduce the heart disease mortality rate to 219.8 per 100,000 (59). Currituck County is currently below the target rate by 17.1%. The Healthy People 2010 goal is to reduce mortality due to heart disease to 166 per 100,000 (60). Currituck County exceeds this goal by 8.9%.

Nationally, as of 2006, the mortality rate due to heart disease was 211.0 (44), which is 13.6% higher than the mortality rate among Currituck County residents and 4.2% higher than the rate statewide.

Since 1984 the mortality rate due to heart disease in Currituck County has paralleled a decreasing trend seen at the state level (Figure 7).

Figure 7



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>.

Stroke Mortality

- The county mortality rate for stroke (38.9) is lower than the comparable rates in the state (54.4) (Table 37).

The Healthy Carolinians 2010 goal is to reduce the mortality rate due to stroke to 61 deaths per 100,000 population (59). Currituck County is below this rate by 36.2%. The most recent (2006) death rate due to stroke in the United States is 45.8 per 100,000 population (61), which is 15.1% higher than Currituck County. The state mortality rate exceeds that of the country as whole by 15.8%.

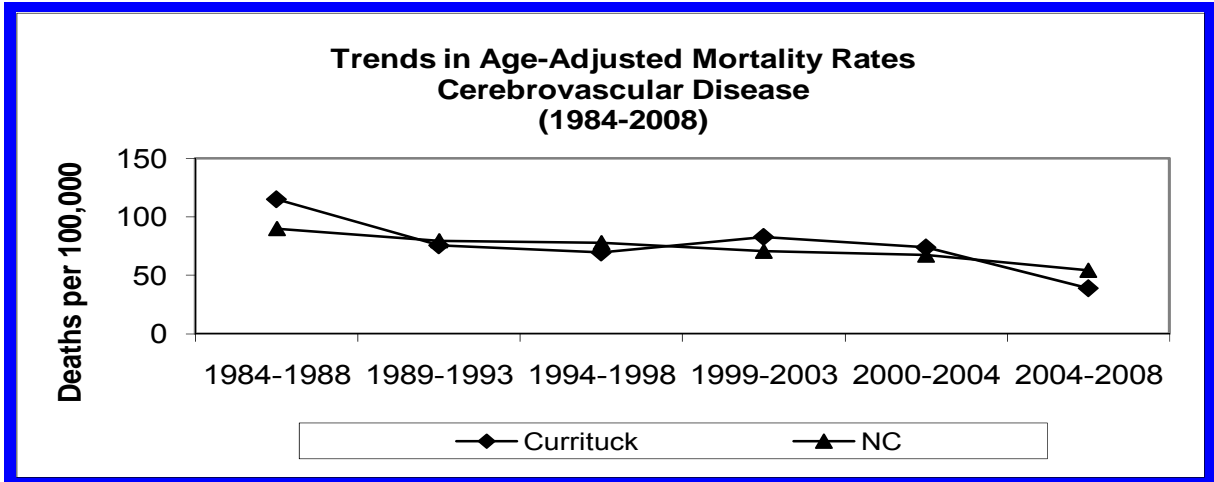
Table 37. Cerebrovascular Disease Mortality (2004-2008)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Currituck	42	38.9	16	37.2	21	37.2	2	72.4	3	43.5
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 Currituck County decreased as did the comparable state rate (Figure 8).

Figure 8



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>.

Cerebrovasluar Disease Deaths per 100,000 Population Peer Counties
Table 38

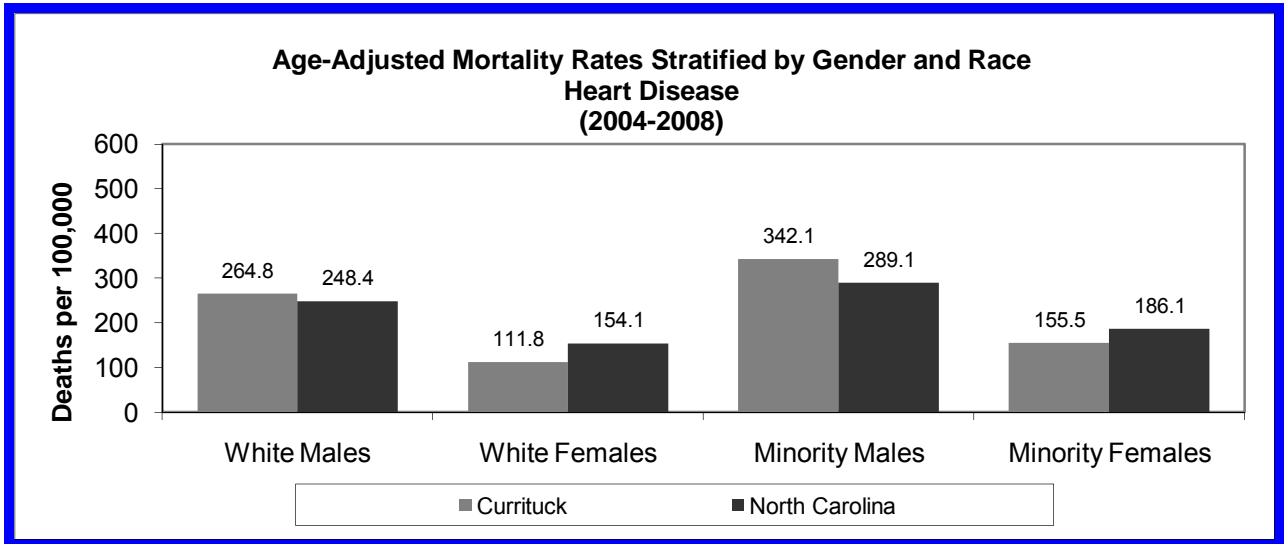
RESIDENCE		2006
North Carolina		53.2
<i>Currituck</i>		<i>56.4</i>
PEERS	Alexander	54.1
	Davie	50.3
	Stokes	83.4
	Yadkin	45

Gender and Racial Disparities in Heart Disease and Stroke Mortality

Figure 9 compares age adjusted mortality rates due to heart disease, aggregated between 2004-2008 among white males, minority males, white females, and minority females. In Currituck County, minority males have a 22.6% higher mortality rate (342.1) due to heart disease than white males (264.8). Minority females in Currituck County have a 28.1% higher mortality rate (155.5) due to heart disease than white females (111.8).

In terms of gender differences, the heart disease mortality rate among minority males (342.1) is 54.5% higher than minority females (155.5), and the rate among white males (264.8) is 57.8% higher than the rate among white females (111.8). The mortality rate due to heart disease among both white and minority males in Currituck County is higher than the comparable rate at the state level.

Figure 9



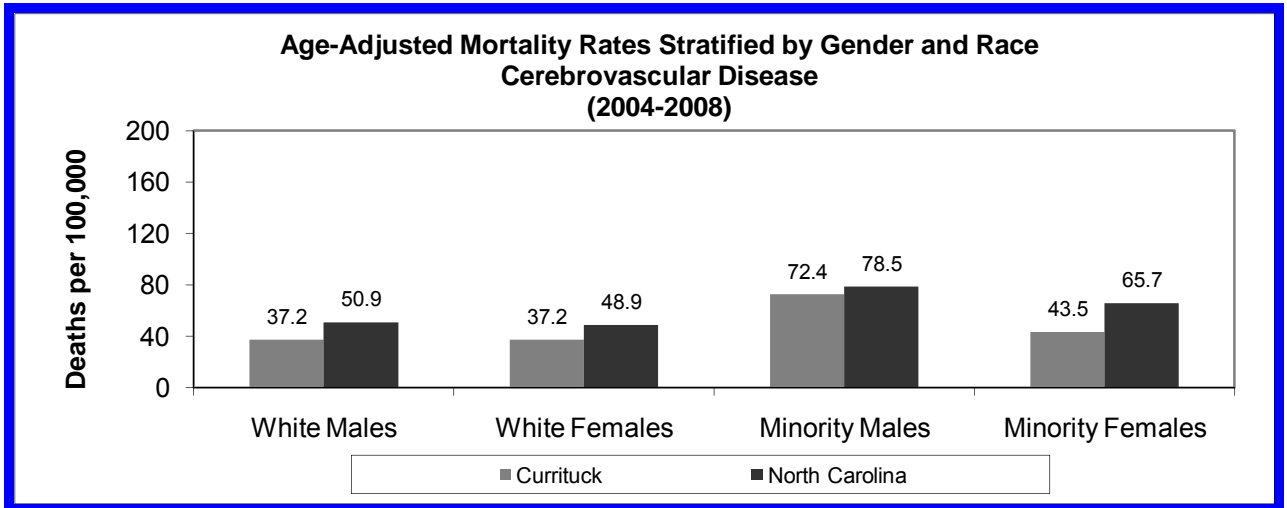
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-2008 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Figure 10 compares race and gender stratified age-adjusted mortality rates for cerebrovascular disease. In Currituck County, the mortality rate among all groups is lower than the comparable state rates. The cerebrovascular mortality rate among minority males (72.4) is 48.6% higher than the rate for white males (37.2); the rate among minority females (43.5) is 14.5% greater than the rate among white females (37.2). The cerebrovascular disease mortality rate among white females is the same as the rate among white males (37.2). The mortality rate due to cerebrovascular disease among minority females (43.5) is 39.9% lower than the rate among minority males (72.4)

Heart Disease Deaths per 100,000 Population Peer Counties
Table 39

RESIDENCE		2007
North Carolina		196.5
<i>Currituck</i>		188.1
PEERS	Alexander	166.0
	Davie	147.3
	Stokes	190.0
	Yadkin	181.0

Figure 10



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>.

- 24% of survey respondents have been told by a health care professional that they have high blood pressure and 29.2% have high cholesterol
- Of those surveyed, heart disease was listed as one of the top five health problems in the county.

Resources and Programs

- Currituck Cooperative Extension offers programs to the community that addresses risk factors for heart disease and stroke.
- Healthy Carolinians of the Albemarle implemented an eight week church based wellness program called Albemarle We Can! The focus of the program was weight loss, heart disease, stroke, and diabetes education.
- Screenings for cholesterol, blood pressure, and blood glucose are held throughout the county each year.
- Albemarle Regional Health Services offers “Know Your Numbers” educational programs to the community and “Know Your Numbers” tracker cards.

Chronic Lower Respiratory Disease

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 (42). In 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 Currituck County residents with CLRD totaled \$966,243 in 2008 (42).

COPD/CLRD Mortality

COPD/CLRD was the third leading cause of death in Currituck County for the period 2004-2008 Table 40 shows race-sex specific age-adjusted mortality rates for COPD/CLRD in Currituck County and North Carolina. For the most current aggregate time period (2000-2004), the overall COPD/CLRD mortality rate in Currituck County (53.7) is 28% higher than the regional rate (41.8) and 17% higher than the state rate (46.0).

- The national mortality rate for CLRD was 40.5 in 2006 (46), a rate lower than both the state rate and the county rate.

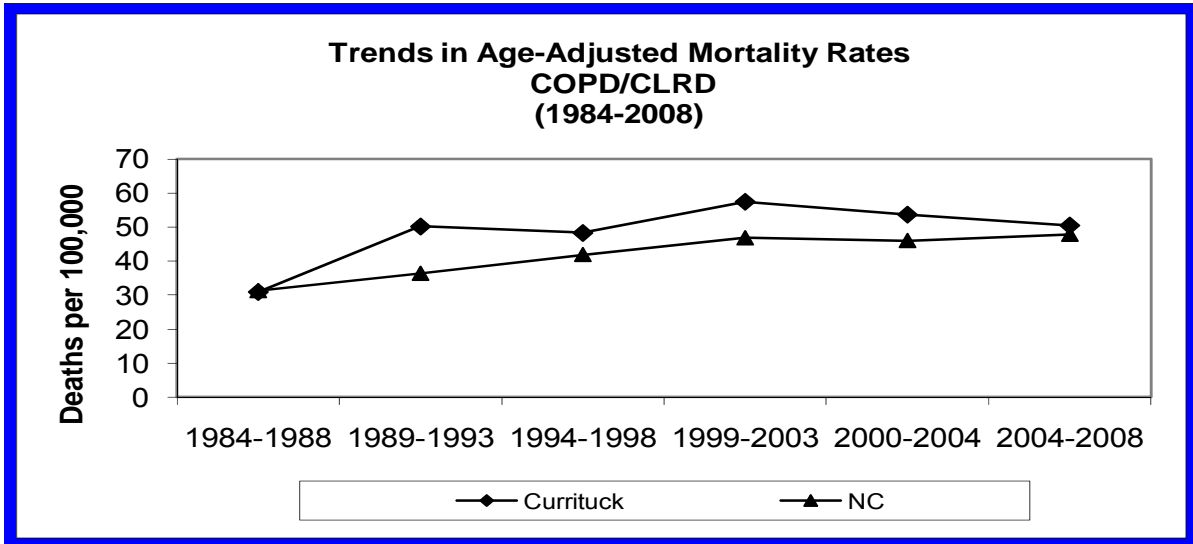
Table 40. Chronic Lower Respiratory Diseases, including COPD (2004-2008)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Currituck	60	50.5	34	69.7	22	37.9	2	60.9	2	34.7
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

- COPD/CLRD mortality rates have increased overall since 1984 in the county and the state. In 1984, the Currituck County mortality rate surpassed the state rate. The county rates have consistently remained above regional and state rates since that time.

Figure 11



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>.

COPD/CLRD Risk Factors

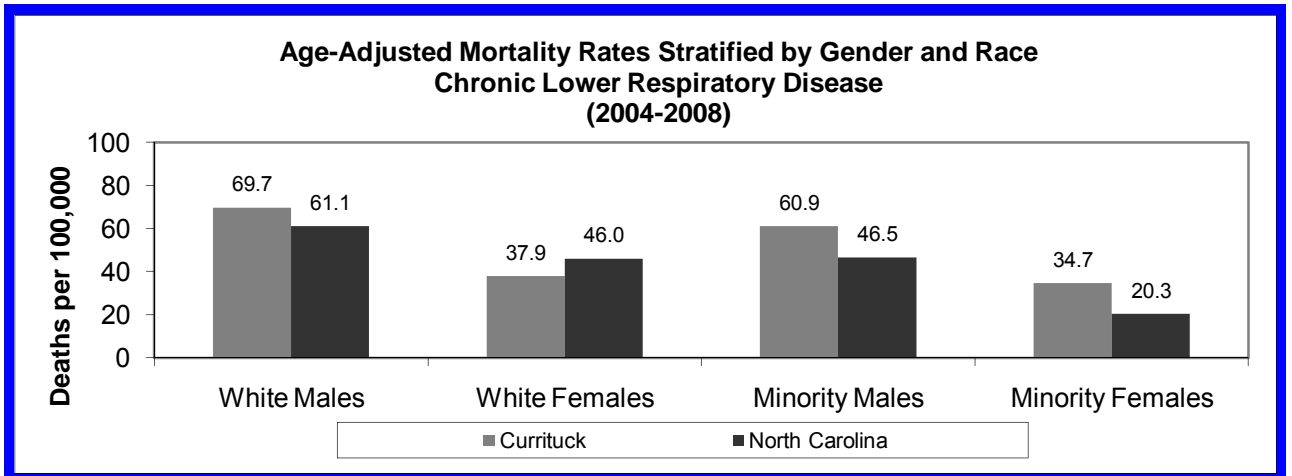
The leading cause of COPD/CLRD is smoking, which leads to emphysema and chronic bronchitis, the two most common forms of COPD/CLRD. Other risk factors include environmental pollutants and passive smoking (exposure to secondhand smoke) (56).

Gender and Racial Disparities in COPD/CLRD Mortality

In Currituck County in the period from 2004 through 2008 the mortality rate for white men (69.7) was 45.6% higher than the rate for white women (37.9). The numbers of COPD/CLRD deaths among minority women and minority men were below the threshold for meaningful local mortality rate comparison.

At the state level, however, the mortality rate due to COPD/CLRD was 23.9% higher among white men (61.1) than among minority men (46.5), and the COPD/CLRD mortality rate among white women (46.0) was 66.8% higher than the rate for minority women (20.3). Also at the state level, the mortality rate for white men was 24.7% higher than the rate for white women, and the rate among minority males was 56.3% higher than the rate among minority women.

Figure 12



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>.

- 33.4% of survey respondents smoke. 16.5% of them smoke at least half a pack to one pack a day. 32.6% are regularly exposed to second-hand smoke in their homes.

Pneumonia and Influenza

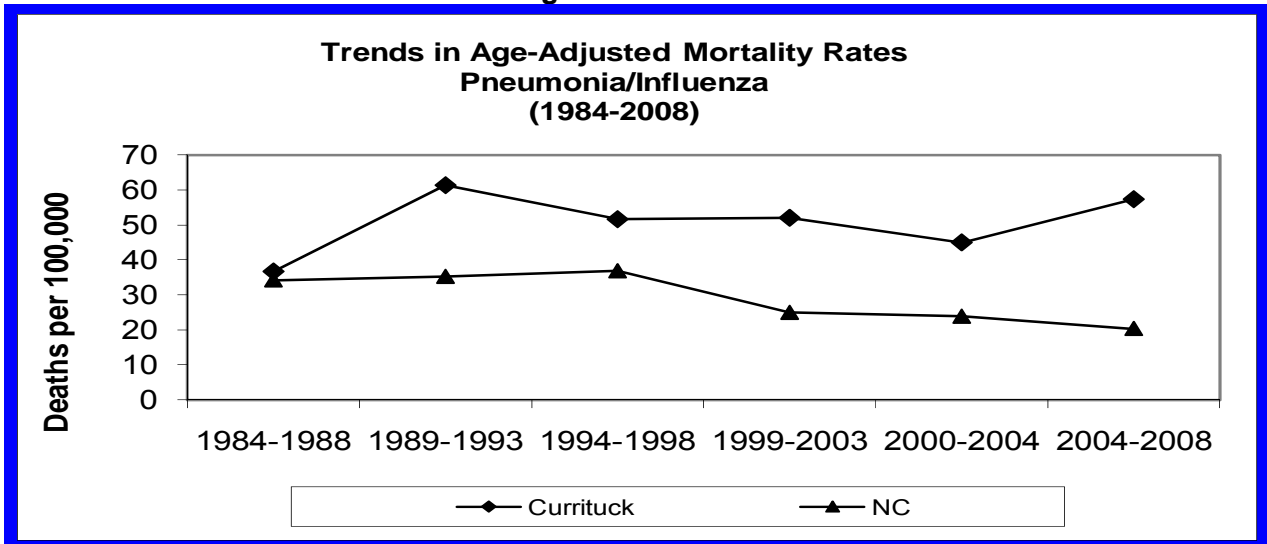
- Pneumonia and influenza are diseases of the lungs. Influenza (the “flu”) is a contagious infection of the throat, mouth and lungs caused by an airborne virus. Pneumonia is an inflammation of the lungs caused by either bacteria or viruses. Bacterial pneumonia is the most common and serious form of pneumonia and among individuals with suppressed immune systems it may follow influenza or the common cold. Pneumonia/influenza was the fourth leading cause of death in Currituck County in the period 2004-2008, and hospital charges in 2008 totaled \$432,516 (42).
- In the 2004-2008 reporting period, the overall pneumonia/influenza mortality rate in Currituck County (57.3) was 64.6% higher than the rate in the state as a whole (20.3) (Table 41).

Table 41. 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
Currituck	57	57.3	21	57.8	30	56.2	5	167.1	1	18.1
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

Figure 13



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>.

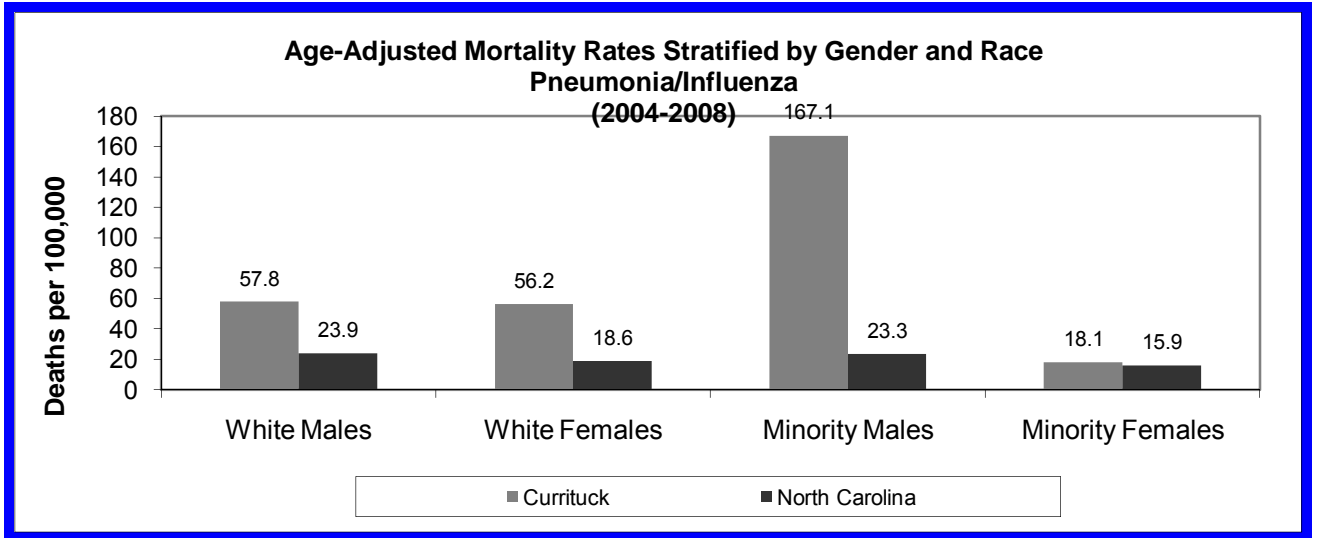
- Since 1984, the Currituck County pneumonia/influenza mortality rate has fluctuated but remained consistently above state levels (Figure 13).

Gender and Racial Disparities in Pneumonia and Influenza Mortality

- Figure 14 graphs the 2004-2008 mortality rates from Table 41. In Currituck County the pneumonia/influenza mortality rate for white men (57.8) is slightly higher than the rate for white women (56.2). During this time period the aggregate numbers of pneumonia/influenza deaths among minority males and minority females in Currituck County were below the threshold for meaningful mortality rate comparisons.

- At the state level, the mortality rate among minority men (23.3) is essentially the same as that of white men (23.9). The mortality rate among white women (18.6) was 14.5% higher than the rate among minority women (15.9).

Figure 14



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>.

- 68.1% of the survey respondents did not get their H1N1 flu vaccine. Of those who did not receive, 20.2% thought it was not safe.

***Other causes of death exceeding the comparable rate for the state as a whole:**

***Unintentional Motor Vehicle Injury**

The NC-SCHS distinguishes unintentional motor vehicle injuries from all other injuries when calculating mortality rates and ranking leading causes of death. Injury mortality attributable to motor vehicle accidents was the seventh leading cause of death in Currituck County in the period from 2004 through 2008.

Unintentional Motor Vehicle Injury Mortality

- Between 2004 and 2008, there were 30 deaths due to motor vehicle injuries in Currituck County, yielding a mortality rate of 26.8, which is 30.6% higher than the statewide rate (Table 42).

Table 42. 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
Currituck	30	26.8	22	45.3	6	9.7	2	47.9	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 Healthy Carolinians 2010 goal for motor vehicle injury is to reduce the mortality rate to 15.8 per 100,000 (43). Currituck County needs to reduce its most recent rate (26.8) by 41.0% to meet this goal.
- In the United States in 2006 motor vehicle crashes were the ninth leading cause of death, with a mortality rate of 16.2 (46). The rate in Currituck County currently exceeds this rate by 39.6%. The Healthy People 2010 goal is to reduce the overall motor vehicle accident mortality rate to 17.7 per 100,000 (46). Currituck County must lower its rate by 34.0% to meet this goal.

Gender and Racial Disparities in Unintentional Motor Vehicle Injury Mortality

The number of motor vehicle injury deaths among minorities in Currituck County was below the threshold for meaningful mortality rate comparisons between racial groups at the county level.

In Currituck County the motor vehicle injury mortality rate among white males was 78.6% higher than the rate among white females.

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 for white women (11.2), and the mortality rate among minority (28.4) men is 66.9% higher than the rate among minority women (9.4).

*Suicide

- Between 2004 and 2008, there were 21 deaths due to suicide in Currituck County, making it the eighth leading cause of death. For that period the suicide mortality rate in Currituck County was 17.5 per 100,000; the comparable rates in the state was 11.9 (Table 43, following page).
- The Healthy Carolinian’s goal for suicide is 8.0 per 100,000 (58), a figure Currituck County exceeds by 54.3%.
- Nationally, the mortality rate due to suicide is 11.1 per 100,000 (60), 36.6% lower than the current Currituck County rate. The Healthy People 2010 goal is 5.0

deaths due to suicide per 100,000 (45). The current Currituck County suicide rate exceeds the national goal by 71.4%.

Table 43. 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
Currituck	21	17.5	16	29.2	4	7.0	1	33.4	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

- Suicide mortality rates in the state have remained fairly stable since 1984 while the mortality rates in Currituck County have fluctuated (likely due to a varying small number of events). County rates have remained above the state rates for most of the reporting period.

Gender and Racial Disparities in Suicide Mortality

The numbers of suicide related deaths in Currituck County were below the threshold for meaningful mortality rate comparisons between race-sex groups at the county level. In North Carolina, 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.

*Chronic Liver Disease and Cirrhosis

Chronic liver disease is marked by the gradual destruction of liver tissue over time. Cirrhosis is a group of chronic liver diseases in which normal liver cells are damaged and replaced by scar tissue, progressively diminishing blood flow through the liver. Risk factors for chronic liver disease include: exposure to hepatitis and other viruses; use of certain drugs; alcohol abuse; chemical exposure; autoimmune diseases; diabetes; malnutrition; and hereditary diseases (56).

- Between 2004 and 2008, 18 people died of chronic liver disease/cirrhosis in Currituck County; the associated mortality rate was 13.5 per 100,000 population. The mortality rate for the state as a whole was 9.1 which is 32.6% lower than the Currituck County rate.

Table 44. Chronic Liver Disease and Cirrhosis Mortality (2004-2008)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Currituck	18	13.5	11	17.5	6	10.1	0	0	1	18.1
State Total	4,199	9.1	2,217	13	1,163	6	547	12.2	272	5

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 state mortality rates due to liver disease and cirrhosis have been at a fairly stable level since 1994, the Currituck County rate has fluctuated more dramatically, likely due to varying small numbers of events.

Gender and Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality

The numbers of chronic liver disease/cirrhosis deaths were below the threshold for meaningful mortality rate comparisons between race groups at the county level. In Currituck County, white males (17.5) had a 42.3% higher mortality rate than white females (10.1). At the state level, the liver disease mortality rate among white males (13.0) was 53.8% higher than that of white females (6.0). The rate among minority males (12.2) is 59.0% higher than rate among minority females (5.0). From these numbers it is apparent that the gender differences are stronger than racial differences with regard to liver disease mortality.

Maternal and Child Health

- 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 Currituck County for the period from 2005 to 2007 was 68.6 which was 18.2% lower than the average NC county pregnancy rate of 83.9.
- In Currituck County between 2005 and 2007, 8.1% of all live births occurred among minority mothers; of the Currituck County live births among girls ages 15-19, 10.4% occurred among minority mothers. These local percentages are both well below the state average.
- In 2006, Currituck County had a 17.8% lower percentage of births to Medicaid mothers than the state (42.6% vs. 51.8%).
- In 2006, Currituck County had 19.9% fewer births to Health Department mothers when compared with the NC County average. There were 42.2% fewer births to WIC mothers than the NC county average.

Table 45. Pregnancies and Births (2005-2007)

County	Pregnancy, Total (2005-2007)						Pregnancy, Females 15 - 19 (2005-2007)						2006 Percent of Live Births To:		
	Preg Rate ¹	Birth Rate ²	Percent of Live Births				Preg Rate ⁵	Birth Rate ⁷	Percent of Live Births				Medicaid Moms	Health Dept. Moms	WIC Moms
			Minority ³	Low Weight ⁴	Late/No Care ⁵	Mother Smoked			Minority ³	Low Weight ⁴	Late/No Care ⁵	Mother Smoked			
Currituck	65.5	53.3	5.2	9.6	9.9	18.8	49.0	37.5	9.0	15.4	16.7	28.2	17.5	11.8	22.7
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

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>

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 Currituck County.
- During the period from 2005 through 2008 there were a total of 4 pregnancies among 10-14 year-olds in Currituck County, with two occurring in 2005 and 1 occurring in 2007, and 1 occurring in 2008. (47)

Abortion

- For women between the ages of 15 and 44, the most recently calculated abortion rate in Currituck County (2008) was 11.7, a number below the overall state abortion rate of 14.4 (48).
- For teenagers between the ages of 15 and 19; the 2008 abortion rate in Currituck County was 10.1, still lower than the statewide teen abortion rate of 12.5 (48).
- Teen abortion rates also fluctuated in Currituck County and the state during the reporting period but and have shown an overall decrease. Since 2005, teen abortion rates have decreased significantly in the county, and slightly in the state.

Pregnancy Risk Factors

- From 2004 through 2008 the percentage of high parity births among Currituck County women under the age of 30 was 35% lower than the comparable state rate (Table 46, following page). 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 Currituck County women age 30 and older was 14% lower than the state rate.
- The percentage of short interval births (less than six months between pregnancies) is 18.1% lower in Currituck County than statewide.
- Between 2004 and 2008, approximately 15.8% of babies in Currituck County were born to mothers who smoked; a rate 27.2% higher than the state (11.5%).

Table 46. Currituck County 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				
Currituck	92	11.7	80	17.2	87	10.4	198	15.8
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. 2006 County Health Data Book. 2000-2004 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. 2006 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://w>

c - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2006 County Health Databook. 2004-2008 Number and Percent of Births to Mothers Who Smoked Prenatally. [Http://www.schs.state.nc.us/SCHS/data/databook](http://www.schs.state.nc.us/SCHS/data/databook)

- The percentage of babies born to Currituck County mothers who smoked did decrease overall since 1996 but remains above the comparable figures for the state as a whole.
- In 2004-2008 more than 88.8% of pregnant women in Currituck County received prenatal care in their first trimester, a proportion higher than state rate of 82.1%

**% of Live Births Where the Mother Smoked During Pregnancy Peer Counties
Table 47.**

RESIDENCE		2007
North Carolina		11.0
<i>Currituck</i>		<i>14.9</i>
PEERS	Alexander	20.0
	Davie	12.8
	Stokes	23.6
	Yadkin	16.3

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 Currituck County than in NC as whole (8.7% vs. 9.1%). The percentage of white low birth weight babies in Currituck County was higher than the comparable state rate while the percent of minority low birth weight babies was slightly lower in the county than statewide (Table 48).
- During the same period the overall percentage of very low weight births (below 1500 grams or 3.3 pounds) was also higher in Currituck County than in the state as a whole (2.1 vs. 1.8). Among minorities the rates in the county was higher than the state (6.9 vs. 3.5).

Table 48 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
Currituck	109	8.7	96	8.3	13	13.4	26	2.1	5	6.9
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 increased in Currituck County but remained relatively stable in NC. Despite the increase in low weight births, the county rate remains below the statewide percentage.

Communicable Disease

Health professionals are required to report cases of certain communicable diseases to the North Carolina Department of Health and Human Services (NC DHHS) through their local health department.

Reportable Communicable Diseases

- For the period 2000-2005 there were 2 cases of Hepatitis A, 2 cases of Hepatitis B, 22 cases of salmonellosis, and 1 case of whooping cough in Currituck County. Incidence rates were unavailable. In 2009 there were no cases of tuberculosis (Table 49).

Table 49. 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
Currituck	2	n/a	2	n/a	22	n/a	0	n/a	1	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 Diseases

- Tables 50, 51, and 52 lists incidence rates and cases for the most prevalent STDs in Currituck County as well as HIV/AIDS, with all compared to the NC state rate and cases for the five year period of 2005-2009.
- There were three deaths in Currituck County attributable to HIV/AIDS between 2005 and 2009. The numbers of AIDS deaths in Currituck 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 50. N.C. HIV Disease Cases by County of First Diagnosis, 2005-2009

RESIDENCE	2005 Cases	2006 Cases	2007 Cases	2008 Cases	2009 Cases	2005 Rate	2006 Rate	2007 Rate	2008 Rate	2009 Rate
North Carolina	1600	1642	1807	1782	1710	18.5	18.6	20.0	19.3	18.5
<i>Currituck</i>	2	2	3	1	1	8.7	8.5	12.6	4.1	4.1

Table 51. N.C. AIDS Cases and County Comparison, 2005-2009

RESIDENCE	2005 Cases	2006 Cases	2007 Cases	2008 Cases	2009 Cases	2005 Rate	2006 Rate	2007 Rate	2008 Rate	2009 Rate
North Carolina	884	887	848	926	957	10.2	10.0	9.4	10.0	10.4
<i>Currituck</i>	2	1	0	1	2	8.7	4.3	0.0	4.1	8.3

Table 52. N.C. STD Rate and County Comparison

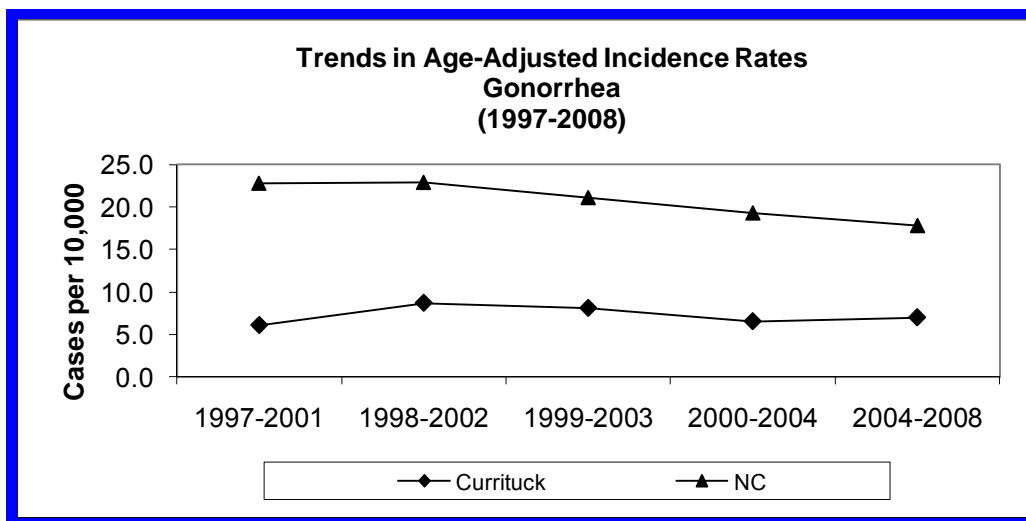
RESIDENCE	Chlamydia					Gonorrhea					All Syphilis				
	2005 Rate	2006 Rate	2007 Rate	2008 Rate	2009 Rate	2005 Rate	2006 Rate	2007 Rate	2008 Rate	2009 Rate	2005 Rate	2006 Rate	2007 Rate	2008 Rate	2009 Rate
North Carolina	360.0	380.0	338.6	410.8	474.2	174.0	195.7	184.3	162.8	160.6	5.6	6.8	6.3	5.5	10.2
<i>Currituck</i>	118.0	145.0	138.3	136.5	173.7	39.3	128.0	88.0	49.6	86.8	0	0	0	0	4.1

North Carolina 2009 HIV/STD Surveillance Report. Communicable Disease Branch.

The minority population in Currituck County, as in the region and the state as a whole, is disproportionately burdened by gonorrhea.

- Recently published trend data for gonorrhea, indicating that between 1997 and 2008 the incidence of gonorrhea has increased slightly in Currituck County, but has decreased in the state as a whole.
- 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 Currituck County for the period 2005-2008 and one new case in 2009.

Figure 15



NC State Center for Health Statistics, County-level Data. County Health Data Books. Various Years. Morbidity. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>

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.

Compared to NC county averages:

- A higher proportion of kindergarteners and fifth graders were screened in Currituck County.
- Currituck County kindergarteners had a lower prevalence of untreated decay, and by small margins, a lower average number of decayed, missing and filled

teeth per child (DMFT) and lower average number of decayed teeth (DT) per child.

- Currituck County fifth graders had a lower prevalence of untreated decay, a lower percentage of children with sealants, a lower average number of decayed, missing and filled teeth per child (DMFT), and a lower average of decayed teeth (DT) per child (Table 53).

Table 53. 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		Average DT/Child		Percent of Title XIX Eligibles Receiving Dental Services (2006)		
	Kindergarten	5th Grade	Kindergarten	5th Grade	Kindergarten	5th Grade	5th Grade	Kindergarten	5th Grade	Kindergarten	5th Grade	Ages 0-5	Ages 6-14	Ages 15-20
Currituck	96	93			16	1	42	1.28	0.31	0.39	0.01	13.8	36.8	22.4
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
 b-Annie E. Kasey Foundation. Kids County Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>

Adult Oral Health

Currituck 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 a six-county sample including also Carteret, Craven, Dare, Hyde and Pamlico counties. However, the small number of participants (n=364 in 2004 and n=471 in 2005) across the sample yields data too limited to interpolate reliably to a single county, so it is not presented here.

- 58.5% of survey respondents had visited their dentist for a routine well check-up in the last 12 months.

Resources and Programs

- Dental Health screening, education, and treatment are offered to children birth through grade 12 through Albemarle Regional Health Services. Referrals for children’s dental services are received from school and medial professionals.
- Dare County sponsored Missions of Mercy Dental Clinic in October 2010. 236 local volunteers contributed approximately 2100 hours of dental services to 752 patients from across the region, including Currituck County residents.

Mental Health and Substance Abuse

Table 54 presents data on utilization of mental health, developmental disability and substance abuse services (MH/DD/SAS) by Currituck County residents for 2008 and 2009. The number of people served in mental retardation centers and alcohol and drug treatment centers was low and changed little between these two years. The number of Currituck County residents served in state psychiatric hospitals increased by 38.9% but decreased significantly statewide.

The number of people served by the local MH/DD/SAS management entity/area programs in Currituck County has decreased overall since 2006.

Table 54. Mental Health, Developmental Disability, Substance Abuse Services (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
Currituck	1	3	33	35	11	18	580	607	609	543
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 55 are out of date, they present interesting historical information on hospitalizations of Currituck County residents for mental disorders and substance abuse. For the period in question (1996-1998), lower *numbers* of Currituck County residents were hospitalized for either problem compared to the average Albemarle Region County and the average NC county. These numbers compute to hospital utilization *rates* that were also considerably lower in Currituck County.

Table 55. 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
Currituck	526	105.0	245	48.9
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

More recent data, provided by Albemarle Hospital, tracks emergency department utilization by patients with substance abuse diagnoses for the period from October 1, 2009 through September 30, 2010 (49). These data represent *principal* diagnoses (not admitting diagnoses) and included alcohol and substance abuse, suicidal ideations, and other mental health problems.

- 31% of survey respondents did not know where to refer a family member or friend who needs counseling for a mental health issue, substance abuse problem, or a developmental disability.

Obesity

Adult Obesity

Currituck 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 a six-county sample including also Carteret, Craven, Dare, Hyde, and Pamlico counties. However, the small number of participants (n=364 in 2004, n=471 in 2005) across the sample yields data too limited to interpolate reliably 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 Currituck County Community Health Survey.

- 22.4% of respondents do not engage in any physical activity
- 27.9% of respondents engage in physical activity at least 2-3 time a week
- 52.5% eat 1-5 servings of fruit in an average week
- 71.3% eat 6-10 servings of vegetables in an average week
- 20.2% have been told by a medical provider that they are overweight/obese
- Unhealthy eating and lack of exercise were listed as two of the top unhealthy behaviors in Currituck County by survey respondents

Resources and Programs

- Albemarle Regional Health Services Health Promotion program works with faith communities, worksites, and schools to promote environmental change and policies to promote healthy eating and physical activity.
- Currituck County Cooperative Extension offers many different weight loss/weight management programs including Eat Smart Move More Weigh Less to the community.
- Currituck County was awarded a two-year grant in 2009 for \$60,000 to implement an employee wellness program that included the construction of a new walking trail.
- Ground breaking was held in November 2010 for the new YMCA being built in central Currituck County addressing the need for more recreational facilities in the county.

- In conjunction with Healthy Carolinians of the Albemarle and the Fitness and Nutrition Council Subcommittee, a Walking Communities program was added to the county website that provides GIS mapping of neighborhood walking distances and parks and trail distances in the county.
- Roadside markets are available throughout the county offering fresh fruits and vegetables.

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 (49). This data is used to calculate Body Mass Index (BMI) in order to gain some insight into the prevalence of childhood obesity.

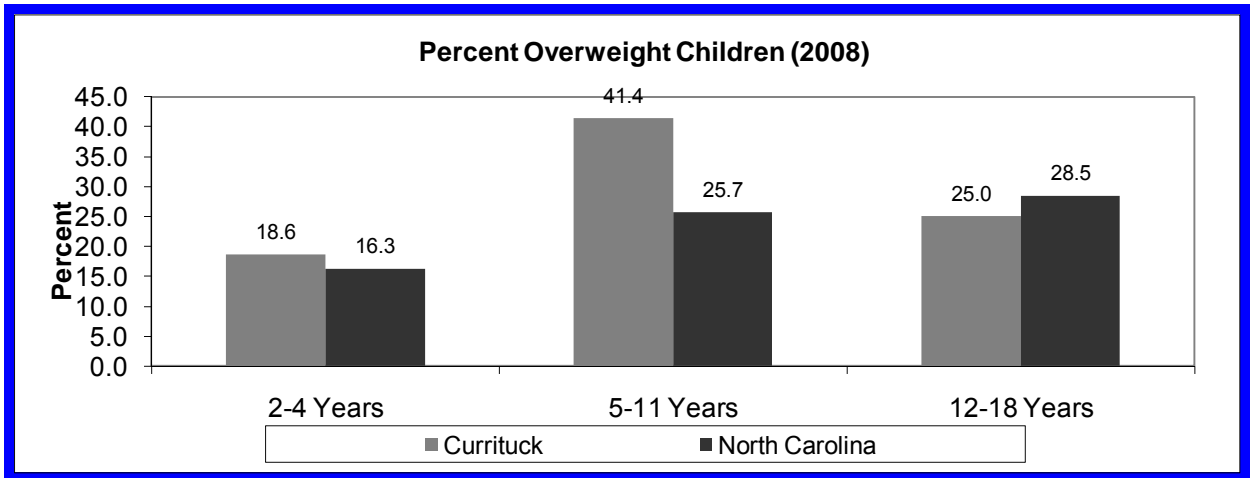
$$\text{BMI} = (\text{weight in kilograms}) / (\text{height in meters})^2$$

Children with BMIs in the 95th percentile or above are considered overweight, while children with BMIs that are between the 85th and 94th 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 Currituck County sample was composed of 177 2-4 year-olds, 29 5-11 year-olds, and 4 12-18 year-olds (64). 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 (46).

According to NC-NPASS data for children who are overweight (Figure 16):

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

Figure 16



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 are as follows:

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

Resources and Programs

- Albemarle Regional Health Services was awarded the Eat Smart Move More Community grant to implement a walking club into all of the elementary schools in the county beginning in 2011.
- Currituck County schools were awarded the Carol M. White Physical Education Program grant totaling \$2.1 million in the fall of 2010.

Asthma

One way the burden of asthma in a community can be assessed is by reviewing hospital records. According to hospital records from 2009 that tallies information about patients from Currituck County regardless of the location of their hospitalization.

- The total hospitalization rate due to asthma (including children and adults) in Currituck County in 2009 was 29.4 and the rate for the state as a whole is 117.1.

- Recent local data, provided by Albemarle Hospital, tracks emergency department utilization by patients with a diagnosis of asthma for the period from October 1, 2009 through September 30, 2010 (49). These data represent *principal* diagnosis (not admitting diagnosis). 642 patients were seen for asthma related symptoms while 7% were admitted for care and 1% was transferred out to another hospital. 92% were discharged from the ER.

In 2000 The North Carolina School Asthma Survey was performed statewide in North Carolina 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 Currituck County, and according to the results of this survey (50):

- 12% of school children surveyed had been diagnosed with asthma
- 19% of children surveyed had experienced undiagnosed wheezing
- The total proportion of surveyed children who currently experienced wheezing was 31%
- 13% of Currituck County children have missed school, 13% have limited activities, and 13% experience sleep disturbances due to asthma

Resources and Programs

- Albemarle Pediatric Asthma Coalition has had an active roll 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.

Chapter Four Community Health Survey and Stakeholder Interviews

Primary Survey Methodology

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 includes 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 Office of Public Health Preparedness and the Guilford County Department of Public Health. 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. Representatives of the ARHSAT entered survey responses into a handheld computer for data entry and analysis with the Epi-Info software package. When appropriate, responses were stratified by the age, gender, race, education, and income of the respondents. Five Hundred and sixty surveys were analyzed.

Two UNC-Chapel Hill Masters of Public Health graduate students as part of their practicum conducted phone interviews with key community stakeholders. A total of nine community leaders in Currituck County were interviewed, working from county-specific lists of names identified by the ARHSAT. 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 their agencies provided, how county residents heard about their services, the barriers residents faced in accessing their services, and methods used to eliminate or reduce any barriers to care that exist. Respondents were also asked to describe the county's general strengths and challenges, greatest health concerns, and possible causes and solutions for these shortcomings. 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.

2010 COMMUNITY HEALTH SURVEY



ALBEMARLE REGIONAL HEALTH SERVICES
Partners in Public Health

Currituck County

Hello, I am _____ and this is _____ representing the Currituck 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 Currituck County, North Carolina. The Currituck 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 Currituck 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.

- *Currituck County Health Dept. → 252-232-2271*

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

- *Currituck County Sheriff's Office → 252-453-8204*

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 Currituck County, please STOP here.**

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

PART 1: Quality of Life Statements

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

Quality of Life Statements	Strongly Disagree Disagree Agree Strongly Agree
Question 1 There is a good health care system in Currituck County. (Think about health care options, access, cost, availability, quality, etc.)	11.3% 28.8% 47.5% 2.5%
Question 2 Currituck County is a good place to raise children. (Think about the availability and quality of schools, child care, after school programs, places to play, etc.)	1.2% 3.7% 79.0% 22.5%
Question 3 Currituck County is a good place to grow old. (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.)	3.8% 3.8% 62.5% 27.5%
Question 4 There are plenty of ways to earn a living in Currituck County. (Think about job options and quality of jobs, job training/higher education opportunities, etc.)	13.8% 68.8% 15.0% 0%
Question 5 Currituck County is a safe place to live. (Think about safety at home, in the workplace, in schools, at playgrounds, parks, shopping centers, etc.)	0% 1.3% 75.0% 23.8%
Question 6 There is plenty of support for individuals and families during times of stress and need in Currituck County. (Examples include neighbors, support groups, faith community outreach, agencies, organizations, etc.)	0% 21.3% 65.0% 8.8%
Question 7 Currituck County has clean air.	0% 1.3% 82.5% 16.3%
Question 8 Currituck County has clean water.	2.5% 22.5% 66.3% 7.5%

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 Currituck County.

Question 9

Using this list, please tell us the five (5) most important health problems in Currituck County.

(Problems that you think have the greatest overall effect on health in the community.)

- 28.8%** Aging Problems
- 28.8%** Cancer
- 25.0%** Heart Disease
- 13.8%** Mental Health
- 13.8%** Obesity/Overweight

Question 10

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

- 65.0%** Alcohol Abuse
- 50.0%** Drug Abuse
- 17.5%** Lack of Exercise
- 13.8%** Smoking/tobacco use
- 20%** Unhealthy eating habits

Question 11

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

- 30.0%** Lack of affordable health care/insurance
- 17.5%** Inadequate/affordable housing
- 27.5%** Lack of health care providers
- 16.3%** Lack of recreational facilities
- 10.0%** Lack of transportation options

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/respice care

0% Lack of information

0% Cost

0.9% Service not available

0% Language/Cultural barriers

0% Lack of transportation

3.1% No problem with this service

96% Did not need this service

Assistance with housing costs/subsidized housing

1.3% Lack of information

0% Cost

7.7% Service not available

0% Language/Cultural barrier

0% Lack of transportation

3.6% No problem with this service

83.7% Did not need this service

Assistance with food costs/food stamps

1.3% Lack of information

0% Cost

3.1% Service not available

0% Language/Cultural barrier

0% Lack of transportation

11.4% No problem with this service

83.8% Did not need this service

Health Promotion/Wellness programs

3.6% Lack of information

1.8% Cost

1.1% Service not available

0% Language/Cultural barrier

0% Lack of transportation

6.3% No problem with this service

86.6% Did not need this service

Medical case management for an ongoing health problem

0.5% Lack of information

0% Cost

0% Service not available

0% Language/Cultural barrier

0% Lack of transportation

7.4% No problem with this service

89.2% Did not need this service

Legal services

2.4% Lack of information

3.1% Cost

0.5% Service not available

0% Language/Cultural barrier

0% Lack of transportation

1.3% No problem with this service

89.8% Did not need this service

Emergency medical care

1.3% Lack of information

1.4% Cost

0% Service not available

0% Language/Cultural barrier

0% Lack of transportation

17.3% No problem with this service

77.1% Did not need this service

Hospital care

1.3% Lack of information

0% Lack of transportation

0% Cost
1.3% Service not available
0% Language/Cultural barrier

16.9% No problem with this service
77.6% Did not need this service

Pregnancy care

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

0% Lack of transportation
2.5% No problem with this service
97.5% Did not need this service

Enrolling in Medicaid or Medicare

0.7% Lack of information
0% Cost
2.6% Service not available
0% Language/Cultural barrier

0% Lack of transportation
16.1% No problem with this service
80.1% Did not need this service

Mental health care or counseling

1.4% Lack of information
0% Cost
1.3% Service not available
0% Language/Cultural barrier

0% Lack of transportation
0.6% No problem with this service
96.9% Did not need this service

Drug or alcohol treatment program

0% Lack of information
0% Cost
0.5% Service not available
0% Language/Cultural barrier

0% Lack of transportation
6.1% No problem with this service
92.3% Did not need this service

Rehabilitation from an injury or permanent disability

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

0% Lack of transportation
6.3% No problem with this service
91.4% 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
4.5% No problem with this service
92.7% Did not need this service

Nutrition service

2.4% Lack of information
0% Cost
0.4% Service not available
0% Language/Cultural barrier

0% Lack of transportation
4.9% No problem with this service
84.5% Did not need this service

Purchasing medical equipment

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

0% Lack of transportation
6.3% No problem with this service
90.7% Did not need this service

Getting prescription medications

<u>0%</u> Lack of information	<u>0%</u> Lack of transportation
<u>0.9%</u> Cost	<u>38.9%</u> No problem with this service
<u>2.2%</u> Service not available	<u>47.1%</u> Did not need this service
<u>0%</u> Language/Cultural barrier	
Smoking cessation	
<u>2.4%</u> Lack of information	<u>0%</u> Lack of transportation
<u>0%</u> Cost	<u>0%</u> No problem with this service
<u>2.4%</u> Service not available	<u>95.2%</u> Did not need this service
<u>0%</u> Language/Cultural barrier	
Dental care	
<u>3.0%</u> Lack of information	<u>0%</u> Lack of transportation
<u>4.8%</u> Cost	<u>25.9%</u> No problem with this service
<u>2.3%</u> Service not available	<u>64.0%</u> Did not need this service
<u>0%</u> Language/Cultural barrier	

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?

7.1% Excellent 31.4% Very Good 40.6% Good 17.3% Fair 1.1% 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.)*

26.3% Health insurance *my* employer provides
11.3% Health insurance *my spouse's* employer provides
0% Health insurance *my school* provides
5.0% Health insurance *my parent or my parent's* employer provider
17.5% Health insurance I bought for myself
7.5% Medicaid
22.5% Medicare
5.0% Veteran's Administration benefits

Other: _____

17.5% 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?

25.9% Yes ___ No

Question 16

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

(Pick all the answers that apply.)

- | | |
|--------------------------------------|--|
| <u>83.7%</u> Doctor's office | <u>0%</u> Company nurse |
| <u>9.9%</u> Health department | <u>4.7%</u> Community or Rural Health Center |
| <u>0%</u> Hospital clinic | <u>12.5%</u> Urgent Care Center |
| <u>10.5%</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>0.5%</u> Ahoskie | <u>0%</u> Franklin | <u>0%</u> Suffolk |
| <u>33.5%</u> Chesapeake | <u>0%</u> Gatesville | <u>20.4%</u> Virginia Beach |
| <u>17.0%</u> Dare County | <u>0%</u> Greenville | <u>0%</u> Williamston |
| <u>3.1%</u> Edenton | <u>3.1%</u> Hertford | <u>0%</u> Windsor |
| <u>14.3%</u> Elizabeth City | <u>8.1%</u> Norfolk | _____ Other: |

Question 18

Where do you usually get advice on your health?

(Pick all the answers that apply.)

- | | |
|--|---|
| <u>83.4%</u> Doctor's office | <u>3.0%</u> Urgent Care Center |
| <u>6.8%</u> Health department | <u>27.8%</u> Family |
| <u>0%</u> Hospital clinic | <u>16.7%</u> Friends |
| <u>0%</u> Hospital emergency room | <u>6.1%</u> Media (television, news, radio, and magazine) |
| <u>0%</u> Student Health Services | <u>20.5%</u> internet or other computer-based info |
| <u>0%</u> Company nurse | |
| <u>1.6%</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.*

- | |
|---|
| <u>70.4%</u> Within the past 12 months |
| <u>14.5%</u> 1-2 years ago |
| <u>4.7%</u> 3-5 years ago |
| <u>6.8%</u> More than 5 years ago |
| <u>3.1%</u> 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.*

- | |
|--|
| <u>58.5%</u> Within the past 12 months |
|--|

17.7% 1-2 years ago
9.4% 3-5 years ago
9.6% More than 5 years ago
4.2% 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% Children’s Developmental Services Agency/Developmental Evaluation Ct.
29.4% Counselor or therapist in private practice
18.3% Doctor
0% Emergency Room
0% Employee Assistance Program
13.1% Local Mental Health Facility
6.9% Minister/pastor
0% School counselor
1.8% Vocational Rehabilitation/Independent Living
31.0% I don’t know

Question 22

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

16.8% High **48.5%** Moderate 33.8% 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?

16.9% Always 5.4% Usually 20.5% Sometimes 22.6% Rarely
29.7% Never

Question 24

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

18.6% 1 day 3.1% 6 days
9.0% 2 days 2.6% 7 days
4.0% 3 days **32.1%** I didn’t drink alcohol on any of the past 7 days
0.4% 4 days 29.8% I never drink alcohol
0.5% 5 days

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?

84.7% 0 times 0.4% 4 times
10.1% 1 time 0% 5 times
4.8% 2 times 0% 6 times

0% 3 times

0% 7 times

Question 26

Do you smoke cigarettes?

33.4% Yes

48.9% I have never smoked cigarettes

17.7% I used to smoke but have quit

Question 27

How many cigarettes do you smoke per day?

(Please check only one (1) answer.)

68.4% Doesn't smoke

8.9% Less than half a pack per day

16.5% Between half a pack and one (1) pack per day

6.2% 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?

32.6% Yes

67.4% 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

22.3% At home

7.2% At work

0.6% In the car

Question 30

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

22.4% None

5.8% Less than once per week

5.2% Once per week

27.9% 2-3 times per week

15.0% 4-6 times per week

23.7% 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?

22.4% None

5.8% Less than once a week

- 5.2% Once a week
- 27.9%** 2-3 times a week
- 15.0% 4-6 times a week
- 23.7% Daily

Question 32

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

- 4.9% My job is physical or hard labor
- 4.9% I don’t have enough time for physical activity
- 4.9% I’m too tired for physical activity
- 6.9%** I have a health condition that limits my physical activity
- 0% I don’t have a place to exercise
- 2.4% Weather limits my physical activity
- 0% Physical activity costs too much (equipment, shoes, gym expense)
- 2.3% Physical activity is not important to me
- Other: _____

Question 33

Not counting juice, how often do you eat fruit in an average week?

- 1.3% None
- 52.5%** 1-5 servings
- 40.0% 6-10 servings
- 5.0% 11-15 servings
- 1.3% More than 15 servings

Question 34

Not counting potatoes and salad, how often do you eat vegetables in an average week?

- 0% None
- 18.8% 1-5 servings
- 71.3%** 6-10 servings
- 6.3% 11-15 servings
- 3.8% More than 15 servings

Question 35

Are grocery stores in or near your neighborhood?

- 77.8%** Yes
- No

Question 36

Are fresh fruits and vegetables readily available at nearby grocery stores?

- 62.5%** Yes
- No

Question 37

On average, about how many meals a week do you eat out?

- 28.8% None
- 61.3% 1-5 times
- 10.0% 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?

- 16.2% Asthma
- 14.6% Depression
- 5.9% Diabetes
- 24.0% High blood pressure
- 29.2% High cholesterol
- 0% Mental Illness
- 20.2% 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?

- 22.1% Yes
- No, why not?
 - I. 0.7% 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% 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?

- 16.8% Within the past 12 months
- 8.5% 1-2 years ago
- 0% 3-5 years ago
- 0% More than 5 years ago
- 0.7% I don't know/don't remember
- 1.8% 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?

29.3% Yes _____ N/A because I'm under age 40 (*now skip to question 43*)

No, why not?

- I. 7.3% Lack of Information
- II. 3.9% Cost
- III. 0% Service Not Available
- IV. 0% Language or Cultural Barrier
- V. 0% Lack of Transportation
- VI. 4.2% 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?

24.6% Within the past 12 months

4.7% 1-2 years ago

1.84% 3-5 years ago

6.3% More than 5 years ago

0% I don't know/don't remember

7.3% I have never had a mammogram

Question 43

Do you get a Pap test at least every 1-3 years?

54.5% Yes

No, Why?

- I. 0% Lack of Information
- II. 3.7% Cost
- III. 0% Service Not Available
- IV. 0% Language or Cultural Barrier
- V. 0% Lack of Transportation
- VI. 7.1% 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?

36.6% Within the past 12 months

17.6% 1-2 years ago

3.6% 3-5 years ago

5.9% 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?

37.6% 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>1.2%</u> Alcohol | <u>0%</u> Gang violence |
| <u>0%</u> Drugs | <u>0%</u> Reckless driving/speeding |
| <u>3.6%</u> Sex | <u>3.1%</u> Eating disorder (e.g. anorexia or bulimia) |
| <u>0.7%</u> Tobacco | <u>23.3%</u> My child is not engaging in any high risk behaviors. |

Question 47

Are you comfortable talking to your child about the above behaviors?

31.1% Yes ____ No

Question 48

Do you or your child need more information about any of the following issues?
(Check all answers that apply.)

- | | |
|---------------------|---|
| <u>1.3%</u> Alcohol | <u>1.3%</u> Reckless driving/speeding |
| <u>1.3%</u> Drugs | <u>2.4%</u> Eating disorder (e.g. anorexia or bulimia) |
| <u>1.3%</u> Sex | <u>3.6%</u> Mental health issues (e.g. depression, anxiety) |
| <u>1.3%</u> Tobacco | <u>3.6%</u> Fitness/nutrition |
| <u>1.3%</u> STDs | ____ Other: _____ |
| <u>1.3%</u> HIV | <u>5.3%</u> 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)

- | | |
|--|---|
| <u>43.7%</u> Yes, smoke detectors only | <u>0.9%</u> Yes, carbon monoxide detectors only |
| <u>55.0%</u> Yes, both | <u>0.4%</u> No |

Question 50

Does your household have a Family Emergency Plan?

54.3% Yes 45.7% No

Question 51

Does your household have a basic emergency supply kit? If yes, how many days do you have a supply for?

36.8% No 28.4% 3 days 17.5% 1 Week 11.4% 2 weeks
2.8% More than 2 weeks

Question 52

Did you get your H1N1 Flu vaccine?

___ Yes, why?

5.3% Feel I am at risk, or a household member is at risk
4.6% I know someone who has been sick
18.0% My doctor recommended it
4.0% I always get the flu vaccine

68.1% No, why not?

2.4% I couldn't afford it
8.2% It was not available
20.2% I feel the vaccine is not safe
3.4% My physician does not recommend its use
11.5% H1N1 is not serious enough or I am not at risk
0% Prefer to wait and get vaccine later
0% The type available is not suitable for my age or medical condition
13.6% I never get vaccinated against flu
9.6% 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 Currituck County?

59.1% No 40.9% Yes

Question 54

How old are you?

<u>10.0%</u> 18-24	<u>5.0%</u> 40-44	15.0% 60-64
<u>10.0%</u> 25-29	<u>11.3%</u> 45-49	<u>8.8%</u> 65-69
<u>8.8%</u> 30-34	<u>6.3%</u> 50-54	<u>8.8%</u> 70-74
<u>7.5%</u> 35-39	<u>6.3%</u> 55-59	<u>2.5%</u> 75 or older

Question 55

What is your sex? 33.8% Male **67.1%** Female

Question 56

What is your race or ethnicity?

5.1% African American/Black 0% Native American
1.3% Asian/Pacific Islander **92.5%** White/Caucasian
1.3% Hispanic/Latino _____ Other: _____

Question 57

What is your marital status?

55.2% Married 4.4% Separated 21.1% Never married
7.6% Widowed 11.7% Divorced

Question 58

What is the highest education level you have completed?

(Check only one (1) answer.)

5.9% Less than high school
29.8% High school diploma or GED
4.0% Associate's Degree
27.5% Some college but no degree
21.5% College degree (Bachelor's degree)
11.3% Graduate degree (Masters or Doctoral degree)

Question 59

What is your employment status?

(Check all answers that apply.)

24.7% Employed full-time 3.6% Disabled; unable to work
29.4% Employed part-time 13.7% Student
11.2% Unemployed 7.3% Homemaker
39.9% Retired

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.)*

5.0% Less than \$20,000
8.2% \$20,000 to \$29,999
26.1% \$30,000 to \$49,999
14.8% \$50,000 to \$74,999
5.5% \$75,000 to \$100,000
20.2% Over \$100,000
20.1% No Answer

Question 61

How many individuals make up your household?

<u>3.9%</u> 1 person	<u>0.6%</u> 6 people
<u>45.5%</u> 2 people	<u>8.1%</u> 7 people
<u>16.4%</u> 3 people	<u>0%</u> 8 people
<u>12.3%</u> 4 people	<u>0%</u> 9 people
<u>7.3%</u> 5 people	

Question 62

Are you the primary caregiver for any of the following?

(Check all answers that apply.)

<u>0%</u> Disabled child (under age 18)	<u>0%</u> Foster child (under age 18)
<u>0.4%</u> Disabled adult (age 18 or older)	<u>0%</u> Grandchild (under age 18)
<u>9.9%</u> Senior adult (age 65 or older)	

THE END!

Thank you very much for completing the Community Health Survey!

Currituck County Stakeholder Responses

A. Are you affiliated with an agency or a community organization? (i.e. healthcare agency, church group, etc.) If not, skip to section B

- Not Applicable
- Yes many
- Chamber of Commerce
- Historic Society
- Church/Senior
- County Extension (ECA)
- Meals on Wheels
- Road to Recovery
- County Extension

These first questions are about your agency or organization and its clients:

1. What services does your agency provide for county residents?

- Not really anything for individual citizens—promoting community businesses and services
- Meals on Wheels: meals and daily visits to homebound people
- Chamber of Commerce—business resource, relocation, resident information
- Church-1st African American Church to have a nutrition program (1976)
- County Extension—NC State information about agriculture, economics, childcare

2. Please describe county residents who *currently* are most likely to use your services (age, gender, race, income level, etc.).

- Business owners
- Meals on Wheels: all income levels (not a criteria), homebound people, primarily elderly (not a criteria)
- Mixed gender, most county residents are white, average county age 41
- Barrier Island

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.

- Not really—prime business is tourism...used to be primarily agricultural
- Meals on Wheels: not that I have noticed specifically. Mostly related to individual situations (dying, moving, nursing home, family recognizes that it's necessary)
- Not really

4. What do you think are the barriers residents encounter in accessing your services?

- Meals on Wheels: not knowing it's available
- Road to Recovery: not knowing it's available
- County is spread out and there isn't public transportation. Not much in person, mostly phone.

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.)?

- Very accessible
- Meals on Wheels: not many barriers, there is a lot of need in the community that isn't always immediately apparent. Barriers are sometimes personal values that people have independence that may become self defeating. See 6a.

6) Is there anything else you'd like to tell me about your organization?

- Meals on Wheels: Wonderful. Elderly couple who do not have children or family. Husband early Alzheimer's. Wife physical issues. Husband didn't want to take help from anyone. Individual was friends with this couple and was able to help them get into the program.
- Transportation—sometimes have to use mail, phone, e-mail.

B. The following open-ended questions also relate to Currituck County as a whole.

1) What services/programs are needed now that are not currently available?

- Social services for abused women and children
- Recreation Center/Fitness/Swimming Facility/Sports Fields for kids
- Lack of Medical Facilities (4 respondents)
 - Only a couple of doctors offices
 - Albemarle is the nearest hospital
 - 45 miles to hospital. Next closest is in Virginia 25 miles further
 - Carola—no medical services or emergency care
- Services and programs for youth (healthy, safe)
- Business resources/services (2 respondents)
- Programs are difficult for African Americans and senior citizens to access
- Information of services and programs aren't disseminated to people who need it
- A lot of programs that are available but it is hard for African Americans and senior citizens to access.

2) Overall, what would you consider to be Currituck County's greatest strengths?

- Don't know
- Water
- Tourism industry makes a great deal of money for the county
- Ability of those who have been long time citizens to welcome to welcome and embrace new comers.
- Safe and beautiful
- Good people who care about each other (community)
- Wonderful environment
- None-individual was moving due to lack of healthcare

3) What do you feel are the major challenges Currituck County is facing?

- Economy/Jobs (2 respondents)
- People have lost jobs
- Homes in foreclosure

- Unqualified leaders (background and education lacking)
- Need a bridge to connect the county to the outer banks area of the county
- Growth and lack of infrastructure to support the growth
 - Sewer
 - Water
- Being stuck in parochialism...change isn't easily embraced (viewed as a threat or criticism.)
 - Education
 - Social system
- Communication—getting information out to residents (mainland and Outerbanks)
- Geography
- Lots of services but not available or accessible for seniors and African Americans

4) Looking *specifically at health*: what do you think are the most important health problems/health concerns in Currituck County?

- Elderly and homebound need more homecare/nursing
- Happy with the health care I receive
- Lack of healthcare facilities (3 respondents)
 - Not many specialists
 - Carola—Don't have any healthcare resources--no clinics, no traveling nurses, no flu clinics, health fairs, mental health, no hospice (Currituck or Dare but nothing on the island)
- Provision of safe outdoor resources
 - Sidewalks
- Home healthcare is available but you can't get it.
- Childhood obesity
- Diabetes
- Healthy Eating

5) What factors do you believe are causing these health problems or concerns?

- Older, unable to afford nursing homes
- Shortage of nurses
- Services for those that are homebound
- Lack of support/money to build the necessary healthcare facilities
- Somebody has to want it badly enough to work towards it (sidewalks)
- Population isn't high enough to warrant larger facilities to located in the county
 - Available in surrounding counties but not directly in the county.
Transportation could be a problem.
- Distance/Inaccessibility of Healthcare Agencies

6) What do you think could be done to solve or overcome these health problems or concerns?

- Elderly care/assisted living is not affordable
- Support from local government
- Enough people need to want something (sidewalks) badly enough and be willing to work towards that goal
- Larger population to support hospital and primary care facility.
- If you can empower people you won't have to take care of them.
- Need to make people accountable for their actions.

- Mid-Currituck Bridge may or may not help. Provide access to Southern Virginia

C. The next questions are about Currituck County as a whole. Please tell me if you *agree or disagree* with the following statements about Currituck County [prompt for details, especially for very strong positive or negative responses]:

1) There is a good health care system in Currituck County.

- Agree (2 respondents)
 - I have good healthcare but it depends on who you are. Question is too big to answer (C-)
 - But it could be better.
- Disagree (5 respondents)
 - No hospital, free standing clinics (2 respondents)

2) Currituck County is a good place to raise children.

- Agree (2 respondents)
- Agree/Disagree (1 respondent)
 - Safe and beautiful but more resources for youth are needed
- Disagree (2 respondents)
 - Drugs
 - Especially for African Americans
- Don't know (2 respondents)
 - Impossible for children in Corolla—kids are bussed 1.5 hours to the mainland.

3) Currituck County is a good place to grow old.

- Agree (6 Respondents)
 - Beautiful place to grow old
 - If you can still drive—otherwise no
 - As long as you can take care of yourself and property. No good high quality retirement/assisted living facility so people move to areas where this is available.
 - Excellent senior center...listen to the people to find out what they need and want and provide it.
- Disagree (1 respondent)
 - Healthcare barriers

4) There are plenty of ways to earn a living in Currituck County.

- Disagree (6 respondents)
 - Particularly for young people
- Don't know (1 respondent)

5) Currituck County is a safe place to live.

- Agree (5 respondents)
- Agree/Disagree (1 respondent)
 - Depends on where you live
- Disagree -Drug problems.

6) There is plenty of support for individuals and families during times of stress and need in Currituck County.

- Agree (4 respondents)
 - Very good network of non-profit, community service organizations
 - If you're connected (church, community groups, etc.)
- Disagree (3 respondents)
 - If you don't have local family

7) Currituck County has clean air.

- Agree (6 respondents)
 - Except when fires are burning
 - Except pollen
- Disagree (1 respondent)
 - Pollen, farming, pine trees)
- Don't know (1 respondent)

8) Currituck County has clean water.

- Agree (2 respondents)
 - But only because reports say so—it doesn't taste good
- Agree/Disagree (1 respondent)
 - Sometimes it doesn't as is published in the paper
- Disagree (3 respondents)
- Don't know (1 respondent)
 - Have noticed a change in the appearance and taste since system was replaced/finalized a year ago.

D. That concludes the formal interview. Are there any other thoughts you'd like to share?

- Economy is poor in the county as well as in the U.S., losing jobs, health insurance.
- Need resources for ALL people...black, white, old, young.
- Corolla EMS does a very good job. Very professional. Hindered because they have to travel great distance.
- Route 12 needs to be widened for the sake of safety through Duck all the way to 158. Impossible to get emergency vehicles through in traffic and poor weather.

Thank you for your time!

Chapter Five Acting on Community Health Assessment Results

Health Priorities

What do Currituck County citizens say about the health of their community?

Top community responses for the following categories:

The 5 most important “health problems”:

- Aging Problems
- Cancer
- Heart Disease
- Mental Health
- Obesity

Actual Leading Causes of Death:

- Total Cancer
- Heart Disease
- Chronic Lower Respiratory
- Pneumonia/Influenza
- Cerebrovascular Disease

The 5 most important “unhealthy behaviors”:

- Alcohol Abuse
- Drug Abuse
- Lack of Exercise
- Smoking
- Unhealthy eating

The 5 most important “community social issues”:

- Lack of affordable health care/insurance
- Inadequate/unaffordable housing
- Lack of health care providers
- Lack of recreational facilities
- Lack of transportation options

On October 15, 2010, the Healthy Carolinians of the Albemarle Partnership met to identify the leading 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 was 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

Priority Areas:

- Heart Disease
- Diabetes – Even though Diabetes was not one of the Leading Causes of death nor did the county rate exceed the state rate HCOTA thought it was important to have it as a focus area.
- Obesity
- Smoking-Tobacco use

- High blood pressure
- Cancer
- Cerebrovascular Disease
- Mental Health

The following priority areas were identified for Currituck County

1. Obesity-lack of physical activity and poor eating habits.
2. Chronic Disease-including heart disease, cancer, high blood pressure, CVD, diabetes, and smoking.

It is important to note that mental health issues and service availability is an important community issue highlighted during the presentation and data results. At this time the partnership decided mental health resources are sufficient in the community and it will not be a priority focus area for HCOTA. It was decided that mental health services and resources need more recognition and the East Carolina Behavioral Health should be made aware of these findings so they may provide more awareness to the public.

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 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

Currituck County Community Health Assessment 2010

the assessment will be placed in the local libraries, 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 Seven Appendices

Appendix A

Currituck County Health Services Inventory

Cooperative Extension

Currituck County Cooperative Extension

120 Community Way
Barco, NC 27917
252-232-2261
FAX 252-453-2782

Dental Care

Affordable Dentures

107 Lazy Corner Road
Moyock, NC 27958
252-435-6335

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.

Currituck Dental

112 Currituck Commercial Drive
Moyock, NC 27958
252-232-0800

Doctors

Currituck Internal Medicine

534 Caratoke Highway
Moyock, NC 27958
252-435-6621

Currituck Chiropractic

112A Currituck Commercial Dr
Moyock, NC 27958
252-435-6131

Eastern Carolina Cardiovascular

534 Caratoke Highway
Moyock, NC 27958
252-331-1100

Health Department

Albemarle Regional Health Services

2795 Caratoke Hwy
Currituck, NC 27929
252-232-2217
FAX 252-232-2442

Albemarle Regional Health Services is the seven-county regional Public Health agency that serves 132,978 residents in rural, northeastern North Carolina. For over 69 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-
- ◆ **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, follow-up nutrition education, and disease management are integral components.
- ◆ 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

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

University Health Systems of Eastern North Carolina:

The Outer Banks Hospital

4800 South Croatan Highway
Nags Head, NC 27959
252-449-4500

Mental Health

Alcohol Anonymous

Call 252-338-1849 or 1-800-350-2538 for meeting schedules and contact information, or visit

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

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
Crisis Hotline: 866-488-PORT (7678)
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.

Pharmacies

Todd's Pharmacy
532 Caratoke Highway
Moyock, NC 27958
252-232-0278

Support Services

~Food Pantries~

Fellowship Baptist Church Food Pantry

871 Tulls Creek Road
Moyock, NC 27958
252-435-6453
Call church for an appointment

Lower Currituck Food Pantry

6480 Caratoke Hwy
Grandy, NC 27939
252-457-1315

Pilmoor United Methodist Church

192 Courthouse Rd.
Currituck, NC 27929
252-232-2136

Currituck residents only, with referral from social services

~Housing Assistance~

Economic Improvement Council (Main Office)

P.O Box 549
Edenton, NC 27932
252-482-4459

Currituck County call: 252-232-2882

~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~

Currituck County Department of Social Services

2793 Caratoke Highway
Currituck, NC 27929
252-232-3083

Appendix B.

Community Stakeholder Interview Protocol

Currituck 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 Currituck 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 Currituck 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 Currituck 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 Pasquotank 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 Currituck 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 Currituck County as a whole.

- 7) What services/programs are needed now that are not currently available?
- 8) Overall, what would you consider to be Currituck County’s greatest strengths?
- 9) What do you feel are the major challenges Currituck County is facing?
- 10) Looking *specifically at health*: what do you think are the most important health problems/health concerns in Currituck County?
- 11) What factors do you believe are causing these health problems or concerns?
- 12) What do you think could be done to solve or overcome these health problems or concerns?

C. Did you participate in the recent Currituck 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 Currituck County as a whole. Please tell me if you *agree or disagree* with the following statements about Pasquotank County [prompt for details, especially for very strong positive or negative responses]:

- 1) There is a good health care system in Currituck County.
- 2) Currituck County is a good place to raise children.
- 3) Currituck County is a good place to grow old.
- 4) There are plenty of ways to earn a living in Currituck County.
- 5) Currituck County is a safe place to live.
- 6) There is plenty of support for individuals and families during times of stress and need in Currituck County.
- 7) Currituck County has clean air.
- 8) Currituck County has clean water.

That concludes the formal interview. Are there any other thoughts you'd like to share? Thank you for your time!