



ALBEMARLE REGIONAL HEALTH SERVICES
Partners in Public Health

Serving the communities of:

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

2010
Community Health Assessment
Perquimans County

 **ALBEMARLE REGIONAL HEALTH SERVICES**
Partners in Public Health



A University Health Systems Affiliate



BERTIE MEMORIAL HOSPITAL
CHOWAN HOSPITAL



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

December 1, 2010

Dear Citizens of Perquimans 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 Perquimans 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 Perquimans County Community Health Assessment

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Introduction

Why conduct a Community Health Assessment?

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

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

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

Members of the ARHSAT, health department staff, and members of the 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 also were asked questions about their personal health and health behaviors. All responses were kept confidential and not linked directly to the respondents in any way.

Methodology for secondary data collection:

In order to learn about the specific factors affecting the health and quality of life of Albemarle Region residents, as part of their practicum, two UNC-Chapel Hill Master of Public Health graduate students reviewed and compiled 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:

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

- NC Tuberculosis Control
- NC DHHS Oral Health Section
- Vital Statistics
- Cancer Registry

Environmental data were gathered from sources including:

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

Other health data sources included:

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

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

As applicable, Perquimans 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 Perquimans County, the NC-CATCH system identified Chowan, Jones, Pamlico, and Swain as peer counties. Therefore, in addition to NC 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 statements or discussions during the Community Health Assessment Data Presentation/Workgroup to the citizens of Perquimans County, responses from the primary surveys, or resources available in the county.

Acknowledgments

The Community Health Assessment Team included representatives from all three Healthy Carolinians Partnerships in the region: Healthy Carolinians of the Albemarle, Three Rivers Healthy Carolinians, and Gates Partners for Health. Members also included individuals who work to provide health, wellness, and support resources to citizens in the Albemarle District. The Community Health Assessment Team met on

the second Friday of each month starting in November 2009 to create a plan for conducting the health assessment and solving any problems encountered.

Amy Underhill

Health Promotion Coordinator/Healthy Carolinians of the Albemarle Chair
Albemarle Regional Health Services

Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

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

Ann Roach

Healthy Carolinians of the Albemarle Coordinator

Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

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

Arina Boldt

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

Representative for Currituck, Camden, Pasquotank, and Perquimans Counties

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

Ashley H. Stoop

Preparedness Coordinator & Safety Officer
Albemarle Regional Health Services

Representative for all seven counties

- ◆ Ashley Stoop was a major asset to the Community Health Assessment Team and supplied much appreciated experience with the community health assessment process, survey collection using two-stage cluster sampling, and use of GIS software and equipment. Through her connections with PHRST 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 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 role 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 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 role in the data analysis and priority selection process for all four counties.

Dana Hamill

Public Health Education Specialist/Albemarle Regional Health Services

Representative for all seven counties

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

Esther Lassiter

Gates Partners for Health Director

Representative for Gates County

- ◆ Esther Lassiter coordinated community health assessment efforts in Gates County. As the Director of Gates Partners for Health, Esther publicized the community health assessment and helped to get as much of the community involved as possible. She contributed Gates Partners for Health information and prizes 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 placed in the reusable bags that were distributed to citizens who participated in the opinion survey. As a member of Healthy Carolinians of the Albemarle, she also provided a strong voice to the group during the data analysis and priority selection process for Currituck, Camden, Perquimans, and Pasquotank Counties.

Hunter Balltziglier

Wellness Coordinator/Member of Three Rivers Healthy Carolinians

University Health Systems - Chowan and Bertie Memorial Hospitals

Representative for Chowan and Bertie Counties

- ◆ Hunter Balltziglier attended Community Health Assessment Team Meetings and assisted in making decisions concerning the assessment process. He contributed educational materials regarding the services provided through University Health Systems placed in the reusable bags that were distributed to citizens who participated in the opinion survey. Hunter participated in the opinion survey collection process and provided a strong voice when Three Rivers Healthy Carolinians selected 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 Community Health Assessment. She also supplied an appreciated opinion to Three Rivers Healthy Carolinians as they analyzed the data and chose priority health issues for Bertie and Chowan Counties.

Juanita Johnson

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

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

Kaley Goodwin

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

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

Lisa Spry

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

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

Mary Morris

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

- ◆ As the Chair of Three Rivers Healthy Carolinians, Mary Morris helped provide updates on the community health assessment process and progress being made to partnership members. Mary

volunteered to conduct opinion surveys door-to-door and played an important part in the data analysis and priority selection process for Chowan and Bertie Counties.

Misty Deanes

Clerk to the Board of Commissioners/Member of Three Rivers Healthy Carolinians

Executive Assistant to the County Manager

Representative for Bertie County

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

Nancy Easterday

Director of Patient Access/Care Coordination

Albemarle Health

Representative for Pasquotank County and the surrounding area

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

Nancy Morgan

Three Rivers Healthy Carolinians Coordinator

Representative for Bertie and Chowan Counties

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

Rich Olson

City Manager/Member of Healthy Carolinians of the Albemarle

Representative for Pasquotank County

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

Wesley Nixon

Environmental Health Specialist

Albemarle Regional Health Services Survey Collection Volunteers for Pasquotank County

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 roll, 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.

Survey Collection Volunteers Perquimans County

Ann Roach

Ashley Mercer

Kaley Goodwin

Ashley Stoop

Wesley Nixon

Jerry Oliver

Nancy Oliver

James Jackson

Lisa Spry

CHA Data Presentation/Workgroup 9/28/10

Jewel L. Winslow

James Bunch

Bobby Darden

Sid Eley

Juanita T. Bailey

Pamela Hurdle

Hattie J. Sharpe

Amy Underhill

Dana Hamill

HCOTA Priority Selection Meeting 10/15/10

Pamela Hurdle

Pamela Etheridge

Catholene Cole

Rich Olson

Ann Roach

Fae Deaton

Hattie Sharpe

Susan Barco

Mary Walker

Amy Underhill

Cathie Williams

Tanya Miller

John Lamberson

Deb Conran

Stacy Fulcher

Arina Boldt

Zary Ortiz

Ashley Mercer

Dana Hamill

Chapter One:

Perquimans County Community Profile

Location and Geography

Perquimans County is located in northeastern NC, in the Coastal Plain region of the state. It is characterized by flat plains and shallow stream valleys. The county contains miles of waterfront along the Perquimans River, the Little River, and the Albemarle Sound. The nearest metropolitan area is Norfolk, VA which is located 52 miles to the northeast. The county is 152 miles east of Raleigh, NC, roughly 40 miles west of the Outer Banks, and 195 miles northeast of Wilmington, NC.

Perquimans County's western border is shared with Chowan County. To the north, the county borders Gates County and to the south the Bachelor Bay section of the Albemarle Sound. To the east Perquimans County borders Pasquotank County and the Little River.

There are five townships in Perquimans County; Belvidere, Bethel, Hertford, New Hope, and Parkville. Of them, Bethel Township is the most populated and Hertford Township is the county seat (1).

The nearest NC interstate highway is I-95, 60 miles west of the county. US Highway 17 runs through Hertford northeast toward the Outer Banks and southwest toward Wilmington; it joins US 64, which leads to Raleigh going west. NC Highway 37 goes northwest leading toward VA.

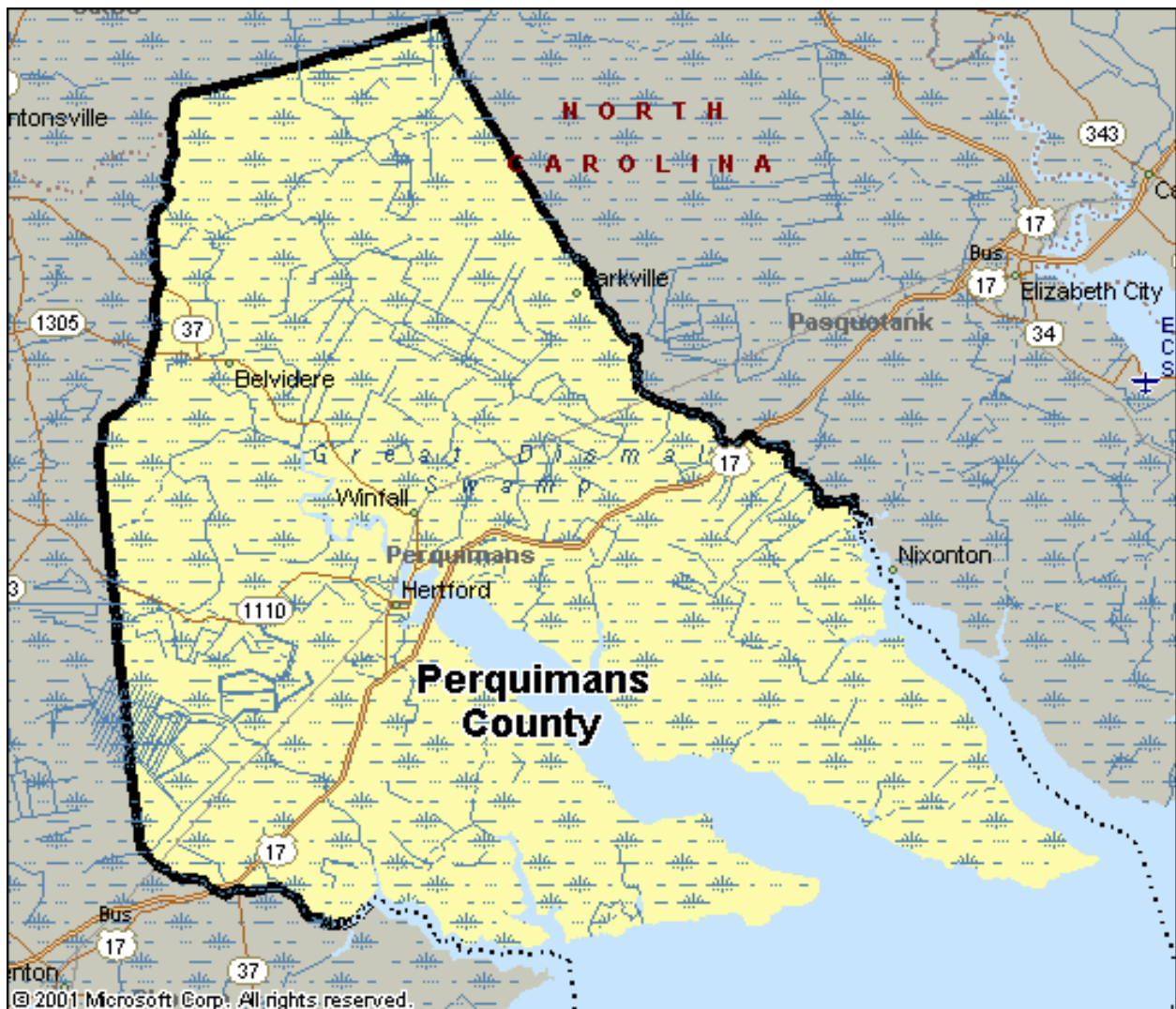
The nearest airport offering commercial passenger service is Norfolk Airport, located 60 miles north in Norfolk, VA. Pitt-Greenville Airport, located 82 miles south in Greenville, NC, also offers commercial passenger service. US Highway 64 provides access to the Raleigh-Durham International Airport located 165 miles to the west. The Regional Airport serves commuter and recreational fliers and is located in Edenton in Chowan County. The closest Amtrak station is in Portsmouth, VA (2), 57 miles away; the nearest Greyhound Lines stop is in Edenton, NC (3).

The county's geographic area is approximately 329 square miles of which 247 square miles cover land and 82 square miles cover water. The county has 302.73 miles of paved roads as of 2007. Fifty-five percent of Perquimans County residents live within 10 miles of a four-lane highway (4).

The elevation of the county ranges from sea level in the eastern and southern section to 52 feet in the northwest corner. Perquimans County has a relatively mild climate with an annual mean temperature of around 61.1 degrees. The average annual precipitation is around 48 inches (5).

Crops include corn, wheat, soybean, cotton, and peanuts.

Figure 1. County Map



History

From the Perquimans County Chamber of Commerce website (6):

Perquimans County was deeded to George Durant in 1661 by Kilcocanen, King of the Yeopim Indians. With the river as the region's major thoroughfare, the small settlement called Hertford served as the state's first capital until 1716.

The town of Hertford, the county seat, is nestled on the shores of the meandering Perquimans River. Hertford is home to 2,317 people, one-sixth of the total county population of around 12,000.

Early on Quakers were a strong influence in Hertford. Having traveled from Hertford, England, Quakers held the first recorded religious service in the state, near the now 'S' Bridge in 1672.

By the late 1700s, farming, livestock, and the fur trade were major industries here. The first bridge across the Perquimans River was built in 1798 and was replaced a hundred years later with a drawbridge. In 1928, the current Historic 'S' Bridge replaced the drawbridge. The 'S' Bridge is still in use today. A moonlight view from the bridge inspired songwriter Benny Davis to pen "Carolina Moon" as he traveled to visit his sweetheart.

During World War II, Hertford was bustling with activity from nearby Harvey Point Naval Air Station.

Leisure Activities/Resources Available

The Perquimans River is ideal for boating, canoeing, and kayaking and has over 100 miles of shoreline. Paddling excursions will allow you to explore some pristine Inner Banks (IBX) landscapes and view wildlife and birds along the way. There are three camping platforms on the river. Albemarle Resource Conservation & Development has developed a trail guide "Paths of Perquimans" as part of the Perquimans County Blueway/Greenway Project. The mission of the Perquimans County Blueway/Greenway Project is "to enhance the quality of life for residents of and visitors to Perquimans County and to preserve the natural, historical, and cultural resources, and landscapes by developing a system of land and water trails and routes for non-motorized traffic. This will provide health, recreational, and educational opportunities, and economic development for the county." This trail guide is available via the web and brochure.

Perquimans County Parks & Recreation Department offers activities for children and adults. Activities include indoor and outdoor seasonal sports, and a play ground for children, kick-box aerobics, ZUMBA, pilates, yoga for adults, and an outside track for walking. The Parks & Recreation Department also provides an annual health promotional activity, including Biggest Loser Program and Walk Across America.

The Perquimans County Arts League and Gallery display local artist's work and schedules monthly activities for the community.

The Minister's Council organizes and facilitates many church bazaars and harvest festivals. Perquimans County is known to be a very strong faith-based community. Many families spend time volunteering for and attending these events.

The Perquimans County Senior Center is a very active resource for senior citizens of Perquimans County who are 55 years of age and older. The center is open Monday-Friday from 8-5 pm. There is an exercise area with a treadmill, bicycle, stepper, Nu-Step machine, and rowing machine. Other activities provided by the senior center include, line dancing, craft and painting classes, computer center, group exercise, music, and games. The nutrition program is housed at the Senior Center. A hot meal with one-third of the Recommended Daily Dietary Allowances is served five days a week. This program is designed for persons 60 years of age and older. The purpose of the program is to promote the health and well-being of older people by providing a meal and opportunities for health education, social interaction, and recreation. Meals are served at the senior center.

The Newbold-White House is a few minutes away from the historic downtown and the oldest brick house (1730) open to the public in NC. This was built by Abraham Sanders, a Quaker, and the site is in the process of being made into a "living museum." Quakers were early settlers and met in homes for services at first, with five meeting houses being active at one time with two still active.

The Periauger is the only known re-creation in the world of a boat used to haul goods across the King's young colony. Originally it would have been a dugout log split and equipped with two forward sails and oars called sweeps. The work vessel was listed on a 1751 inventory of the Sanders' homestead. The boat is currently moored in Hertford, awaiting its permanent home on the river at the Newbold-White House.

The Perquimans County Farmer's Market started in May 2010. This market provides locally grown and made produce and products to the community.

Northeast Dragway is a motor sport dragstrip located in Hertford. It was originally built in 2000, and is a 1/8 of a mile long, concrete track. This auto-racing event draws participants and spectators from inside and outside of the county. Races are held on the weekends from March to November.

Annual Events in Perquimans County include the Indian Summer Festival, Garden Party in the Spring, 4th of July Celebration, Illuminate Downtown, and the Christmas Parade.

Hertford is the home of one of the five Colored Union Memorial monuments in the nation. The monument is located at the corner of King Street and Hyde Park. These monuments are dedicated to those who fought in the war of 1861-1865.



"A Rare Monument" ("In Memory of the Colored Union Soldiers"), Trails sign at the First Baptist Church corner of King and Hyde Park – Monument to those who served in the United States Colored Troops erected about 1912 on Academy Green in Hertford, NC, the site of the county's first black school, library, and church.

Jim “Catfish” Hunter, a life-long Perquimans resident was the first free agent in professional baseball. “Jimmy” as he is known to locals, signed with the Kansas City Athletics in 1964. He went on to play for Oakland Athletics and in 1974 as the first free agent signed with the New York Yankees. The Jim “Catfish” Hunter Baseball Museum is located in the Perquimans County Chamber Office and a Jim “Catfish” Hunter monument sits on the courthouse lawn.

Hertford is home to the Jim “Catfish” Hunter ALS Foundation and was founded in 1999 by Jimmy, family, friends, and the Bear Swamp-Beech Springs Ruritans.



Baseball Hall-of-Famer Jim “Catfish” Hunter was a proud Hertford native. After retiring, Hunter returned to Hertford to farm and lived there until his early death in 1999.

Demographics Population Characteristics

Table 1. General Demographic Characteristics (years as noted)

County	2010 Tier Desig	Total Population 2009	% Pop Change 2000 2009	2009								
				No. Males	No. Females	Median Age	No. Under 5 Years	No. 65 Years and Older Male	No. 65 Years and Older Female	Race		% Hispanic or Latino, Any Race (2008)
										% White	% Other	
Perquimans	2	12,951	13.9	6,181	6,770	45.4	668	1,305	1,605	73.6	26.4	1.2
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

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>

- In 2009, Perquimans County had an estimated permanent population of 12,651 persons, a population 86.2% smaller than the average NC county (Table 1).
- Like the state as a whole, Perquimans County's population is increasing. Between 2000 and 2009, Perquimans County's population increased by 13.9%, while the average NC County population grew by more than 16.6%.
- In 2009, the median age of Perquimans County residents was 45.4 years, almost eight years older than the median age for the state, 37.06.
- Perquimans County's population is predominately white, with minorities making up 26.4% of the population in 2008; in NC at that time minorities represented almost 26.1% of the total population.
- In 2009, people over the age of 65 made up 22.5% of the Perquimans County population compared to 12.7% of the total NC population.
- Children under the age of five represented 5.2% of the Perquimans County population in 2009, compared to 6.8% statewide.
- Between 2000 and 2009, the population in Perquimans County grew 16.3% faster than the state as a whole. However, this rate is slowing and is projected to be lower than the state rate of growth by 2020.
- In accordance with its growth, the Perquimans County population is becoming more dense as is the population in the state as a whole.
- By 2020, the population in Perquimans County is expected to be 7.4% denser than it was in 2010, but 7.5% lower than the density of the state as a whole.

Table 2. County Population by Township (2000)*

Township	Number	Percent	Median Age
Belvidere	1,268	11.2	41.1
Bethel	3,054	26.9	47.0
Hertford	2,317	20.4	42.3
New Hope	2,502	22.0	40.6
Parkville	2,227	19.6	39.6
TOTAL/Average	11,368	100	42.1

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

*Data has not been updated since the 2000 Census

- Bethel Township is the most heavily populated township in Perquimans County, with 30% of the county’s population.
- The least populated township is Belvidere Township, home to 11.2% of the county population.
- Bethel is the “oldest” township by far, with a median age of 47 years, while Parkville Township has the “youngest” median age of 39.6 (Table 2).

Figure 2. Perquimans County Township Map



Race/Ethnicity

- As detailed in Table 3, Perquimans County is primarily white, with minorities making up a total of 26.4% of the population in 2008. Perquimans County has a slightly higher proportion of African Americans than NC as a whole (25.3% vs. 21.6%); while the proportion of Latino residents is also considerably lower than statewide (1.2% vs. 7.4%).

**Table 3. Population Distribution by Race/Ethnicity (2008)
Number and Percent**

White		Black		Native American		Asian		Other		Hispanic Origin	
Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
9,372	73.6	3,222	25.3	25	0.2	25	0.2	102	0.8	153	1.2
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

reau, <http://quickfacts.census.gov/qfd/states/>

- The largest age segment of the population in Perquimans County is the adult age group 65 and older, representing 22.5% of the Perquimans County population. In NC, the 5-19 year-old age group is the largest age segment of the population representing 19.9% of the population (Table 4).
- The 15-19 year old age group is the next largest segment of the Perquimans County population at 17.0%. Statewide the adult 35-44 age group is the next largest segment at 14.7%.
- Children ages 0-4 compose the smallest portion of the population in Perquimans County, accounting for 5.2% of the total population. In NC, children ages 0-4 also compose the smallest portion of the state population, but in greater proportion (6.8%).

Table 4. Population Distribution by Age, Number (2009)

County	Total Population	0-4 Years	5-19	20-24	25-34	35-44	45-54	55-64	65+
Perquimans	12,951	668	2,204	890	1,285	1,361	1,825	1,808	2,910
State Total	9,382,610	635,977	1,866,301	678,767	1,235,359	1,381,751	1,340,595	1,054,575	1,189,285
NC County Avg.	93,826	6,360	18,663	6,788	12,354	13,818	13,406	10,546	11,893

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

Growth of the Elderly Population

- The population of adults over the age of 65 in Perquimans County is growing and is expected to continue to increase in all segments over the next 20 years.
- The fastest growing segment is the group aged 75-84, which is expected to grow by 48.3% between 2000 and 2030.
- The percent population growth of the segment aged 65-74 could increase by 23.3% by 2030, and the two older segments, 85-94 and 95 and older could grow by 48.5% and 66.0%, respectively.
- According to the workgroup participants, the county hasn't kept up with the growth of the seniors.
- Other areas of concern included grandparents raising grandchildren and more families are living with grandparents due to economic issues.
- With regard to disabled elders, if they have an income and live at home, they are denied assistance that could otherwise help them stay at home. In order for assistance to be provided, the elder would have to be institutionalized.
- Concern was also voiced for lack of transportation opportunities for the elderly, they don't have cars and when you have a disability, the ability to ride is limited.
- Inter-Country Transit Authority (ICPTA), does provide transportation to the elderly and disabled. Riders bound in wheelchairs can ride and be secured in their wheelchair using this service. See transportation for more information.

Table 5. Perquimans County Population of Adults Older than 65, by Township (2000)

Township	Number	% of Township Population
Belvidere	237	18.7
Bethel	670	21.9
Hertford	543	23.4
New Hope	369	14.7
Parkville	373	16.7
TOTAL	2,192	19.3

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

Characteristics of the Elderly Population

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

Attainment

- Elderly persons in Perquimans County tend to be somewhat less educated than their counterparts elsewhere in NC. In Perquimans County in 2000, 45.1% of persons age 65 and older *lack* a high school diploma, compared to a comparable figure of 41.6% for the state as a whole. In addition, 22.6% of persons aged 45-64 in Perquimans County *lack* a high school diploma, compared to 19.9% for the state as a whole.
- A smaller proportion of Perquimans County residents than NC residents age 65 and older have had a graduate school education (3.1% vs. 5.5%). In the age group 45-64 the difference is slightly greater, 5.9% in Perquimans County compared to 8.8% statewide.

Living Conditions

- In 2000, approximately 121 persons in Perquimans County could be classified as grandparents who are raising grandchildren under the age of 18. This number computes to a proportion of the total population equal to approximately 1.0%, a figure the same as the comparable rate for NC as a whole (1%).
- With regard to home ownership, the figures for the elderly population in Perquimans County are higher than the comparable figures for the state as a whole. Approximately 84% of county residents between the ages of 45 and 64 are homeowners compared to approximately 80% statewide; among persons aged 65 and older the county figure for homeownership is almost 86% and the state figure 82%.

Mobility

- With regard to the disabled elderly population, according to 2000 US Census figures, 25.3% of persons age 65 or older in Perquimans County reported having one disability; 22.5% of the same population reported having two or more disabilities. These percentages compare to respective statewide figures of 20.6% and 25.1%. The US Census Bureau of disability includes any long-lasting physical, mental, or emotional condition that can make it difficult for persons to walk, climb stairs, dress, bathe, learn, or remember.
- Significantly lower proportions of Perquimans County residents in several older age groups are without a car as compared to similar data for NC as a whole. In Perquimans County, 4.8% of householders between the ages of 55 and 64, 6.6% of those between the ages of 65 and 74, and 15.3% of those aged 75 or older do not have an automobile. These percentages compare to respective statewide figures of 6.0%, 9.0% and 21.3%.

Non-English Speaking Population

NC 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.

According to data:

- As of the 2000 Census, there were 80 foreign-born residents in Perquimans County, making up 0.7% of the total county population at that time.
- Almost 69% of the Perquimans County residents in 2000 who were foreign-born entered the United States before 1980.
- Only 15% of the 2000 foreign-born population in Perquimans County arrived after 1990.
- The recent (after 1994) increase of settlement of foreign-born persons is much lower in the county than for the state as a whole (15.9 vs. 76.2%).
- As of 2000, 140 individuals, or 1.3% of the Perquimans County population over the age of five, reported they spoke Spanish at home, making Spanish the most commonly spoken language other than English in the county. However, of the Perquimans County residents who reported speaking Spanish, 66% said they spoke English “very well” (8).
- Of 4,662 Perquimans County *households* assessed in the 2000 Census, 219 or 4.6% reported speaking a language other than English. Of these 219, 9 households (or 4%) reported being linguistically isolated, meaning that all household members who are older than 14 had at least some difficulty speaking English (Table 6).

Table 6. Household Language by Linguistic Isolation ¹ (2000)*

County	Number of Households									
	Total Households	English-Speaking	Spanish-Speaking		Speaking Other Indo-European Languages		Speaking Asian or Pacific Island Languages		Speaking Other Languages	
			Isolated	Not isolated	Isolated	Not isolated	Isolated	Not isolated	Isolated	Not isolated
Perquimans	4,662	4,443	0.0	118	9	77	0	3	0	12
State Total	3,133,282	2,841,028	43,698	125,899	6,804	69,246	8,730	25,143	1,607	11,127
NC County Avg.	31,333	28,410	437	1,259	68	692	87	251	16	111

Source US Census Bureau, 2000 Census, http://www2.census.gov/census_2000/datasets/demographic_profile/North_Carolina/2kh37.pdf
 1 - Linguistic isolation describes a household where no member over 14 years of age (1) speaks only English or (2) speaks a non-English language and also speaks English "very well". In other words, all members have difficulty with English.

*Available data has not been updated since the 2000 census.

- It was not possible to graph the age distribution of the Hispanic population in Perquimans County since the US Census Bureau does not release stratified county data in cases where the total target population is less than 100 persons, as is the case with the Hispanic population in Perquimans County during the 2000 Census. However, in 2009 it was estimated that there were 153 Hispanic people in Perquimans County accounting for 1.2% 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 (8).

Commuting Patterns

- The overall percentage of Perquimans County workers commuting out of the county to work increased from 58.2% to 62.2% between 1990 and 2000. Over this interval, the percentage of county workers working out of the county increased, but the percentage working out of the state decreased.
- During the period cited, more than two times the percentage of workers left Perquimans County for work (i.e., traveled to a job in another county or state) than the average NC county (Table 7 following page).

Table 7. Worker Commuting Patterns (1990 and 2000)

County	Number and Percent of Persons													
	1990							2000						
	Total # of Workers over 16	# Working Out of County	% Working Out of County	# Working Out of State	% Working Out of State	Total # Leaving County for Work	Total % Leaving County for Work	Total # of Workers over 16	# Working Out of County	% Working Out of County	# Working Out of State	% Working Out of State	Total # Leaving County for Work	Total % Leaving County for Work
Perquimans	4,230	1,924	45.5	536	12.7	2,460	58.2	4,434	2,331	52.6	426	9.6	2,757	62.2
State Total	3,300,481	657,483	n/a	60,323	n/a	717,806	n/a	3,837,773	936,047	n/a	75,604	n/a	1,011,651	n/a
NC County Avg.	33,005	6,575	19.9	603	1.8	7,178	21.7	38,378	9,360	24.4	756	2.0	10,117	26.4
Source	US Census Bureau, 1990 Census, 2000 Census, http://www2.census.gov													

*Available data has not been updated since the 2000 Census.

- According to US Census data, the majority of workers in Perquimans 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, working at home, or walking to work declined in Perquimans County during this time; the number of persons using public transportation increased minimally. Use of all means of transportation to work increased in NC in the decade between 1990 and 2000.

Socioeconomic Climate

Income

- According to data in Table 8, Perquimans County residents have a per capita income that is \$14,876, 43.2% lower than the state average.
- The median household income in Perquimans County is \$23,773 (38.7%) lower than in the NC county average.

Table 8. Income (years as noted)

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
Perquimans	2	\$19,577	-\$14,876	\$37,647	-\$23,773
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/37143.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 as 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.

- Perquimans County residents have a per capita income that is \$14,876 (43.2%) lower than the state average.
- The median household income in Perquimans County is \$23,773 (38.7%) lower than in the NC county average.
- Since 2005, Perquimans County has seen negative employment growth each year with the exception of 2009 (Table 9).
- With the exception of 2009, Perquimans County has generally fared worse than the state as a whole since 2005 (Table 9).

**Table 9. Annual Employment Growth (2005-2009)
Percent Change from Previous Year**

County	2005 Q3	2006	2007	2008	2009
Perquimans	3.7	1.5	1.2	-3.5	-1.3
NC County Avg.	1.7	3.3	1.4	-0.7	-5.3

Source

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

Table 10 (following page) details the various categories of industry in Perquimans County and NC; Table 11 lists the major employers in Perquimans County, only one of which employed more than 250 people during the period cited.

According to data in Table 10 (following page):

- Public Administration is the largest reported industry in Perquimans County, accounting for 17.9% of the labor force statewide; healthcare/social assistance is the largest industry, accounting for 14.8% of the labor force.
- Educational service is the second largest reported industry in Perquimans County, employing 15.7% of the labor force. Statewide, retail trade is the second largest industry accounting for 11.7% of the labor force.

Table 10. Employment by Industry (Third Quarter 2009)

Industry	% of Workforce	
	Perquimans	NC
Accommodation/Food Services	10.9	9.1
Administrative/Waste Services	3.2	5.8
Agriculture/Forestry/Fishing/Hunting	3.1	0.9
Arts/Entertainment/Recreation	0	1.8
Construction	6.0	5.1
Educational Services	15.7	8.5
Finance/Insurance	2.2	3.9
Health Care/Social Assistance	9.3	14.8
Information	0.7	1.9
Management of Companies	0.0	1.9
Manufacturing	1.7	11.6
Mining	0	0.1
Other Services (not Public Admin)	2.8	2.5
Professional and Technical Services	1.2	4.7
Public Administration	17.9	6.3
Real Estate/Rental Leasing	0.7	1.3
Retail Trade	11.4	11.7
Transportation/Warehousing	4.2	3.3
Unclassified	1.0	0.3
Utilities	0	0.4
Wholesale Trade	7.9	4.4

Percentages were calculated.

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

- Perquimans County Schools, followed by Perquimans County Government, are the largest employers in the county (Table 11).
- According to workgroup participants, the jobs for Perquimans County residents are primarily in education and healthcare. Many low, entry-level positions...fast food, etc.

Table 11. Major Employers in Perquimans County, Third Quarter 2009

Employer	Industry	Number Employed
Perquimans County Schools	Education and Health Services	250-499
Perquimans County	Public Administration	100-249
Albemarle Plantation	Leisure and Hospitality	50-99
Ssc Hertford Operating Company Llc	Education & Health Services	50-99
Food Lion Llc	Trade, Transportation, & Utilities	50-99
N C Department Of Transportation	Public Administration	50-99
Crossroads Fuel Service, Inc.	Trade, Transportation and Utilities	Below 50
Tandem Inc Dbm Mcdonalds	Leisure & Hospitality	Below 50
Hardee's- Non Edi	Leisure & Hospitality	Below 50
Albemarle Electric Membership Corp	Trade, Transportation, & Utilities	Below 50

Business Closings and Layoffs

- According to data catalogued by the NC Employment Security Commission (ESC) (9) from newspaper reports and data submitted to the commission, between 2006 and 2010 (to date) there were no reported business closings in Perquimans County during that period. One company

reported layoffs. It should be noted that these data are largely anecdotal and not the result of definitive research by the ESC.

Poverty

The *poverty rate* is the percent of the population (both individuals and families) whose monetary 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 Perquimans County has been consistently above the comparable state rate since 1980 (Table 12).
- The Perquimans County poverty rate has continued to decrease since 1980 from 24.4% to 18.1% in 2008. Despite this decrease the poverty rate remains 3.5% higher than that in the average NC county.

Table 12. Annual Poverty Rate (1980-2003)

County	1980	1990	2000	2008
Perquimans	24.4	21.6	17.9	18.1
NC County Average	14.8	13.0	12.3	14.6
Source	a	a	b	b

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

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

Poverty and Race

- Since 1990, poverty rates in Perquimans County have been consistently highest among the black population, though the percent of blacks in poverty has decreased (Table 13).
- Conversely, the poverty rate for the white Perquimans County population slightly increased between 1990 and 2000.
- Statewide, between 1990 and 2000 poverty rates decreased for all populations except “Other.”

Table 13. Persons in Poverty by Race (1990 and 2000)

County	1990					2000				
	Total Persons in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Other in Poverty	Total Persons in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	% Other in Poverty
Perquimans	2,214	22	10.6	43.9	0.3	1,997	17.9	10.8	35.7	2.4
State Total/Avg.	829,858	13.0	8.7	27.1	0.502	958,667	12.3	8.5	22.9	1.3
Source	Log Into North Carolina (LINC) database, http://linc.state.nc.us									

Children in Poverty

- Since 2006, Perquimans County has demonstrated higher proportions of persons in poverty under the age of 18, when compared to the state (Table 14 following page).
- In 2008, 29.5% of Perquimans County residents under the age of 18 lived in poverty, a proportion 32% higher than the comparable state proportion.
- Perquimans County has also had a consistently greater proportion of residents of all ages in poverty when compared to the state as a whole.

- Of children enrolled in the Perquimans County public school system in 2005, 62% were eligible for free or reduced cost lunches; in 2007, this rate had increased to 71.1% of Perquimans County children. This is significantly higher than the rest of the state. Statewide, 54.8% of all public school children were eligible for free or subsidized lunches in 2007, compared to the 48% that had been eligible in 2005 (10).

Table 14. 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
Perquimans	17.5	28.3	26.2	15.9	26.4	25.1	18.1	29.5	28.4
State Total	14.6	20.1	18.3	14.3	19.5	17.8	14.6	19.9	18.2

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

- In the past three Census periods, the percent of very young (under age 6) children in poverty in Perquimans County has fluctuated, greatly exceeding the comparable state rate in 1980 and 1990, then dropping closer to the comparable state rate in 2000. In 2008, the percentage of the very young in Perquimans County is again significantly higher than the state rate.

Food Stamps

- Despite a decrease in 2001, the number of people on food stamps has steadily increased in Perquimans County between 2000 and 2009 (Table 15).

Table 15. Number of Food Stamp Recipients (2000-2009)

Average Monthly Number of Food Stamp Recipients

County	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Perquimans	1,127	1,116	1,283	1,327	1,634	1,534	1,641	1,721	1,848	2061
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://linc.state.nc.us>

- Perquimans County has had a consistently higher percentage of children (under 18) receiving food stamps than the average NC county and the difference is widening as the percent of children receiving food stamps increases in Perquimans County at a faster rate than in the average NC county (Table 16).

Table 16. Food Stamp Recipients Ages 0-17 (1999-2004)

County	Percent of Children 0-17 who receive Food Stamps					
	1999	2000	2001	2002	2003	2004
Perquimans	17.1	16.9	18.5	20.7	25.0	25
NC County Avg.	13.7	11.8	12.7	14.3	16.3	18
	a	a	a	a	a	b

Source a - Previously but no longer: NC Child Advocacy Institute, County and State Data, CLIKS On-Line database, http://www.aecf.org/cgi-bin/cliiks.cgi?action=rawdata_results&subset=NC
 b - NC Child Advocacy Institute, County and State Data, CLIKS On-line Database, <http://www.aecf.org/cgi-bin/cliiks.cgi>

Housing

- In Perquimans County, the *number* of owned housing units increased between 1990 and 2000, while the percentage decreased (Table 17).
- The *number* of rental household units in the county increased over the same period, while the percentage decreased.
- The number and percentage of mobile home units increased in the county as they did in the state.
- In 2000, Perquimans County had a 76% greater proportion of mobile home units than the average NC county.

Table 17. Housing (1990-2000)

1990									2000									2008
Total Housing Units	Average Persons/ Household	Owner Occupied Units		Renter Occupied Units		Median Rent	Mobil Home Units		Total Housing Units	Average Persons/ Household	Owner Occupied Units		Renter Occupied Units		Median Rent	Mobile Home Units		Total Housing Units
No.	No.	No.	%	No.	%	\$	No.	%	No.	No.	No.	%	No.	%	\$	No.	%	No.
4,972	2.6	3,061	61.6	927	18.6	\$193	1,424	28.6	6,043	2.4	3,649	60.4	996	16.5	\$275	1,741	28.8	6,834
2,818,193	n/a	1,711,882	n/a	805,144	n/a	n/a	421,464	n/a	3,523,944	n/a	2,172,355	n/a	959,658	n/a	n/a	577,323	n/a	4,201,378
28,182	2.54	17,119	60.7	8,051	28.6	\$284	4,215	15.0	35,239	2.49	21,724	61.6	9,597	27.2	\$431	5,773	16.4	42,014
a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	b

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

b--US Census Bureau State and County QuickFacts, <http://quickfacts.census.gov/qfd/states/37/37143.html>

Affordable Housing

According to data from the NC Rural Economic Development Center based on data from the 2000 US Census (11):

- In 2000, 20.2% of the Perquimans County population was living in “unaffordable” housing; this compares to 20.7% statewide (10). (The Census Bureau defines unaffordable housing as housing that costs more than 30% of the total household income.)
- Only 0.2% of Perquimans County housing units, compared to 0.1% statewide, were considered “substandard,” meaning that they were overcrowded (more than one person living in a room) *and* lacking complete indoor plumbing facilities (hot and cold piped water, a flush toilet, and a bath or shower).

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

- The HUD Homes and Communities webpage and associated links list no single-family HUD-sponsored homes in Perquimans County, but thirteen HUD-sponsored homes in the Albemarle Region (12).
- There is one HUD Public and Indian Housing Authority located in Perquimans County, the Hertford Housing Authority. Other HUD PHA offices in the Albemarle Region are in Ahoskie (Hertford County), Edenton (Chowan County), and Elizabeth City (Pasquotank County) (13).
- The only privately owned HUD-subsidized rental housing properties in Perquimans County listed on the HUD website are a group home for the mentally disabled (in Hertford) and a multi-family apartment complex, Wynn Fork Drive Apartments, which also is located in Hertford (17).

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

- A listing as of July 21, 2006, shows four rental properties in Hertford: Albemarle Village, Amsterdam Apartments, Bradford Apartments, and Wynne Fork Apartments.

Homelessness

- According to the Albemarle Area United Way and the NC Coalition to End Homelessness (Nancy Holochwost), there are three homeless shelters in the Albemarle Region, all located in Elizabeth City (Pasquotank County).
- The state attempts to assess homelessness by periodically sponsoring a point-in-time survey/census. According to the 2005 point-in-time census data submitted on behalf of Perquimans County, 14 individuals in five families were identified as homeless persons in the county at that time (16).

Children and Families

- In 2009, 5.2% of Perquimans County residents were under the age of five (Office of State Budget and Management).
- In 2009, 19.6% of residents were under the age of 18 (Office of State Budget and Management).
- According to 2000 Census data, the largest *number* of children under the age of 18 lives in Bethel Township; the largest *percentage* of children under 18 lives in Parkville Township.

Table 18. Perquimans County Population under the Age of 18, by Township (2000*)

Township	Number	% of Township Population
Belvidere	282	22.2
Bethel	630	20.6
Hertford	546	23.6
New Hope	589	23.5
Parkville	563	25.3
TOTAL	2,610	22.9

Source US Census Bureau, American Fact Finder, Data Sets, Summary File 1, Quick Tables, County Subdivisions, Select areas, Table QT-P1 (Age Groups and Sex 2000). <http://factfinder.census.gov>

*Data has not been updated since the 2000 Census.

Single Parent Families

- The number and percent of homes with single parents increased between 1990 and 2000 in Perquimans County and the state (Table 19).
- When compared to the state, Perquimans County has a significantly lower percentage of single parent homes.
- The percent of households headed by single fathers in Perquimans County increased by 2 ½ times during this period, and the state number almost doubled. Nevertheless, in 2000, the percentage of homes headed by a single male in Perquimans County was still lower than the state average.
- The percentage of homes with single female head of household remained relatively stable in Perquimans County over the period.

Table 19. Single Parent Families (1990 and 2000)

County	1990								2000							
	Total Family Homes		Total Homes with Single Parent		Single Male Head of Household		Single Female Head of Household		Total Family Homes		Total Homes with Single Parent		Single Male Head of Household		Single Female Head of Household	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Perquimans	3,044	10.0	305	1.0	29	0.1	276	0.9	3,378	11.6	392	11.6	85	2.5	307	9.1
State Total	1,824,465	n/a	488,515	n/a	31,588	n/a	164,000	n/a	2,158,869	n/a	697,521	n/a	60,791	n/a	227,351	n/a
NC County Avg.	18,245	26.8	4,885	17.3	316	1.7	1,640	9.0	21,589	32.3	6,975	32.3	608	2.8	2,274	10.5

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

Child Care Programs

- Between 2006 and 2007, the number of children in regulated child care increased in both Perquimans County and the average NC county (Table 20).
- Of the children in regulated care in Perquimans County, 62% received a subsidy in 2001, a rate 44% higher than the NC county average. In 2005, 111% of children in regulated care received a subsidy, a percentage three times the statewide percentage and almost double the county percentage from 2001.
- As of 2005, there were no Perquimans County children between the ages of birth and twelve in the county who were eligible for but not receiving a child care subsidy.

The number of children in foster care in Perquimans County increased between 2006 (12 children) and 2007 (14 children). However, it decreased again in 2008 (eight children.) The number of children in foster care decreased significantly in NC between 2006 and 2008.

Table 20. 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)
Perquimans	21	168	62	111	0	12	14	8
State Total	265,943	276,099	43	37	37,063	17,385	17,008	15,773
NC County Avg.	2,659	2,761	n/a	n/a	3,706	174	170	158

Source: a - NC Child Advocacy Institute, Data and Statistics, 2005 Children's Index County Profiles, <http://www.aecf.org/cgi-bin/cliiks.cgi>
 b - Annie E. Casey Foundation Kids Count Data Center <http://datacenter.kidscount.org/>

a - NC Child Advocacy Institute, Data and Statistics, 2005 Children's Index County Profiles, <http://www.aecf.org/cgi-bin/cliiks.cgi>
 b - Annie E. Casey Foundation Kids Count Data Center <http://datacenter.kidscount.org/>

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

Three areas of child care provider performance are assessed in the star system: program standards, staff education, and compliance history. Each area has a range of one through five points. The star rating is based on the total points earned for all three areas. Listed below is the breakdown for the

number of stars received based on the total points earned in each of the three areas. A five-star facility has earned a total of 14-15 points, a four-star facility 11-13 points, a three-star facility 8-10 points, a two-star facility 5-7 points, and a one-star facility 3-4 points. (Note: The system will implement new compliance rules beginning January 1, 2008.)

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

- Three Star Center License - 3 facilities
- Two Star Center License - 2 facilities
- Four Star Family Child Care Home License – 2 facilities
- Three Star Family Child Care Home License – 1 facility
- Two Star Family Child Care Home License - 1 facility
- One Star Family Child Car Home License – 1 facility
- Temporary License – 1 facility

Educational Attainment and Investment

According to data presented in Table 21:

- Between 2007-2008, Perquimans County had approximately 8.7% fewer high school graduates than the NC county average.
- According to 2008 End of Grade (EOG) Test results, both third and eighth graders in the Perquimans County school system performed at lower rates of proficiency in both math and reading than students statewide.
- The 2008 average SAT scores for students in the Perquimans County school system (1359) was 130 points below the NC average (1489).
- In 2008-2009, the rate of acts of school violence in Perquimans County schools (6.99) was 7.8% lower 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 Perquimans County school system (\$9,669.82) ranked 23rd among the 115 school systems in the state.

Table 21. Educational Attainment (Years as noted)

County	% High School Graduates (2008)	% College Graduates-- Bachelor's Degree (2008)	Per Pupil Expendit. State, Fed and Local * (2007-2008)	State Per Pupil Expendit. 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)
Perquimans	63.9		\$9,669.82	23	63.6	49.3	62.2	45.5	1359	6.99
NC County Avg.	70.0	26.0	\$8,045.49	n/a	73.2	54.5	68.2	54.2	1489	7.59
Source	b	c	b	b	c	c	c	c	d	e

a - NC Department of Commerce, Economic Development Information Service, <http://cmedis.commerce.state.nc.us/countyprofiles>

b - NC Dept. of Public Instruction, <http://www.ncpublicschools.org/docs/fbs/resources/data/statisticalprofile/2009profile.pdf>

c - Annie E. Casey Foundation Kids Count Data Center <http://www.aecf.org/cgi-bin/cklks.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 Perquimans County has varied, but has shown an overall increase between 2002 and 2008 (Table 22).
- The drop-out rate in Perquimans County increased 4.3% between 2002 and 2008, and with the exception of the 2006-2007 school year, the local rate exceeded the average NC county rate.
- According to the 2007-2008 figures, the high school drop-out rate in Perquimans County (5.4) was 7.4% higher than the NC rate.
- In 2008-2009, the drop-out rate decreased to 3.6%, this is below the state's rate of 4.3%.
- During the workgroup it was mentioned that Perquimans County School System employs a Drop-Out Prevention Specialist, full-time position beginning in the 2008-09 school year. Will go to a student's house/look for them if they are not in school.
- Also during the workgroup, it was discussed that, in the past students who transferred schools to another state, would be considered a drop-out. That has been changed; students transferring schools to another state are no longer considered drop-outs. With Perquimans County being so close to VA, and Coast Guard families (a Coast Guard base is in one of our neighboring counties of Pasquotank), families would move from state-to-state. It is believed these factors did affect our drop-rate.

Table 22. High School Drop-Out Rate (2002-2008)

County	Drop Out Rate						2008-09
	2002-03	2003-2004	2004-05	2005-06	2006-07	2007-08	
Perquimans	5.2	7.3	5.9	7.8	5.2	5.4	3.6
NC County Avg.	4.8	4.8	4.7	5.2	5.3	5.0	4.3

Table 23: % High School Dropout Peer County Information Grades 9-12
www.ncpublicschools.org

RESIDENCE		2007-08	2008-09
North Carolina		4.97	4.27
<i>Perquimans</i>		5.39	3.56
PEERS	Chowan	4.07	5.19
	Jones	5.21	4.64
	Pamlico	4.79	2.43
	Swain	7.45	6.33

For the 2008-09 school year, Perquimans County's drop-out rate was below the NC state rate, as well as its peer counties.

Schools and Enrollment

Primary and Secondary Schools

- There are four traditional public schools in the Perquimans County School District; three elementary schools and one secondary school (18, 19).
- Perquimans Central School serves Pre-K through 2nd grade, Hertford Grammar School serves 3rd-5th grades, Perquimans Middle School serves 6th-8th grades, and Perquimans County High School serves 9th-12th grade.
- There are no charter schools in the county (18, 19).
- Enrollment in Perquimans County Schools increased between SY2003 and SY2006, but has decreased slightly since then (Table 24).

Table 24. Public School Enrollment (SY2003-SY2008)
Number of Students

County	Number of Students				
	2003-04	2004-05	2005-06	2006-07	2007-08
Perquimans	1,764	1,775	1,851	1,848	1,831
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/>

- There are no private schools in the county (20). Perquimans County children do attend private schools in Pasquotank County. There is no county specific data available on children attending private schools (based on county of residence). A total of 358 children attend private schools in Pasquotank County, Perquimans County children are included in that number.
- After-school programs were mentioned as a county need during the CHA Data workgroup. All schools have an after-school program, serving students needing academic help. Students scoring 1-2 on EOG scores are targeted for these programs.
- During the CHA Data workgroup, it was discussed that many Perquimans County children are home schooled, and workgroup participants requested this information be included in the CHA. For the 2009-2010 school year, 97 children were home schooled in Perquimans County.

Higher Education

- The College of the Albemarle (COA), a regional community college, serves Perquimans County residents, as well as others in the Albemarle Region with locations in Edenton in Chowan County, Elizabeth City in Pasquotank County, and Manteo in Dare County. COA was the first comprehensive community college in the state of NC (21).
- Chowan University is a small (<1,000 students) four-year liberal arts university located in Murfreesboro (Hertford County). Chowan University is affiliated with the Southern Baptist Association (22).
- Mid-Atlantic Christian University is a small (<200 students) private, co-educational four-year college located in Elizabeth City in Pasquotank County offering associate and baccalaureate degrees. Mid-Atlantic Christian University is supported by the Fellowship of Churches of Christ and Christian Churches (23).

- Elizabeth City State University (ECSU) is a four-year state university located in Elizabeth City in Pasquotank County. A constituent institution of The University of North Carolina, ECSU offers baccalaureate programs in the arts and sciences and professional and pre-professional areas, as well as master's degrees in selected disciplines. Originally an institution for African-American students, the university's rich heritage provides a strong background for its increasingly multicultural student body (24).
- East Carolina University (ECU) is a large, four-year state university that is also a constituent member of the UNC System. ECU was founded in 1907 to alleviate the desperate shortage of teachers in the eastern part of the state. The College of Education has been joined by programs of high distinction in health care and the fine and performing arts. Today the university offers 106 bachelor's degree programs, 71 master's degree programs, four specialist degree programs, one first-professional MD program, and 16 doctoral programs in professional colleges and schools, the Thomas Harriot College of Arts and Sciences, and the Brody School of Medicine (25). A total of 27 Perquimans County residents were enrolled in ECU (on-campus) in the Fall 2009 Semester, 15 were enrolled in distance programs, and none registered as first-time freshmen (26).

Crime and Safety

Crime Rates

Table 25 shows the rates for "index crime", which consists of violent crime (murder, rape, robbery, and aggravated assault) plus property crime (burglary, larceny, arson, and motor vehicle theft) between 2004-2009 Table 26 shows the actual number of index crimes by type that occurred in Perquimans County between 2004-2009.

- The index crime rate in Perquimans County has fluctuated since 2003, with a low of 1797.0 crimes per 100,000 population in the most recent reporting period and a high of 2612.7 in 2004 (Table 25).
- The violent crime rate also fluctuated between 2004 and 2009 with a low rate of 80.4 in 2007. Since this time the violent crime rate has increased to 113.3.
- The property crime rate in the county has fluctuated since 2004, although it has remained lower than the rate in the average NC county rate, during this time.

Table 25. Index Crime Rates (2004-2009)

Crimes per 100,000 Population

County	2004			2005			2006			2007			2008			2009		
	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime	Index Crime	Violent Crime	Property Crime
Perquimans	2612.7	153.7	2459.0	2660.5	194.3	2466.2	2542.4	107.0	2435.4	1800.4	80.4	1720.0	2037.8	165.0	1872.8	1797.0	113.3	1683.7
NC County Avg.	4573.9	446.9	4127.1	4,622.4	478.5	4,143.9	4,654.4	483.5	4,170.9	4,659.4	480.6	4,178.8	4,581.0	477.0	4,103.9	4,178.4	417.2	3,761.2

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

- As detailed in Table 26 (following page), the actual *number* of violent crimes committed in Perquimans County fluctuates on a yearly basis. Aggravated assault accounts for the majority of violent crimes in the county.
- Property crimes committed in Perquimans County also fluctuate yearly with the highest number having occurred in 2006. Larceny (the theft of property without the use of force) accounts for the majority of property crimes in the county.

Table 26. Number of Index Crimes (2000-2009)

Type of Crime	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Violent crime	22	10	16	18	18	23	13	10	20	14
<i>Murder</i>	1	1	1	0	1	2	1	1	1	1
<i>Rape</i>	3	0	1	3	1	2	2	0	3	3
<i>Robbery</i>	4	3	3	7	9	13	6	2	5	2
<i>Aggravated assault</i>	14	6	11	8	7	6	4	7	11	8
Property crime	231	146	187	248	288	292	296	214	227	208
<i>Burglary</i>	75	56	77	104	135	135	152	79	119	102
<i>Larceny</i>	138	72	100	130	126	131	115	126	102	98
<i>Motor vehicle theft</i>	18	18	10	14	27	26	29	9	6	8

Source:

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

- As detailed in Table 27, of the 15,515 registered sex offenders living in NC in July, 2010, 26 were residing in Perquimans County (27).
- Between 2006 and 2010, no clandestine drug lab busts occurred in Perquimans County as compared to an increasing rate in the state as whole (28).
- As of 2010, there were no gangs in the county. This has been the case since 2004 (29).
- During the CHA Data workgroup, participants were surprised that no gangs were reported for Perquimans County. They did not agree with this data, stating there was gang activity in Perquimans County. According to Sheriff Eric Tilley, Perquimans County Sheriff’s Department, “There is gang activity in Perquimans County. There is no known “established” gang.”
- In 2008, 31 people in Perquimans County were charged with DWI. Of those charged, 23 were convicted, for a conviction rate of 74.2% which is 24.9% higher than the statewide conviction rate of 55.7% (30).

Table 27: Perquimans County Criminal Activity

County	Registered Sex Offenders (July, 2010)	Number of Gangs		Number of Methamphetamine Lab Busts				Most Common Crimes (2009)		
		2004	2010	2006	2007	2008	2009	#1	#2	#3
Perquimans	26	0	0	0	0	0	0	Burglary	Larceny	MV Theft/ Aggravated Assault
State Total	15,515	387	891	197	157	197	206	Larceny	Burglary	Aggravated Assault
Source	a	b	b	c	c	c	c	d	d	d

Sources:

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

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

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

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

Robbery = Larceny by the threat of violence

Larceny = The theft of property without the use of force

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

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

Juvenile Crime

According to data in Table 28 (next page):

- The number of complaints of undisciplined youth increased slightly from five to six between 2004 and 2009 in Perquimans County. The number of delinquent youth decreased from 56 to 35 during this same time period. The number of complaints of undisciplined and delinquent youth decreased in the average NC county during this same time period.
- The rates of both undisciplined youth and delinquent youth in Perquimans County were below the NC rates in 2009.

- The number of Perquimans County youth sent to secure detention decreased from nine to three between 2004 and 2009 while the comparable number in the average NC county decreased 16.5% during the same interval.

Table 28. Juvenile Justice Complaint and Outcomes

County	Number of Complaints								Outcomes					
	Undis (2004)	Undis (2009)	Delinq (2004)	Delinq (2009)	Non-Divertable Class A-E Felonies (2009)	Serious Felony H-I, A1 Misdem. (2009)	Minor-Misdem. Class 1,2,or 3 (2009)	Infraction (2009)	Undis Rate (2009)	Delinq Rate (2009)	Number Sent to Secure Detention (2004)	Number Sent to Secure Detention (2009)	Number Sent to Youth Development Center (2009)	Number Transferred to Superior Court (2009)
Perquimans	5	6	56	35	0	13	22	0	3.26	23.3	9	3	0	0
State Total	5,218	4,631	40,823	35,801	766	8,581	26,213	241	5.20	29.14	7,921	6,612	365	28
NC County Avg.	52	46	408	358	8	86	262	2.4	n/a	n/a	79	66	4	0.28
Source	a	b	a	b	c	c	c	c	b	b	a	b	b	c

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

b-NC Division of Juvenile Justice. 2009 Annual Report. http://www.ncdjdp.org/resources/pdf_documents/annual_report_2009.pdf

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

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

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

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

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

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

Domestic Violence

- According to data from the NC Court System there were 35 *ex parte* orders issued in Perquimans County in FY 2008-2009 related to domestic violence complaints; these *ex parte* orders resulted in 12 restraining orders upon hearing (31). These numbers represent an increase from the year 2000 when nine restraining orders and 22 *ex parte* orders were issued.

Table 29: Perquimans County Domestic Violence

County	Ex-Parte Orders		Protective Orders	
	2000	FY 2008-2009	2000	FY 2008-2009
Perquimans	22	35	9	12
State Total	21,400	33,823	9,581	12,430
NC County Average	214	338	96	124

Source NC Court System. Domestic Violence Issues in District Court Civil Cases. <http://www.nccourts.org/Citizens/SRPlanning/Documents/dome2008-2009.pdf>

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

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

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

Table 30: Domestic Violence Related Homicides

County	2007	2008	2009
Perquimans	0	0	0
State Total	86	84	68
NC County Average	0.86	0.84	0.68

Source: NC Coalition against Domestic Violence
<http://www.nccadv.org/homicides.htm>

The state of NC maintains a Pregnancy Risk Assessment Monitoring System (PRAMS) that documents physical abuse before and during pregnancy among women who are surveyed by phone shortly after giving birth. Although these data are available only on a regional basis, they may be useful in understanding the domestic violence issues in any county within the region. Perquimans County is part of the large Region IV (Eastern region) of the PRAMS network, data for which is presented in Table 31. From these data, it is apparent that women in this region report these kinds of abuse similar to state rates across all the categories assessed.

Table 31. Physical Abuse Before and During Pregnancy in Region VI - Eastern Region * (2002-2004)

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

Source

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

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

Elder Maltreatment

According to Perquimans County Department of Social Services in 2009, 40 reports were made regarding elder maltreatment. Of the 40, 13 were accepted for Adult Protective Services. Two of these reports were caretaker neglect, three were exploitation, five were self-neglect, and the remaining three no abuse/neglect was found (33).

Child Maltreatment

The annual *number* of substantiated child abuse cases in Perquimans County fluctuated between 2003 and 2007 (Table 32). (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 2005.

Table 32. Child Abuse Investigations (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
Perquimans	77	32	68	24	114	35	107	17	135	1
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 Perquimans County child abuse substantiated *rate* also fluctuated between 2001 and 2005 (Table 33).
- The local rate of reports investigated, as well as the rate of substantiated cases, has been lower than the comparable state rate in each of the past available reporting periods.
- Statewide, there were 25 child abuse homicides in 2007 and 33 in 2008; none of the homicides were in Perquimans County (34).

Table 33. Child Abuse/Neglect Substantiated Rate, per 1,000 Children aged 0-17 (2001-2007)

County	2001		2002		2003		2005		2006		2007	
	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate Substantiated	Rate of Investigation	Rate of Investigation
Perquimans	32.5	7.9	30.9	12.8	27.8	9.8	47.0	14.0	42.7		51.4	
NC County Avg.	51.0	16.0	52.7	16.2	51.9	14.5	54.0	10.0	56.2		54.3	
	a	a	a	a	a	a	b	b	b		b	b

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

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

- The number of children in Division of Social Services custody fluctuates from year to year (Table 34).

Table 34. Number of Children Placed by DSS (2005-2009)

County	2005	2006	2007	2008	2009
Perquimans	8	11	6	4	0
State Total	10,829	11,309	11,230	10,524	9,878
NC County Avg.	108	113	112	105	99

Source

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

Transportation

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

In 2010, among Perquimans County residents, 1,326 trips were provided to the general public (this includes going to work, school, grocery store, etc.), and ICPTA provided 5,679 trips to the elderly and

disabled. Riders that are wheelchair bound can be secured on the bus in their wheelchair. ICPTA does contract with the Medicaid Program. Medicaid will pay for trips that have prior approval.

Environmental Health

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

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

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 Landfill (PCG) Commission. These counties operate a jointly-owned transfer station in Belvidere with 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.

Figure 3
Perquimans Chowan Gates Convenience Centers Map

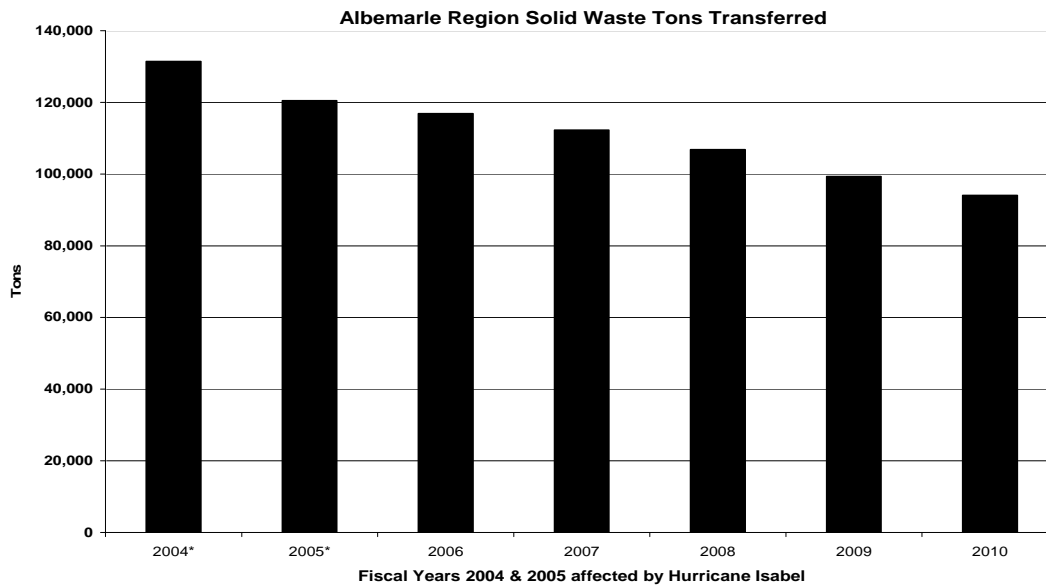


Albemarle Regional Solid Waste Management Authority

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 landfilled in the East Carolina Environmental Landfill in Bertie County. The waste is primarily sent there through the three transfer stations located in Dare, Currituck, and Perquimans Counties. The towns and counties operate their own solid waste collection programs. The Authority conducts centralized solid waste billing, data collection and reporting, educational services, and technical assistance for local programs.

Data provided by Albemarle Regional Health Services

Figure 4



Albemarle Regional Health Services On-Site Waste Water Program

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.

Table 35: On-Site Waste Water Program

PERQUIMANS	2007	2008	2009
Construction Authorizations – New	82	63	66
Construction Authorizations –Repair	17	12	12
Improvement Permits Denied	3	10	3
Improvement Permits Issued	115	74	66
Other Site Visits	118	98	97

Data provided by Albemarle Regional Health

Chapter 2: **Access to Health 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-type data were collected and are presented here.

Health Care Professionals

Practitioners

- The proportional availability of physicians, physician extenders, and nurses in Perquimans County has been consistently lower than the state as a whole, as demonstrated by the persons-per-provider data shown in Table 36.
- The persons-per-primary care physician ratio has increased since 2001, indicating that as the county population has grown, the county has not gained physicians.
- The ratio of persons-per-nurse has also increased, indicating that the county has not gained nurses either.
- The Perquimans County persons-per-dentist ratio has increased since 2001 and is well above the comparable state ratio.
- There is a particular shortage of dentists who accept Medicaid patients, especially children. According to information in a dental services referral list provided by NC Division of Medical Assistance (35), there are nine dentists in the Albemarle Region who will accept Medicaid children, including one in Perquimans County. (Bertie-1, Chowan-1, Pasquotank-6, Perquimans-1.)
- The NC Division of Medical Assistance maintains a list of dentists who are enrolled in the NC Medicaid program and who have filed claims for at least 10 new Medicaid patients in the first quarter of the calendar year. On this basis, the system lists no such dentist actually practicing in Perquimans County (35).

Table 36. Persons per Provider Type (2001-2007)

County	2001				2003				2005				2007			
	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist	Primary Care Physician	Primary Care Physician Extender	Registered Nurse	Dentist
Perquimans	5,761	3,470	245	5,761	5,856	4,403	317	5,856	6,077	3,054	467	6,077	6,361	3,832	471	6,361
NC County Avg.	1,198	872	109	2,471	1,193	860	110	2,432	1,056	749	109	2,302	1,043	717	107	2,313

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

- The distribution of health care professionals in Perquimans County according to specialty area is shown in Table 37 (following page).
- The data indicate that although there is representation in Perquimans County in several major categories of health care, many categories such as general medicine, obstetrics/gynecology, pediatrics, nurse practitioner, chiropractic, podiatry, and optometry lack local representation.

Table 37: Active Health Care Professionals: Perquimans County 2000, 2004, 2008, and NC 2008				
Physicians	2000	2004	2008	NC 2008
Total Physicians	2	2	2	19,542
Primary Care Physicians	2	2	2	8,347
<i>Family Practice</i>	1	1	1	2,684
<i>General Practice</i>	0	0	0	122
<i>Internal Medicine</i>	1	1	1	2,922
<i>Obstetrics/Gynecology</i>	0	0	0	1,026
<i>Pediatrics</i>	0	0	0	1,593
Other Specialty	0	0	0	11,149
Physicians per 10,000 Population	1.8	1.7	1.5	21.2
Primary Care Physicians per 10,000 Population	1.8	1.7	1.5	9.0
Dentists and Dental Hygienists	2000	2004	2008	NC 2008
Dentists	2	2	2	3,987
Dental Hygienists	1	2	4	4,963
Dentists per 10,000 Population	1.8	1.7	1.5	4.3
Nurses	2000	2004	2008	NC 2008
Registered Nurses	30	34	40	87,743
Nurse Practitioners	0	1	0	3,150
Certified Nurse Midwives	0	0	0	225
Licensed Practical Nurses	15	26	25	17,888
Registered Nurses per 10,000 Population	26.4	28.8	31	95.1
Other Health Professionals	2000	2004	2008	NC 2008
Chiropractors	1	0	0	1,317
Optometrists	0	0	0	983
Pharmacists	3	4	4	8,578
Physical Therapists	0	0	0	4,643
Physical Therapy Assistants	1	2	1	2,182
Podiatrists	0	0	0	278
Psychologists	1	0	0	1,844
Psychological Associates	1	1	1	896
Physician Assistants	1	1	2	3,228
Source: 2008 UNC Sheps Center for Health Services Research http://www.shepscenter.unc.edu/hp/profiles.htm				

The number of health care professionals in Perquimans County has remained about the same during the past decade with very few of the most essential health care professionals, physicians, registered nurses and dentists. In 2008, there were only 1.5 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 Perquimans County in 2008, there were 31 registered nurses per 10,000 people and a state average of 95.1 registered nurses 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. Citizens who need care that is not available in Perquimans County usually travel to neighboring counties or even cross the state line into VA.

- Perquimans County does not have a hospital, nor does it have an urgent care facility. This was deemed as a weakness among the workgroup participants. There is a hospital in two neighboring counties; Chowan and Pasquotank. Participants stated if we had an urgent care, more people would be able to receive care in this county.
- Regarding the Active Healthcare Professionals, Perquimans County 2000, 2004, and 2008 (Table 37), there was a Nurse Practitioner working in Perquimans County in 2000, 2004, and 2008.

Perquimans County Health Resources Inventory-See Appendices

Hospitals and Health Centers

Because there is no hospital located in Perquimans County, residents must utilize services provided by hospitals in neighboring counties.

Albemarle Hospital

Albemarle Hospital, located in Elizabeth City, NC in Pasquotank County, is a regional, not-for-profit, 182-bed, community hospital serving not only Pasquotank County but also Camden, Chowan, Currituck, Dare, Gates, and Perquimans Counties, a total of more than 130,000 people. 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 like the Community Care Clinics, which serve the region's indigent, underinsured, and uninsured residents (36).

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 (37).

Chesapeake Regional Medical Center

Chesapeake Regional Medical Center, located in Chesapeake, VA is a major health resource for southeast VA and northeast NC residents, including those in Perquimans 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 (38).

Chowan Hospital

Chowan Hospital, an 89-bed facility located in Edenton, NC in 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 Tyrrell). 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 (39).

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, the Chowan Hospital Foundation has offered 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 in 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 (40).

Roanoke-Chowan Hospital

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

of further treatment. As part of University Health Systems of Eastern North Carolina the hospital's patients have access to treatment at facilities and clinics in other locations (41).

Tertiary and Critical Care Facilities

Tertiary care is specialized consultative care, usually provided on referral from primary or secondary medical care personnel. It is offered by specialists working in centers that have the staff, equipment, and other facilities for special investigation and treatment. The nearest tertiary care facility in NC accessible to Perquimans County residents is Pitt County Memorial Hospital (46), a 745-bed hospital and academic medical center located in Greenville, 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 Trauma Facility

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 NC (42).

Community Health Center

The Albemarle Hospital Foundation 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 (43).

Local Health Department

The Perquimans 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 Perquimans County at 103 ARPDC Street in Hertford. Comprehensive clinical services include Women's Preventive Health, Adult Health, Communicable Disease 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, Preparedness and Response, Solid Waste Management Authority, and the Regional Landfill services. Perquimans County Health Department houses Albemarle Home Care and Hospice for Perquimans County at the same location (44).

Long-Term Care Facilities

The NC Division of Aging and Adult Services provided the following information on categories of long- and short-term adult care (46).

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 (46). According to the Medicare Nursing Home Compare System, there is one nursing home in Perquimans County. This nursing home provides 78 beds to Perquimans County residents. This number of beds in long-term care facilities has not changed since 2005 (45). The number of beds in the state has increased only slightly over the same period (Table 38).

Nursing Homes

- Brian Center Health and Rehab, Hertford, NC
78 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 two 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 and 620 family care homes in NC. They are licensed by the State Division of Facility Services (Group Care Section) under state regulations and are monitored by Adult Home Specialists within county departments of social services. Facilities that violate licensure rules can be subject to sanctions, including fines. In Perquimans County, there are two adult care homes and two family care homes as of 2010.

Adult Care Homes

- Country Oaks, Hertford, NC
24 beds
- South Haven Manor, Hertford, NC
24 beds

Family Care Homes

- Russell's Rest Home, Hertford, NC
6 beds
- Winfall Manor, Winfall, NC
5 beds

Table 38. Number of Beds in Long Term Care Facilities (2005-2010)

County	Nursing Home Beds					2010	
	2005	2006	2007	2008	2009	Family Care Homes	Adult Care Homes
Perquimans	78	78	78	78	78	2	2
State Total	43,987	44,248	44,210	44,234	44,315	620	626
NC County Avg	440	442	442	442	443	6	6
	a	a	a	a	a	b	c

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

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

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

Mental Health Services and Facilities

East Carolina Behavioral Health (ECBH) is a local management entity (LME) 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.

ECBH does not provide direct services. Their mission is to work in partnership with people who face significant challenges related to substance abuse, mental illness, and/or developmental disability. 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.

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 Perquimans County, the percentage of the total population that is uninsured has fluctuated since 1999 (Table 39).
- Since 1999, the percentage of those uninsured in Perquimans County has been above the comparable state percentage.
- The percent of the population without health insurance was highest in Perquimans County in 2003 at 21.0%.

Table 39. Percent of Population without Health Insurance (1999-2007)

County	1999	2000	2001	2002	2003	2004	2005	2006-07	State Rank 2004	State Rank 2005
Perquimans	20.5	17.3	19.4	20.1	21.0	20.3	20.6	20.6	62	77
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	b	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

- In 2005, the proportion of uninsured children under the age of 18 in Perquimans County was slightly higher (11.9%) than the proportion of uninsured children in the state as a whole (11.3%) (Table 40).

Table 40. 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
Perquimans	21.0	12.1	24.0	20.3	12.7	23.1	20.6	11.9	23.7
NC County Avg.	19.4	n/a	n/a	17.5	n/a	n/a	17.2	11.3	19.5

Source - Sheps Center for Health Services Research, Publications.

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

- During the CHA Data Workgroup, it was mentioned that 20% of the population without health insurance is pretty significant. It was recognized that Perquimans County does not offer many jobs providing health insurance to employees.

Medicaid

- The number and percent of Perquimans County residents eligible for Medicaid have increased overall between 2005 and 2008 (Table 41).
- When compared to the NC county average, a greater percent of Perquimans County residents were eligible for Medicaid in 2008.
- In 2008, Perquimans County spent 7% more per capita on Medicaid than the average NC county.

Table 41. Medicaid Eligibility and Expenditures (2005-2008)

County	FY 2005					FY 2006					FY 2007					FY 2008				
	Est. Total Population	Number Eligible	% Eligible	Per Capita Expenditure	Per Capita Expenditure Rank	Est. Total Population	Number Eligible	% Eligible	Per Capita Expenditure	Per Capita Expenditure Rank	Est. Total Population (2005)	Number Eligible	% Eligible	Per Capita Expenditure	Per Capita Expenditure Rank	Est. Total Population (2007)	Number Eligible	% Eligible	Per Capita Expenditure	Per Capita Expenditure Rank
Perquimans	11,840	2,653	22.4	\$1,068	45	12,154	2,684	22.1	\$1,106	45	12,442	2,763	22.2	\$1,088	50	12,722	2,906	22.8	\$1,073	55
State Total	8,541,263	1,563,751	18.3	\$685	n/a	8,682,066	1,602,645	18.5	\$911	n/a	8,860,341	1,682,028	19.0	\$965	n/a	9,069,398	1,726,412	19.0	\$1,002.00	n/a
NC County Avg.	85,413	15,638	n/a	n/a	n/a	86,821	16,026	n/a	n/a	n/a	88,603	16,820	n/a	n/a	n/a	90,694	17,264	n/a	n/a	n/a

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

North Carolina Health Choice

As has been established with previously cited data, children in Perquimans County 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 Perquimans County children enrolled in Medicaid grew between 2004 and 2007, while the number and percent of children enrolled in NC Health Choice decreased (Table 42).
- The number of Perquimans County children enrolled in Medicaid increased 21.3% between 2004 and 2007, which is lower than the state rate (18.3%).
- The number of Perquimans County children enrolled in NC Health Choice decreased by 26.5% over the period cited, while the state level decreased by 2.3%.

Table 42. Children Enrolled in Medicaid and Health Choice (2004, 2007 unless otherwise indicated)

County	2004				2007			
	# Children Enrolled in Medicaid	% Children Enrolled in Medicaid	# Children Enrolled in Health Choice	% Children Enrolled in Health Choice	# Children Enrolled in Medicaid (2008)	% Children Enrolled in Medicaid	# Children Enrolled in Health Choice	% Children Enrolled in Health Choice
Perquimans	1,030	42	230	9	1,309	n/a	169	6.6
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 NC’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.

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.

- Perquimans County residents participate in ACCESS and ACCESS II.
- As of July 2006, there were 822,596 Medicaid recipients enrolled in Carolina ACCESS or ACCESS II statewide, which represents 73% of all Medicaid recipients eligible to participate (47).
- As of July 2006, there were 1,281 Medicaid recipients in Perquimans County enrolled in Carolina ACCESS or ACCESS II, which represents 67% of all Medicaid recipients in the county eligible to participate (47).
- According to data provided by the state (48) there were (as of August 2006) two medical providers in Perquimans County participating in Carolina ACCESS programs, one in ACCESS, and one in 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 (49).

According to these data, Medicaid patient visits to the emergency department of Bertie County 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 composed 28% of all emergency department visits at Bertie County Memorial Hospital from 2002 through 2005; at Chowan Hospital, the comparable figure was 29%, although Medicaid patient utilization of the emergency department actually peaked in 2003.

An average of approximately 22% of Perquimans County residents were Medicaid-eligible during this period.

Medicare/Medicaid Dual Eligibility

- The numbers and percentages of dually eligible Medicare/Medicaid beneficiaries in Perquimans County increased overall between 1999 and 2001 in the under 65, 65-74, and 85 and older age groups; the number and percentage decreased in the 75-84 year-old age group over the same period.
- The percentages of residents dually eligible for Medicare/Medicaid in Perquimans County are consistently below the comparable state percentages.

Chapter Three: Health Statistics

Understanding Health Statistics

Routinely collected mortality and morbidity surveillance data and behavior survey data can be used to describe the health status of Perquimans 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.

Age-adjustment

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

Aggregate Data

Another convention typically used in the presentation of health statistics is aggregate data combining data gathered over a five-year period. The practice of presenting data that are aggregated over a five-year period avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. It is particularly important to aggregate data for smaller counties like Perquimans 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 are diagnosed outside of the hospital, in-patient setting is 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. 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 Perquimans County, the preferred method for reporting incidence and mortality trend data is long-term trends using the age-adjusted aggregated format. Most data points used in the report are standardized to the 2000 US population.

ICD Coding Changes

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

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

The comparability ratio is a measure of expected changes due only to the changes in disease definitions. The ratio is calculated by dividing the number of deaths coded using ICD-10 in a standard population by

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

Leading Causes of Death

Table 43 shows the leading causes of death in Perquimans 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 Perquimans County rate exceeds the comparable rate for the state as a whole.

Table 43. Age-Adjusted Mortality Rates for the Leading Causes of Death in Perquimans County, North Carolina and the United States (2004-2008)
Causes of Death that are bolded exceed the NC state rate.

Cause of Death	Perquimans County		North Carolina	United States (2006)
	Number	Rate	Rate	Rate
1. Heart Disease	200	212.2	202.2	211.0
2. Total Cancer	182	199.5	192.5	187.0
3. Cerebrovascular Disease	55	58.0	54.4	45.8
4. Chronic Lower Respiratory Disease	28	29.1	47.8	41.6
5. Alzheimer's Disease	19	19.2	28.7	24.2
6. Unintentional Non-Motor Vehicle Injury	18	23.3	18.6	16.2
7. Pneumonia and Influenza	18	19.7	20.3	18.8
8. Diabetes Mellitus	18	19.5	25.2	24.2
9. Kidney Disease	18	19.2	18.8	15.1
10. Unintentional Motor Vehicle Injury	16	26.8	18.6	16.2
11. Chronic Liver Disease and Cirrhosis	10	11.3	9.1	9.2
12. Septicemia	9	9.8	14.2	11.4
13. Homicide	5	9.0	7.2	6.2
14. Suicide	4	5.2	11.9	11.1
15. HIV/AIDS	3	5.0	4.4	4
Total Deaths All Causes (some causes not listed)	738	822.5	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

Mortality Rates

State and National Mortality Rate Comparisons

Table 43 provides recent, overall age-adjusted mortality rates for Perquimans County, as well as for NC and the US.

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

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

- **Heart Disease - 4.7%**
- **Total Cancer - 3.5%**
- **Cerebrovascular Disease - 6.2%**
- **Kidney Disease - 2.1%**
- **Unintentional Motor Vehicle Injury - 30.6%**
- **Chronic Liver Disease and Cirrhosis - 19.5%**

Compared to the national mortality rates available, Perquimans County has **higher** rates of:

- **Heart Disease - 5.7%**
- **Total Cancer - 6.3%**
- **Cerebrovascular Disease - 21.0%**
- **Unintentional Non-Motor Vehicle Injury - 30.5%**
- **Pneumonia and Influenza - 4.6%**
- **Kidney Disease - 21.4%**
- **Unintentional Motor Vehicle Injury - 39.6%**
- **Chronic Liver Disease and Cirrhosis - 18.6%**

Gender Disparities in Mortality

Table 44 compares rates for males versus females in Perquimans County. The mortality data cited in this section was obtained from the NC SCHS, except as noted, and represent the period from 2004-2008.

For all deaths combined, Perquimans County males have a 34.0% higher mortality rate than females.

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

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

- **Total Cancer - 30.8%**
- **Trachea, Bronchus, and Lung Cancer - 50.7%**
- **Heart Disease - 40.2%**
- **Unintentional Non-Motor Vehicle Injury - 45.6%**

- **Cerebrovascular Disease - 29.7%**
- **Chronic Lower Respiratory Disease - 54.3%**
- **Diabetes - 43.1%**
- **Pneumonia and Influenza - 67.4%**

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

- **Kidney Disease - 27.8%**

Table 44. Age-adjusted Mortality Rates by Gender, Perquimans County (2004-2008)

Cause of Death	Males		Females	
	Number	Rate	Number	Rate
1. Total Cancer	97	245.2	85	169.7
Trachea, Bronchus and Lung Cancer	34	81.5	20	40.2
Colon, Rectum and Anus	9	24.6	5	9.4
Pancreas	5	12.3	5	9.0
Female Breast	n/a	n/a	13	27.1
Prostate	16	43.3	n/a	n/a
2. Heart Disease	102	272.7	98	163.1
3. Unintentional Non-Motor Vehicle Injury	10	31.8	8	17.3
4. Cerebrovascular Disease	26	70.7	29	49.7
5. Chronic Lower Respiratory Disease	17	42.7	11	19.5
6. Alzheimer's Disease	2	5.9	17	26.4
7. Diabetes	11	26.0	7	14.8
8. Unintentional Motor Vehicle Injury	11	38.0	5	16.2
9. Pneumonia and Influenza	12	33.1	6	10.8
10. Suicide	3	7.1	1	3.8
11. Kidney Disease	6	15.3	12	21.2
12. Septicemia	6	17.4	3	5.2
13. Chronic Liver Disease and Cirrhosis	10	24.6	0	0.0
14. Homicide	5	18.2	0	0.0
15. HIV/AIDS	1	3.0	2	6.7
Total Deaths All Causes (some causes not listed)	377	1015.7	361	670.3

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

Racial Disparities in Mortality

Racial disparities in mortality are discussed in detail in the descriptions of specific diseases and health conditions in the sections that follow. 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 minority deaths during the period in question, and gender-stratified racial disparities will not be analyzed for any cause of death that resulted in five or fewer aggregate deaths among minority males or females during the period.

For all causes of death, the age-adjusted mortality rate among minorities (1023.8) in Perquimans County for the period from 2004 through 2008 is 25.4% higher than the age-adjusted mortality rate for whites (764.1).

In addition, following the above guidelines, for the period from 2004 through 2008 mortality rates in Perquimans County were **higher among minorities than among whites** for:

- **Total Cancer** - 32.2%
- **Prostate Cancer** - 79.8%
- **Heart Disease** - 23.3%
- **Cerebrovascular Disease** - 37.7%
- **Diabetes** - 38.7%
- **Kidney Disease** - 38.8%

Conversely, mortality rates in Perquimans County were **higher among whites than among minorities** for:

- **Trachea, bronchus and lung cancer** – 4.4%

Heart Disease and Stroke (First and third leading causes of death in Perquimans County)

Chronic diseases, including heart disease and stroke, will continue to be a health focus for Healthy Carolinians of the Albemarle. Priority areas focusing on these health problems include obesity (including lack of physical activity and poor eating habits), smoking, and high blood pressure. These focus areas are the same or refinements of the focus areas set in 2006. Data results from the community health survey revealed 32.1% of participants had been told by a doctor they had high blood pressure.

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 (50). 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 are the first and third leading causes of death among Perquimans County residents. For the 2004-2008 time period, 200 Perquimans County residents died of heart disease and 55 died of stroke (Table 43, cited previously).

Heart Disease and Stroke Incidence

Hospital utilization data provided by the NC SCHS give some indication of the burden of heart disease in Perquimans 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 \$6,650,039 in hospital charges in Perquimans County in 2008.

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 who have *not* sought medical care or been hospitalized. The category represented in Table 45 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	23.1	22.1	20.9	19.4	20.1
Heart Disease	16.0	15.2	14.5	12.7	14.3
Cerebrovascular Disease	4.3	4.0	3.9	3.1	2.8

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

The most recent data (aggregated for the years 2004-2008) show that the overall Perquimans County mortality rate due to heart disease (212.2) is higher than the state rate (202.2) (Table 46). The local rates for white males and females and minority males and females also exceed the comparable state rates.

Table 46. Heart Disease Mortality Rates (2004-2008)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	200	212.2	74	249.4	68	155.4	28	352.0	30	196.9
State Total	87,332	202.2	35,043	248.4	33,582	154.1	9,370	289.1	9,337	186.1

Sources: 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. Perquimans County currently exceeds the target rate by 3.5%.

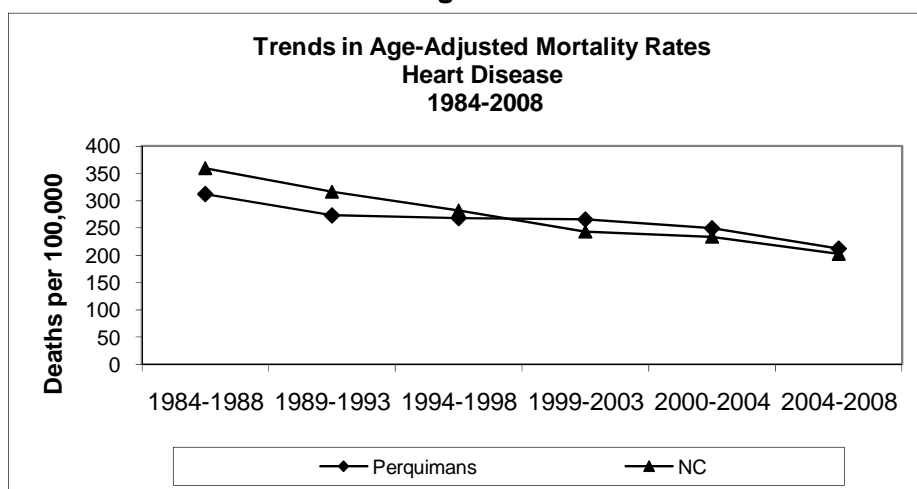
Table 47:
Heart Disease Deaths per
100,000 Population

RESIDENCE		2005-09
North Carolina		191.7
<i>Perquimans</i>		206.9
PEERS	Chowan	198.2
	Jones	246.1
	Pamlico	164.9
	Swain	252.9

Nationally, the mortality rate due to heart disease is 211.0 (52), which is only 0.6% lower than the mortality rate among Perquimans County residents, and 4.2% higher than the rate statewide. The Healthy People 2010 goal is to reduce mortality due to heart disease to 166 per 100,000 (52). Perquimans County exceeds this goal by 17%.

Since 1984, the mortality rate due to heart disease in Perquimans County has paralleled a decreasing trend seen at the state level (Figure 5).

Figure 5



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 (58.0) is 6.2% higher than the comparable rate in the state as a whole (54.4) (Table 48, following page).

The county cerebrovascular disease mortality rates for white males, minority males, and minority females all exceed the comparable state rates. The county stroke mortality rate for white females is lower than the comparable state rate.

Table 48. Cerebrovascular Mortality Rates (2004-2008)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	55	58.0	18	60.2	19	43.3	8	105.1	10	68.8
State Total	23,158	54.4	6,763	50.9	10,688	48.9	2,432	78.5	3,275	65.7

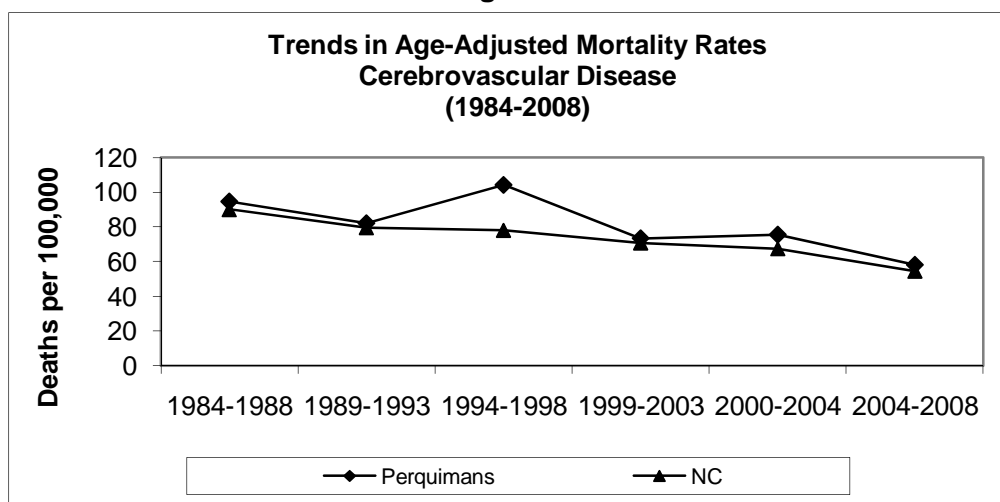
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

The Healthy Carolinians 2010 goal is to reduce the mortality rate due to stroke to 61 deaths per 100,000 population (52). Perquimans County is 4.9% lower than this level.

The most recent (2006) death rate due to stroke in the US is 45.8 per 100,000 population (53), a rate exceeded in Perquimans County by 21.0%. The state mortality rates also exceed the national cerebrovascular mortality rate by 15.8%.

Between 1979 and 2004, the mortality rate due to stroke in Perquimans County decreased, as did the comparable state rate (Figure 6).

Figure 6



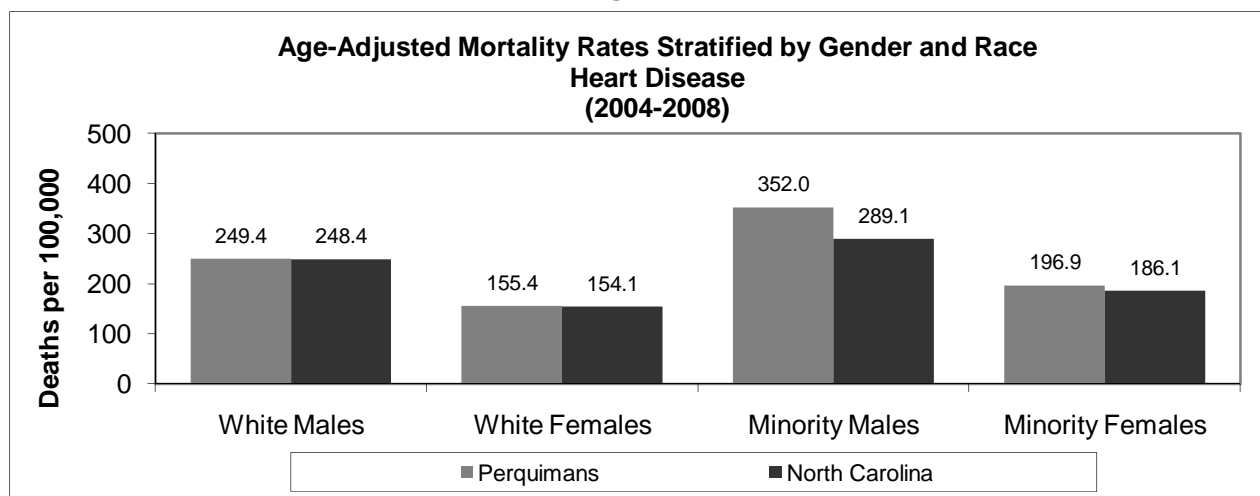
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Gender and Racial Disparities in Heart Disease and Stroke Mortality

Figure 7 (following page) compares age adjusted mortality rates due to heart disease, aggregated between 2004-2008 among white males, minority males, white females, and minority females. In Perquimans County, minority males have a 29.1% higher mortality rate (352.0) due to heart disease than white males (249.4). Minority females in Perquimans County have a 21.1% higher mortality rate (196.9) due to heart disease than white females (155.4).

Gender disparities exist for both whites and minorities in Perquimans County, though the disparity among minorities is greater. The mortality rate among minority males is 44.1% higher than the rate among minority females (352.0 vs. 196.9). The mortality rate due to heart disease among white males is 37.7% higher than that of white females (249.4 vs. 155.4).

Figure 7

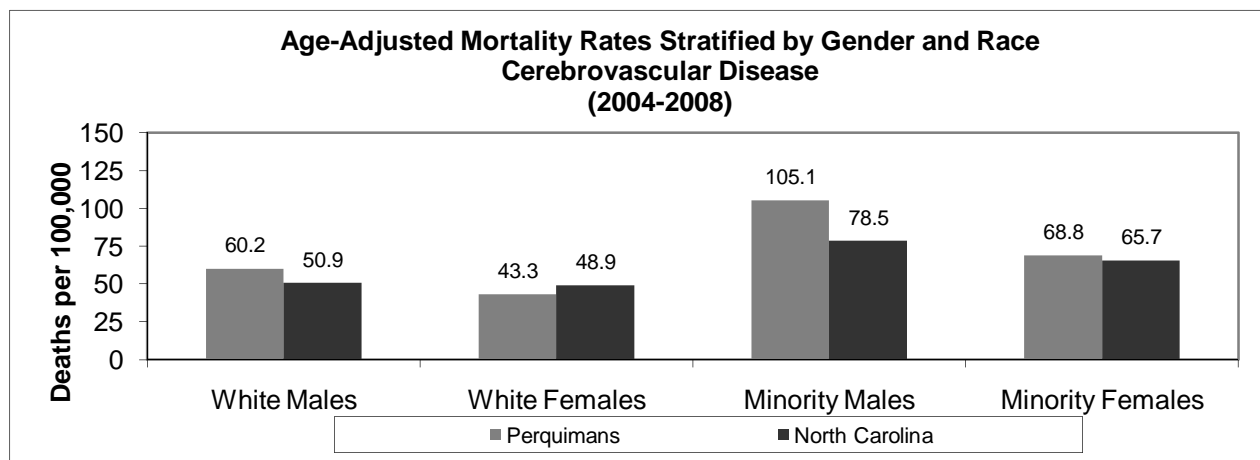


Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. 2010 County Health Data Book. Mortality. 2004-20048 Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Figure 8 compares sex-race stratified age-adjusted mortality rates for cerebrovascular disease. The cerebrovascular disease mortality rate among minority males in Perquimans County (105.1) is 42.7% higher than the rate for white males (60.2), and the mortality rate among minority females in the county (68.8) is 37.1% higher than the rate among white females (43.3).

The cerebrovascular disease mortality rate among white males in Perquimans County is 28.1% higher than the rate among white females (60.2 vs. 43.3); the cerebrovascular disease mortality rate among minority males in the county is 34.5% higher than minority females (105.1 vs. 68.8).

Figure 8



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

Cancer (Second leading cause of death in Perquimans County)

Total Cancer

Cancer will remain a Chronic Disease focus for Healthy Carolinians of the Albemarle. Smoking will remain a priority area as well.

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 (50). Cancers of all kinds are sometimes grouped together in a parameter called “total cancer.” Total cancer was the second leading cause of death in Perquimans County for the period from 2004-2008 (Table 43 cited previously). In 2008, in Perquimans County, hospital charges associated with cancer diagnoses totaled \$1,287,286 (50).

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

Total Cancer Incidence

Table 49 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 374 newly diagnosed cases in Perquimans County between 2003 and 2007. The incidence rate for all cancers in Perquimans County (433.1) is below the average rate for NC as a whole. Nationally, the age-adjusted cancer incidence rate for all types of cancer in 2006 was 461.8 (56). Incidence rates for individual cancers will be presented and discussed subsequently.

Table 49. 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
Perquimans	374	433.1	56	62.8	55	59.9	72	164.6	48	120
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>

The total cancer incidence rate in Perquimans County has fluctuated, but has decreased slightly since 1996. Over the same period, the state rate has increased gradually, but steadily.

Total Cancer Mortality

Cancers of all types resulted in 182 deaths in Perquimans County between 2004 and 2008; the associated total cancer mortality rate was 199.5 deaths per 100,000, just above the state rate of 192.5.

The total cancer mortality rate in the county was higher than the comparable state rate for white females and minority males; the rate among white males and minority females in the county was lower than the comparable state rate (Table 50 following page).

Table 50. Total Cancer Mortality Rates (2000-2004)

County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	182	199.5	64	201.5	61	169.8	33	415.1	24	168.8
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

The Healthy Carolinians 2010 goal for total cancer is a mortality rate of 166.2 per 100,000 (52), a target currently exceeded by 16.7% in Perquimans County. The county also exceeds the Healthy People 2010 target of 159.3 deaths per 100,000 (54) by 20.2%. The national mortality rate for all types of cancer was 187.0 per 100,000 in 2006, with cancer ranking as the second leading cause of death (53). For 2004-2008, Perquimans County and NC exceeded the national rate.

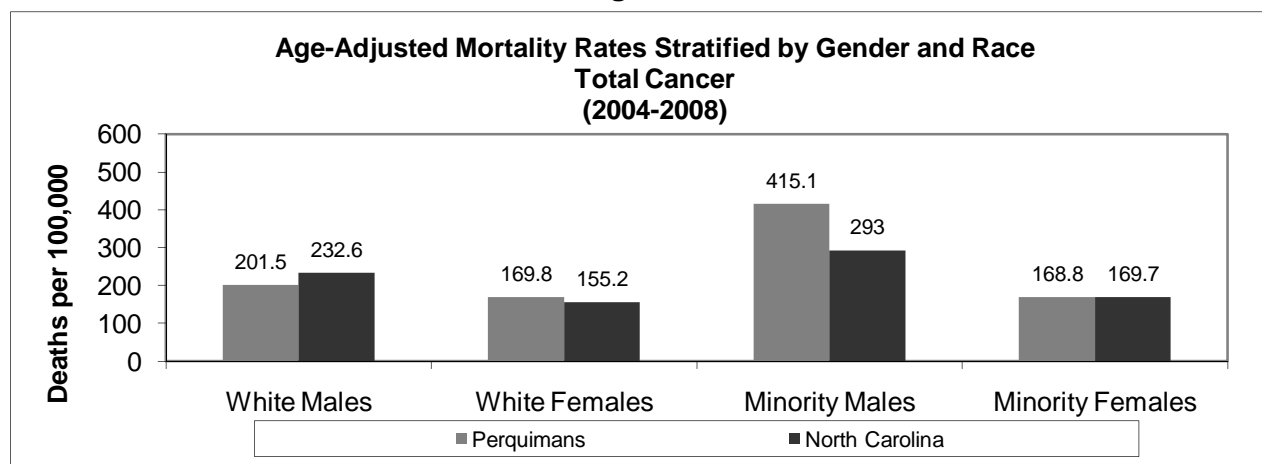
Since 1984, the overall cancer mortality rate for Perquimans County has fluctuated above and below that of the state with the lowest mortality rate (184.5) during the 1989-1993 reporting period. The county mortality rate remains above the comparable state figure.

Gender and Racial Disparities in Total Cancer Mortality

Figure 9 compares the age-adjusted mortality rates due to all types of cancer for Perquimans County. The data represent aggregate deaths between 2004 and 2008 among white males, minority males, white females, and minority females. In Perquimans County specifically, minority males have a 51.5% higher total cancer mortality rate than white males. White females have a cancer mortality rate that is 0.6% higher than minority females.

The mortality rate due to all types of cancer among white males in Perquimans County is 15.7% higher than that of white women; the mortality rate for minority men is 59.3% higher than the rate for minority women.

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>.

Breast Cancer (Third leading cause of cancer death)

Breast Cancer Incidence

Between 2003 and 2007, breast cancer had the highest incidence rate of the four major cancers in Perquimans County (164.6), with 72 new cases diagnosed during the period cited (Table 49, cited previously).

Nationally, breast cancer is the third most commonly diagnosed cancer, with an incidence rate of 131.4 per 100,000 in 2006. Nationally, the incidence rate is highest nationally among non-Hispanic white females (138.9 per 100,000) (53).

Since 1995, breast cancer incidence rates have fluctuated more in Perquimans County than in NC. While the number of new breast cancer cases has remained relatively stable in the state, the county incidence rate has increased overall, remaining below the comparable state rate until the 2003-2007 reporting period.

Breast Cancer Mortality

Between 2004 and 2008, 13 people died of breast cancer in Perquimans County representing an age-adjusted mortality rate of 27.1 per 100,000 (Table 51). **This represents the third highest mortality rate of the four major cancers in Perquimans County during that period**, ranking behind lung cancer and prostate cancer (55). The breast cancer mortality rates in Perquimans County for both white and minority females exceeded the comparable state and regional rates during the period cited.

Table 51. Breast Cancer Mortality Rates (2004-2008)

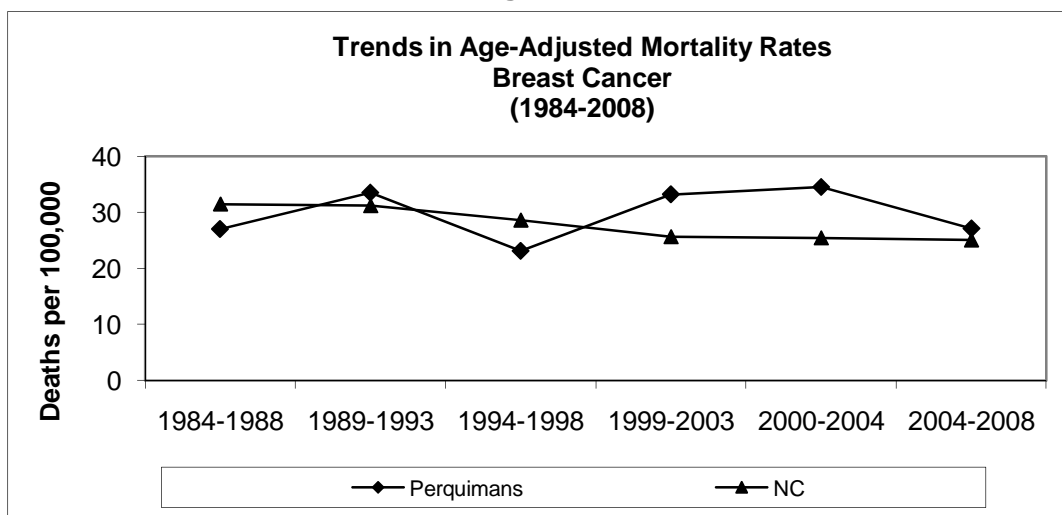
County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	13	27.1	0	0	9	26.1	0	0	4	32.3
State Total	6,301	25	40	0.3	4,589	22.8	14	0.4	1,658	31.3

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

The Healthy Carolinians 2010 goal for breast cancer is a mortality rate of 22.6 per 100,000 (52). The Healthy People 2010 target rate is 22.3 per 100,000 females (54). The current Perquimans County rate exceeds these goals by 16.6% and 17.7% respectively.

Since 1979, statewide breast cancer mortality rates have decreased overall while the Perquimans County rates have increased, surpassing rates in the state as a whole (Figure 10, following page).

Figure 10



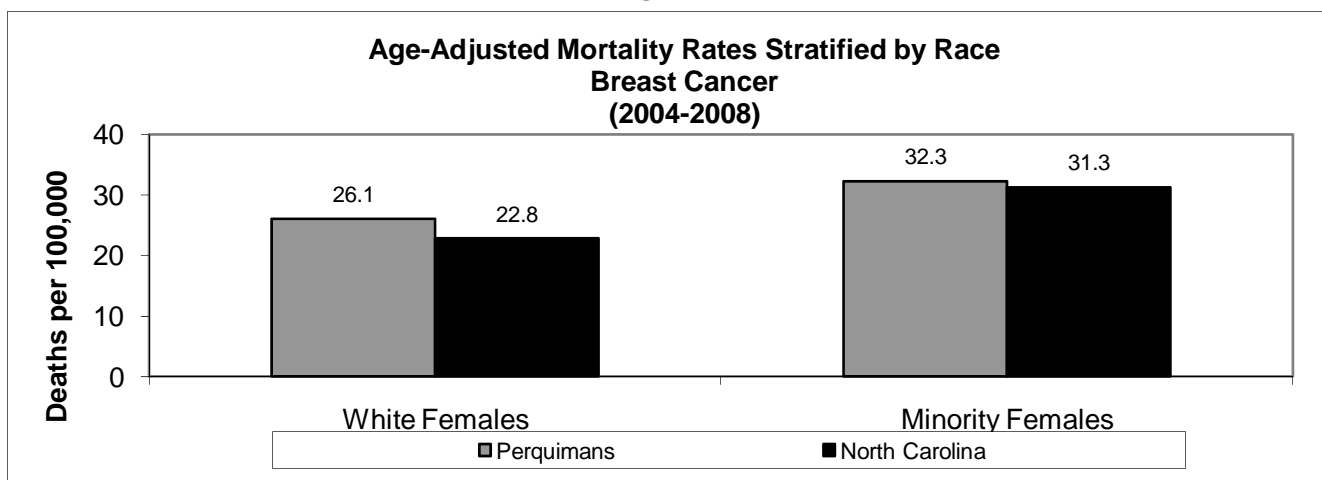
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Racial Disparities in Breast Cancer Mortality

Figure 11 compares 2004-2008 aggregate, age-adjusted breast cancer mortality rates for white females and minority females in Perquimans County and NC. The mortality rate among minority females in Perquimans County was 19.2% greater than the rate among white females. (Note, however, that the number of events was small in each group; there were nine deaths among whites and four deaths among minorities.)

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

Figure 11



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

Breast Cancer Risk Factors (50)

Risk factors for breast cancer include:

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

Suspected risk factors include:

- High breast density

Prostate Cancer (Second leading cause of cancer death)

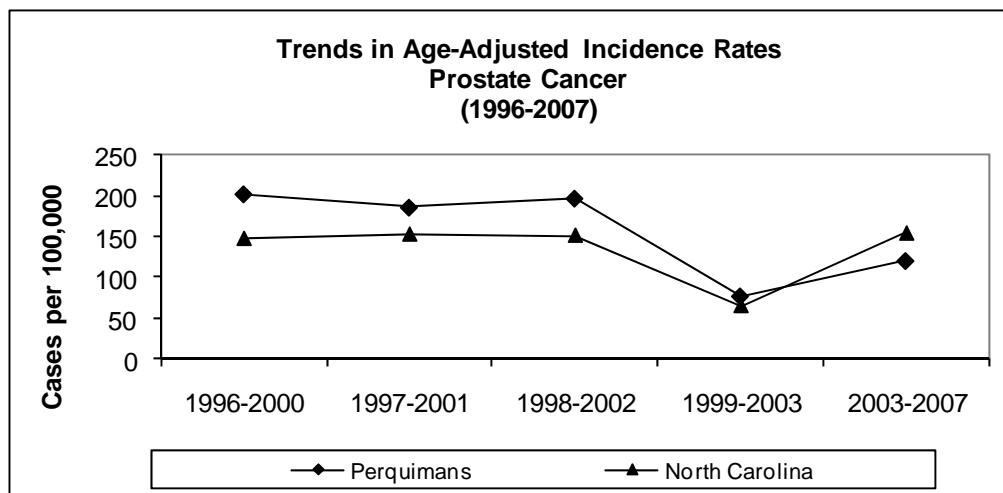
Prostate Cancer Incidence

Between 2003 and 2007, prostate cancer had the second-highest incidence rate of the four major cancers in Perquimans County (120.0), with 48 new cases diagnosed during the period cited (Table 49, cited previously). In 2008, \$57,181 was spent treating Perquimans County prostate cancer patients (51).

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

After several years of stability, the prostate cancer incidence rates in the state and the county dropped significantly between the 1998-2002 and 1999-2003 reporting periods (Figure 12). However, the rates increased again during the 2003-2007 reporting period, but not to the same levels that were seen in previous years. The prostate cancer incidence rate in Perquimans County (120.0) was 22.0% lower than the rate statewide (153.8) (Table 49, cited previously).

Figure 12



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

Prostate Cancer Mortality

Prostate cancer was the second leading cause of mortality among the four major cancers in Perquimans County for the period from 2004 through 2008 (55).

The overall 2004-2008 prostate cancer mortality rate in Perquimans County was higher than the comparable rates for the state as a whole (43.3 vs. 27.3) (Table 52). During that period, 16 males in Perquimans County died from prostate cancer.

The county rate for both white and minority males were higher than the state rates.

Table 52. Prostate Cancer Mortality (2004-2008)

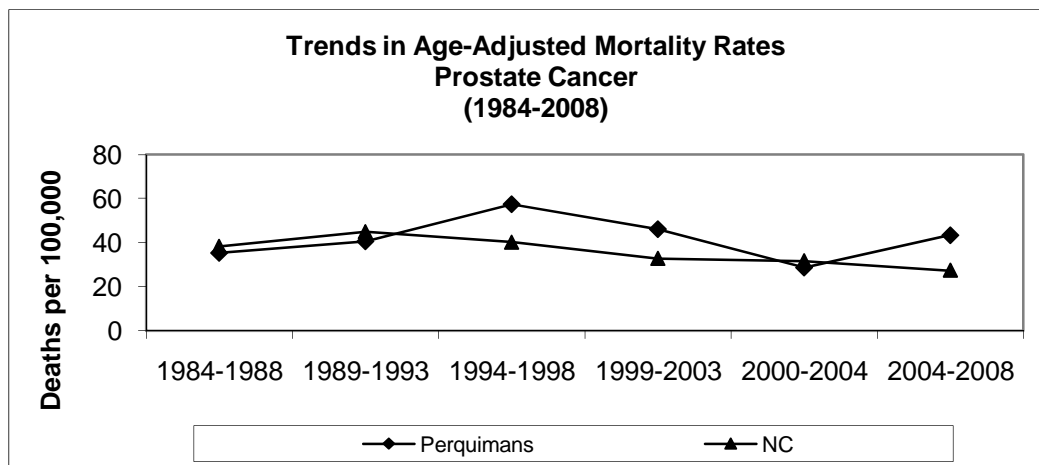
County	Overall		White Males		Minority Males	
	Number	Rate	Number	Rate	Number	Rate
Perquimans	16	43.3	7	24.4	9	120.5
State Total	4,314	27.3	2,855	21.8	1,459	56.3

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/>

The Healthy People 2010 prostate cancer goal is 28.8 deaths per 100,000 males (52), a rate Perquimans County exceeds by 33.5%. Nationally, prostate cancer has the second highest mortality rate among the four main cancers (54).

Since 1984, the prostate cancer mortality rate in the county has fluctuated, with the greatest drop between 1994 and 2004 (Figure 13). During the 2004-2008 reporting period rates increased in the county, but have steadily decreased in the state.

Figure 13

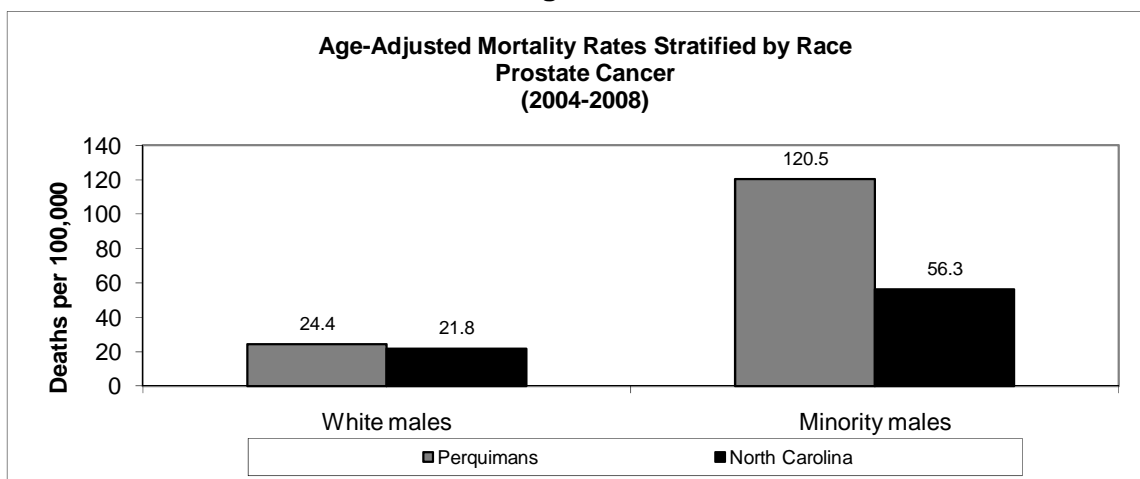


Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Racial Disparities in Prostate Cancer Mortality

Figure 14 compares 2004-2008 aggregate age-adjusted prostate cancer mortality rates for white males and minority males in Perquimans County and NC. Minority males die from prostate cancer at a rate 79.8% higher (120.5) than white males (24.4). At the state level the difference in prostate cancer mortality rates between white and minority males is less profound though the rate for minority males (56.3) is 61.3% greater than that for white males (21.8).

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>.

Prostate Cancer Risk Factors (50)

Risk factors for prostate cancer include:

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

A suspected risk factor is:

- High fat consumption

Colon and Rectal Cancer (Fourth leading cause of cancer death)

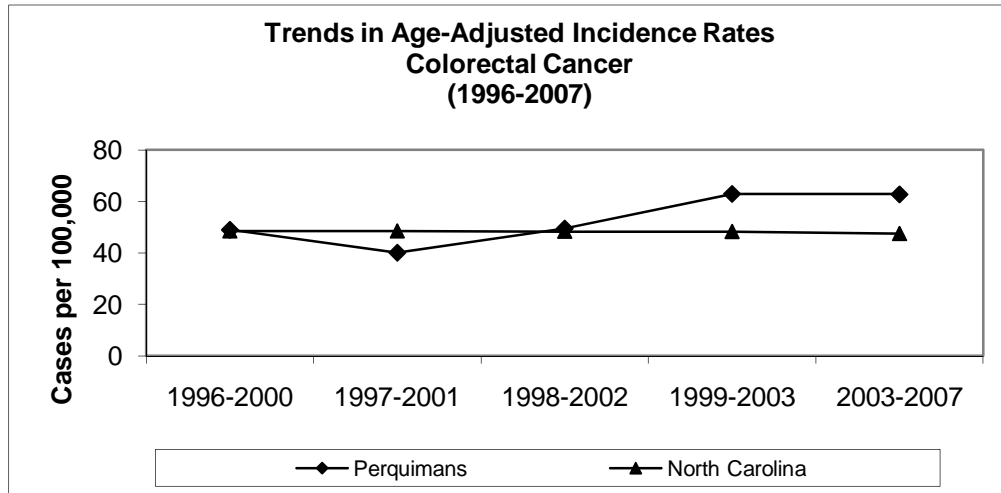
Colorectal Cancer Incidence

During the period from 2003 through 2007, cancers of the colon and rectum accounted for 56 new cancer diagnoses in Perquimans County and an associated incidence rate of 62.8, the third highest incidence rate among the four major cancers in the county (Table 49, cited previously). This rate was 24.5% higher than the incidence rate for the state (47.4). In 2008, hospital charges attributable to colorectal cancers among Perquimans County residents totaled over \$261,605 (51).

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

The Perquimans County colorectal cancer incidence rate has risen overall since 1996 (Figure 15).

Figure 15



Source: NC State Center for Health Statistics. Cancer. Annual Reports: NC Cancer Incidence Rates 1999-2003. Cancer Incidence Rates for All Counties by Specific Site (by five-year aggregate). Available at: <http://www.schs.state.nc.us/SCHS/CCR/reports.html>.

Colorectal Cancer Mortality

The overall colorectal cancer mortality rate in Perquimans County was virtually the same as the rate for the state as a whole for the period between 2004 and 2008 (Table 53). During this period, 14 people in Perquimans County died from colorectal cancer, representing an age-adjusted mortality rate of 17.1 per 100,000.

Table 53. Colorectal Cancer Mortality Rates (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	14	17.1	4	14.1	1	2.6	5	62.5	4	25.4
State Total	7,627	17.3	2,932	19.4	2,798	13.5	917	27	980	19.4

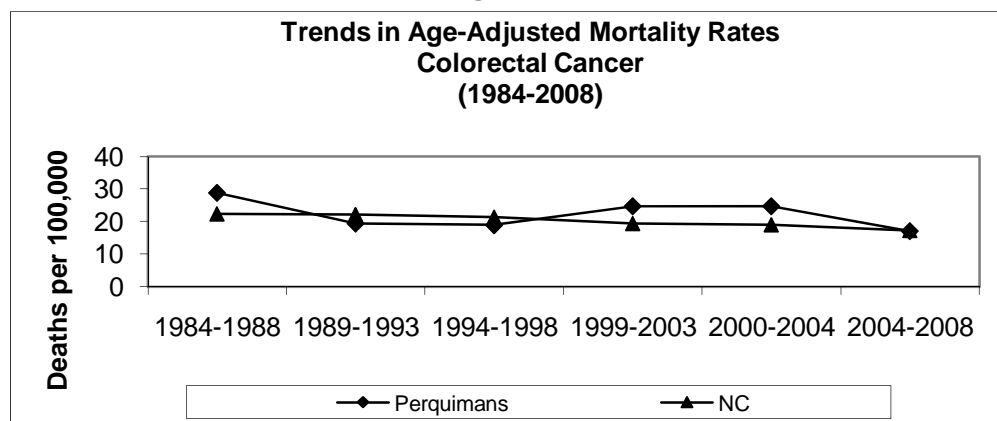
Source: NC State Center for Health Statistics, 2010 County Health Databook. <http://www.schs.state.nc.us/SCHS/healthstats/databook/>
2004-2008 NC Resident Race and Sex-Specific Age Adjusted Death Rates, Standard=Year 2000 Census Data

This local mortality rate was the fourth highest among the four major site-specific cancers in the county (53). Of the four major cancer types, colorectal cancer had the lowest national mortality rate: 17.1 per 100,000 in 2006 (56). The current mortality rate for Perquimans County is the same as the 2006 national mortality rate. Current mortality rates for NC are virtually the same as the national rate as well.

The Healthy Carolinians 2010 target rate for colorectal cancer mortality is 16.4 deaths per 100,000 (52), a rate Perquimans County currently exceeds by 4.1%.

The state colorectal mortality rate has shown an overall decline slightly since 1984, while the comparable Perquimans County rate has been more variable, but is currently at it's lowest level since the 1984 to 1988 reporting period. (Figure 16, following page).

Figure 16



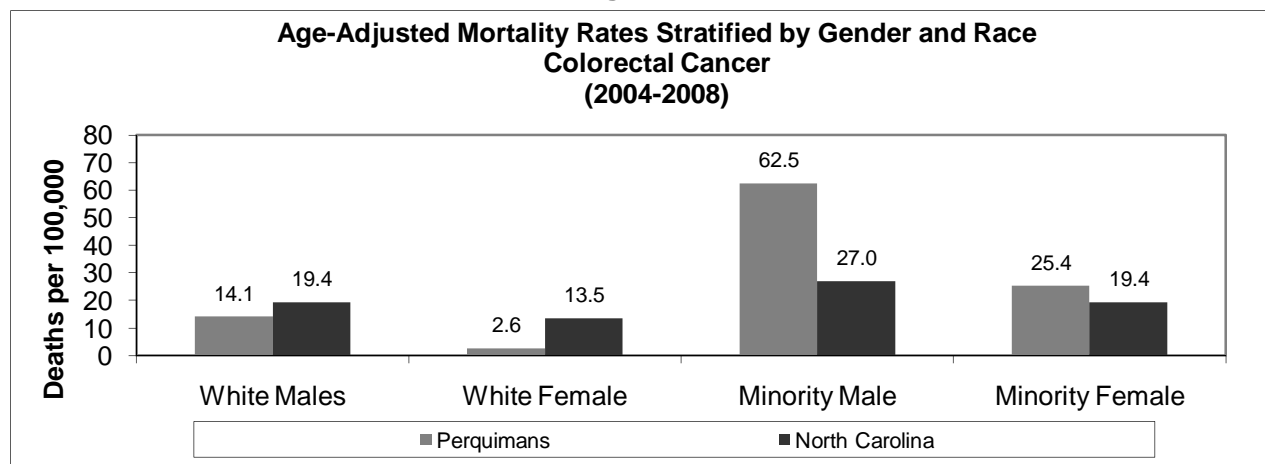
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Gender and Racial Disparities in Colorectal Cancer Mortality

Figure 17 compares aggregate age-adjusted mortality rates due to colorectal cancer for the period 2004-2008. In Perquimans County, the numbers of colorectal cancer deaths among whites 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, and the mortality rate for minority women is 30.4% higher than the rate for white women.

The statewide colorectal cancer mortality rate among white men was 30.4% higher than that for white women and the mortality rate among minority males was 28.1% higher than among minority females.

Figure 17



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

Colorectal Cancer Risk Factors (50)

Risk factors for colorectal cancer include:

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

Other suspected risk factors include:

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

Lung Cancer (Top leading cause of cancer death)

Lung Cancer Incidence

Between 2003 and 2007, 55 new cases of trachea, bronchus, and lung cancer were diagnosed in Perquimans County. The resulting aggregate incidence rate of 59.9 per 100,000 was fourth highest among the four major cancers and well below the incidence rate for the state (75.8) (Table 49, cited previously). In 2008, hospital charges for the treatment of lung cancer in Perquimans County residents totaled \$228,787 (51).

Since 1996, the Perquimans County lung cancer incidence rate has been below the state levels, although the rates increased during the 2003-2007 reporting period.

Lung Cancer Mortality

The 2004-2008 lung cancer mortality rate was lower in Perquimans County than the state rate (57.6 vs. 59.1). Nevertheless, **lung cancer had the highest mortality rate of the four major cancers in Perquimans County during this period**, when a total of 54 people died due to this cause (Table 54).

Table 54. Lung Cancer Mortality Rates (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	54	57.6	24	72.1	18	48.3	10	119.4	2	15.8
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

Nationally, lung cancer is the leading cause of cancer deaths, with a mortality rate of 51.7 per 100,000 in 2006 (53). Perquimans County's current lung cancer mortality rate exceeds the national rate by 6.11%. The Healthy People 2010 goal is to reduce the lung cancer mortality rate to 44.9 per 100,000 (54). Perquimans County currently exceeds this target rate by 22.0%.

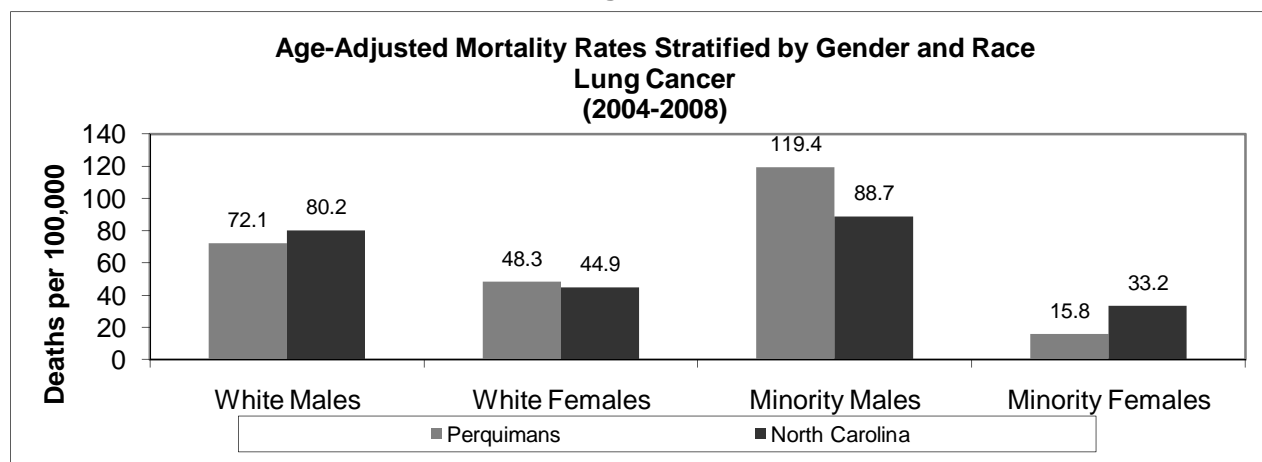
The lung cancer mortality rate in Perquimans County has fluctuated slightly, but has only shown a small overall increase between 1984 and 2008.

Gender and Racial Disparities in Lung Cancer Mortality

Figure 18 compares aggregate, age-adjusted mortality rates due to lung cancer for the period 2004-2008. In Perquimans County, the number of lung cancer deaths among minority females was below the threshold for meaningful mortality rate comparisons between race-sex groups. However, it is possible to compare mortality rates among white males and minority males where the rate for minority males exceeds that of white males by 39.6%. The rate for white males exceeds the rate for white females by 33.0%.

Statewide, the lung cancer mortality rate for white males exceeds the rate for minority males by 9.6%, and the rate for white females exceeds the rate for minority females by 26.1%.

Figure 18



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

Lung Cancer Risk Factors (50)

Risk factors for lung cancer include:

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

Chronic Lower Respiratory Disease (Fourth leading cause of death in Perquimans County)

Chronic Lower Respiratory Disease deaths for Perquimans County included emphysema, bronchitis, asthma, and chronic obstructive pulmonary disease. Although Chronic Lower Respiratory Disease is not listed specifically in Chronic Disease areas of focus for Healthy Carolinians of The Albemarle, priority areas do include smoking, which will raise awareness and provide education for these diseases.

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 (50). Around 1999, the NC SCHS 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 Perquimans County residents with CLRD totaled \$1,183,876 in 2004 (51).

CLRD Mortality

COPD/CLRD was the fourth leading cause of death in Perquimans County for the period 2004-2008 (Table 43, cited previously). Table 55 presents race-sex specific, age-adjusted mortality rates for COPD/CLRD in Perquimans County and NC. For the time period cited (2004-2008), the overall COPD/CLRD mortality rate in Perquimans County was 29.1, a figure 39.1% lower than the state rate (47.8).

Table 55. Chronic Lower Respiratory Disease Mortality, including COPD (2004-2008)

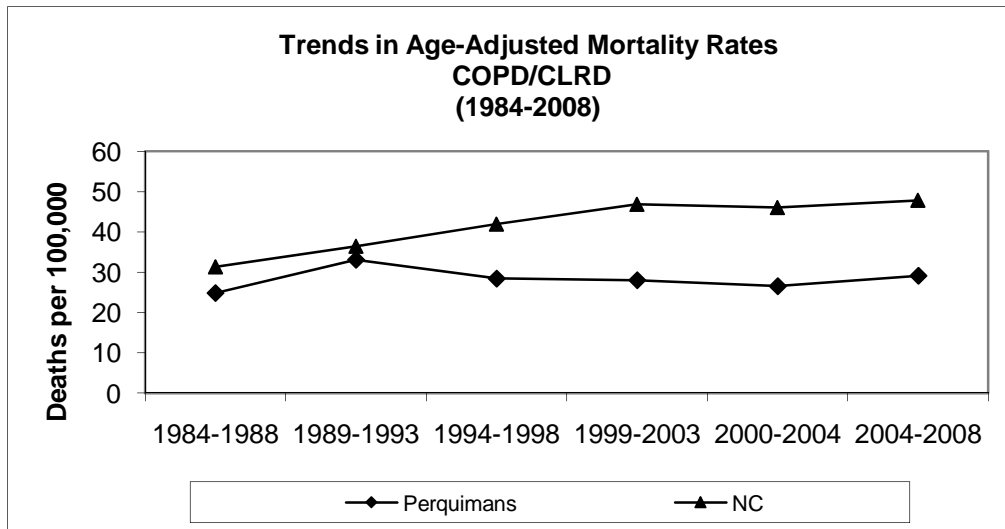
County	Overall Rate		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	28	29.1	14	44.7	10	23.8	3	35.5	1	7.7
State Total	20,522	47.8	8,590	61.1	9,577	46	1,352	46.5	1,003	20.3

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

The national mortality rate for CLRD was 40.5 in 2006, a rate lower than the state rate, but higher than that of the county.

As demonstrated in Figure 19, COPD/CLRD mortality rates have increased overall from 1984 to 2008 in the county and the state; throughout this period, the county rates consistently remained below state rates.

Figure 19



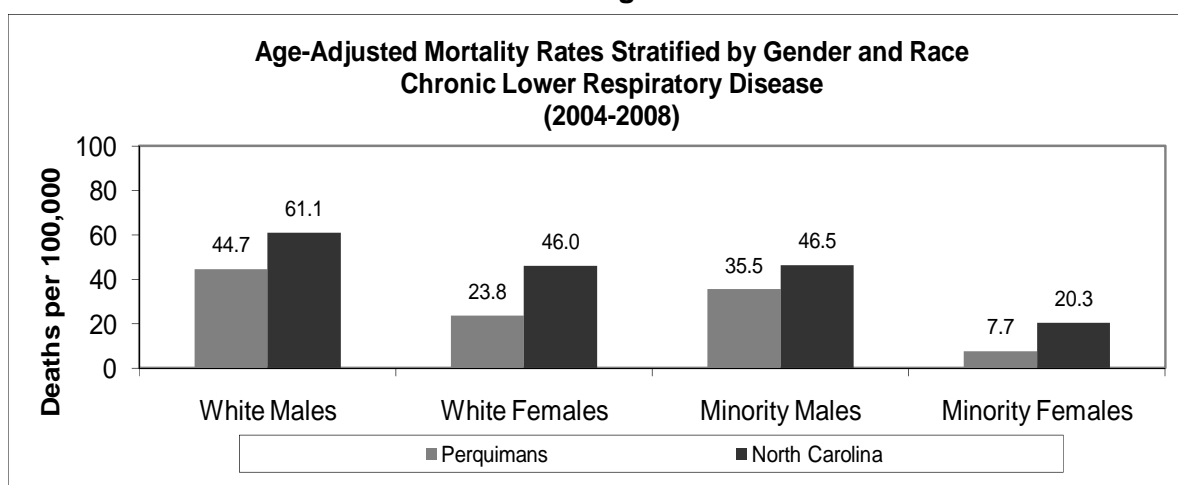
Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Gender and Racial Disparities in CLRD/COPD Mortality

Figure 20 graphs the data from Table 55, comparing age-adjusted mortality rates due to COPD/CLRD for 2004-2008 in order to highlight racial and gender disparities. In Perquimans County, the mortality rate for white women (23.8) was 46.8% lower than the rate for white men (44.7). Statewide, the mortality rate for white men was 46.8% higher than the rate for white women.

The numbers of COPD/CLRD deaths among minority women and minority men in Perquimans County 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 mortality rate for white women (46.0) was 55.9% higher than the rate for minority women (20.3). Also at the state level, the mortality among minority males was 56.3% greater than the rate among minority women.

Figure 20



Source: NC

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

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) (50).

Alzheimer's Disease (Fifth leading cause of death)

Alzheimer's disease is a progressive neurodegenerative disease affecting mental abilities including memory, cognition, and language. Alzheimer's disease is characterized by memory loss and dementia. The risk of developing Alzheimer's disease increases with age (e.g., almost half of those 85 years and older suffer from Alzheimer's Disease). Early-onset Alzheimer's has been shown to be genetic in origin, but a relationship between genetics and the late-onset form of the disease has not been demonstrated. No other definitive causes have been identified.

Alzheimer’s Disease Mortality

Alzheimer’s Disease is not an area of focus for Healthy Carolinians of the Albemarle. Support groups need to be researched and/or established, and educational materials or resource guides should be compiled for the caregivers of Alzheimer’s patients. Including Alzheimer’s in this CHA will bring awareness to this disease and the need for these resources in this community.

- Alzheimer’s Disease data has been recorded only in recent years, so trend data is not yet available. According to data aggregated between 2004 and 2008, there were 19 deaths attributable to Alzheimer’s Disease in Perquimans County where it was the fifth leading cause of death during that period (Table 43, cited previously).
- The mortality rate in Perquimans County (19.2) was 33.1% lower than the comparable state rate (28.7) (Table 56).
- During the Community Health Surveys, participants recognized Alzheimer’s as an “important health problem” for this county.
- An Alzheimer/Dementia Support Group for family members and caregivers is provided on the second Monday of the month at Hertford United Methodist Church (this was not mentioned during the workgroup).

Table 56. Alzheimer’s Disease Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	19	19.2	2	7.3	13	28.5	0	0	4	21
State Total	11,926	28.7	2,749	23	7,523	33.2	393	17.7	1,261	25.7

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

Table 57: Alzheimer’s Disease Deaths per 100,000 Population Age-Adjusted Rate

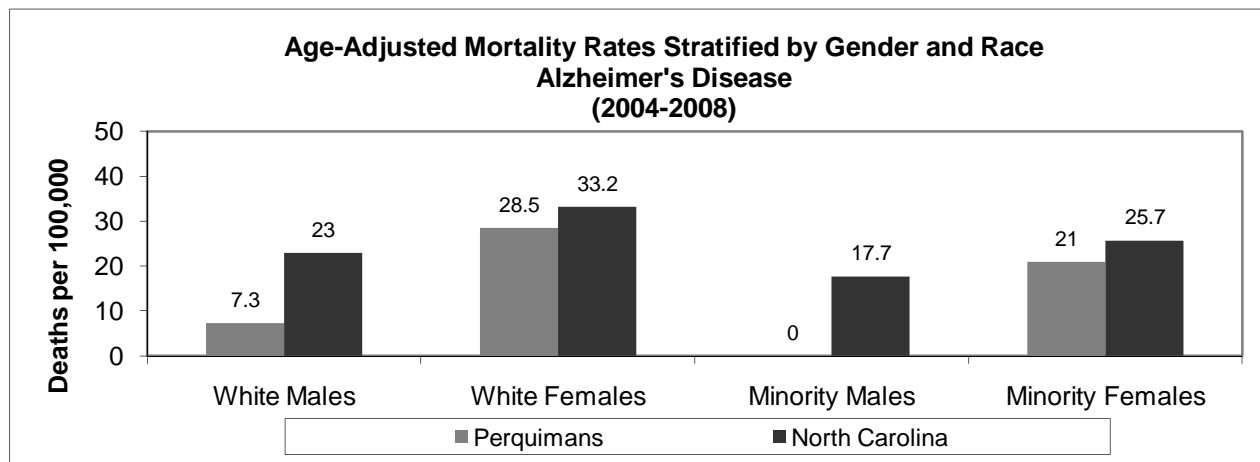
RESIDENCE		2005-09
North Carolina		28.3
<i>Perquimans</i>		19.0
PEERS	Chowan	10.9
	Jones	7.4
	Pamlico	15.0
	Swain	20.8

Gender and Racial Disparities in Alzheimer’s Disease Mortality

In Perquimans County, the number of deaths due to Alzheimer’s Disease for the period 2004 through 2008 were below the threshold to compute rates reliable for comparison in all groups except white

females. On the state level, gender disparities do exist. The mortality rate among white females (33.2) was 30.7% higher than the rate for white males (23.0). The rate among minority females (25.7) was 31.1% higher than the rate among minority males (17.7). There were also racial differences as the rate among white males was 23.0% higher than the rate among minority males. The rate among white females was 22.6% higher than the rate among minority females.

Figure 21



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>.

Perquimans County’s other causes of death exceeding the comparable state rate:

It was requested by participants in the CHA Data workgroup to include causes of death which exceed the state rate.

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 tenth leading cause of death in Perquimans County over the period from 2004 through 2008 (Table 43, cited previously).

Unintentional Motor Vehicle Injury Mortality

Between 2004 and 2008, there were 16 deaths due to motor vehicle injuries in Perquimans County, and the resulting mortality rate was 26.8 per 100,000 (Table 58). This overall rate was 30.6% higher than the overall state rate.

Table 58. Unintentional Motor Vehicle Injury Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	16	26.8	7	32.5	4	19.8	4	59.6	1	7.7
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 (52). Perquimans County needs to reduce its rate (26.8) by 41.0% to meet this goal. In the US in 2006, motor vehicle crashes were the ninth leading cause of death, with a mortality rate of 16.2. Perquimans 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 (54). Perquimans County must lower its rate by 34.0% to meet this goal.

The unintentional motor vehicle injury mortality rate in Perquimans County fluctuated between 1984 and 2008, with a peak in the 1994-1998 reporting period. Mortality due to motor vehicle injuries decreased slightly overall in the county from the beginning to the end of the period cited. In NC, the motor vehicle injury mortality rate has remained relatively stable.

According to the NC Highway Research Center, in 2008 there were 208 motor vehicle accidents in Perquimans County, resulting in 74 nonfatal injuries and 1 fatality (Table 59).

Frequently, motor vehicle crashes are associated with alcohol consumption. In 2008, 4.8% of Perquimans County motor vehicle crashes were associated with alcohol, a figure slightly higher than the comparable percentage statewide (Table 59). Alcohol was involved in 8.6% of all *nonfatal* motor vehicle crashes in the county. There were no alcohol related fatalities during 2008. In the state as a whole, 8.6% of all *nonfatal* motor vehicle crashes and 30.0% of all *fatal* motor vehicle accidents were alcohol-related.

Table 59. Motor Vehicle Injuries, 2008

	Crashes		Number of Injuries				Alcohol Related Crashes			No. DWI Charges	No. DWI Convictions	% DWI convictions
	Total Number	Number Alcohol Related	Non-Fatal	Fatal	Alcohol Related Non-Fatal	Alcohol Related Fatal	Percent of Total Crashes	Percent of Non-Fatal Crashes	Percent of Fatal Crashes			
Perquimans	208	10	74	1	6	0	4.8	8.6	0.0	31	23	74.2
State Total	209,318	11,920	112,387	1,450	9,267	431	5.7	8.6	30.0	59,513	40,506	55.7

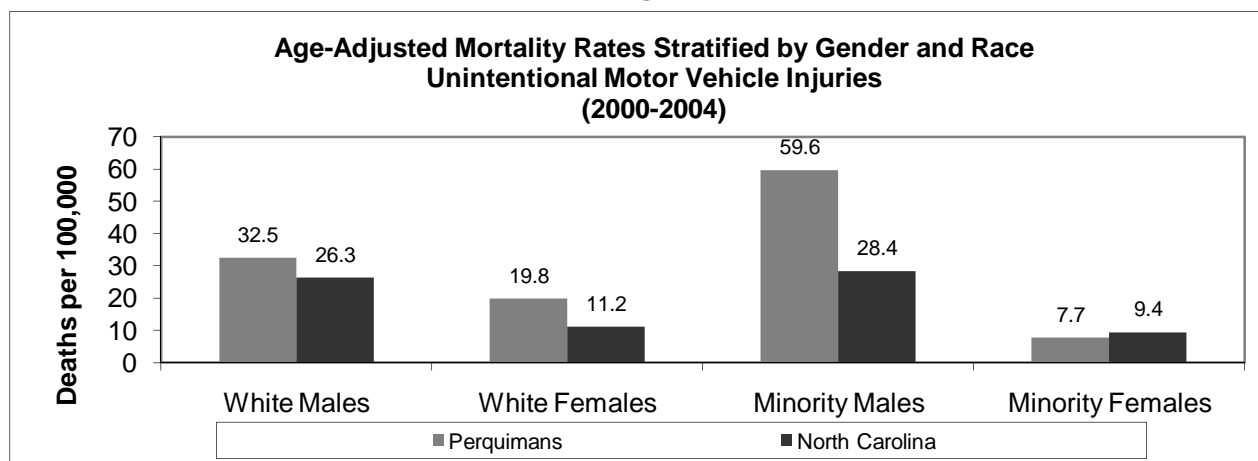
Source: Highway Safety Research Center, NC Alcohol Facts, <http://www.hsrec.unc.edu/ncaf>

Gender and Racial Disparities in Unintentional Motor Vehicle Injury Mortality

Figure 22 (following page) graphs data in order to highlight disparities in age-adjusted mortality rates due to motor vehicle injury in Perquimans County and NC for the period from 2004-2008. The number of motor vehicle deaths in Perquimans County was below the threshold for meaningful mortality rate comparisons between race-sex groups at the county level.

On the state level, racial disparities are not as dramatic as gender disparities. The mortality rate due to motor vehicle injury for white men (26.3) is 57.4% higher than the rate for white women (11.2). The mortality rate was 69.9% higher among minority men (28.4) than among minority women (9.4).

Figure 22



Source:

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

Unintentional Non-Motor Vehicle Injury

The NC SCHS distinguishes unintentional non-motor vehicle injuries from motor vehicle injuries when calculating mortality rates for unintentional injuries and ranking leading causes of death. Unintentional non-motor vehicle injuries are the sixth leading cause of death in the county (Table 43, cited previously). Unintentional injuries of all types are costly injuries and led to \$2,607,383 in hospital charges for Perquimans County residents in 2008 (55).

Unintentional Non-Motor Vehicle Injury Mortality

From 2004 through 2008, there were 18 deaths in Perquimans County due to unintentional non-motor vehicle injuries (e.g., boating accidents, falls, burns, animal bites, drowning, choking, etc.), resulting in a mortality rate of 23.3 deaths per 100,000 population (Table 60). That county mortality rate (23.3) was 18.0% lower than the state rate (28.4).

Unintentional non-motor vehicle injuries are the fifth leading cause of death nationwide. The 2006 national mortality rate was 40.6. The Healthy People 2010 goal is to reduce deaths due to unintentional injuries to no more than 17.5 per 100,000 (52). The current rate in Perquimans is 24.9% higher than this goal.

Table 60. Unintentional Non-Motor Vehicle Injury Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	18	23.3	9	36.9	7	17.3	1	11.3	1	15.7
State Total	12,435	28.4	6,082	39.6	4,276	22	1,341	31.2	736	13.8

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

Perquimans County mortality rates due to non-motor vehicle injuries peaked during the 1989-1993 reporting period and reached a low during the 1999-2003 reporting period. The mortality rate in the state was relatively stable.

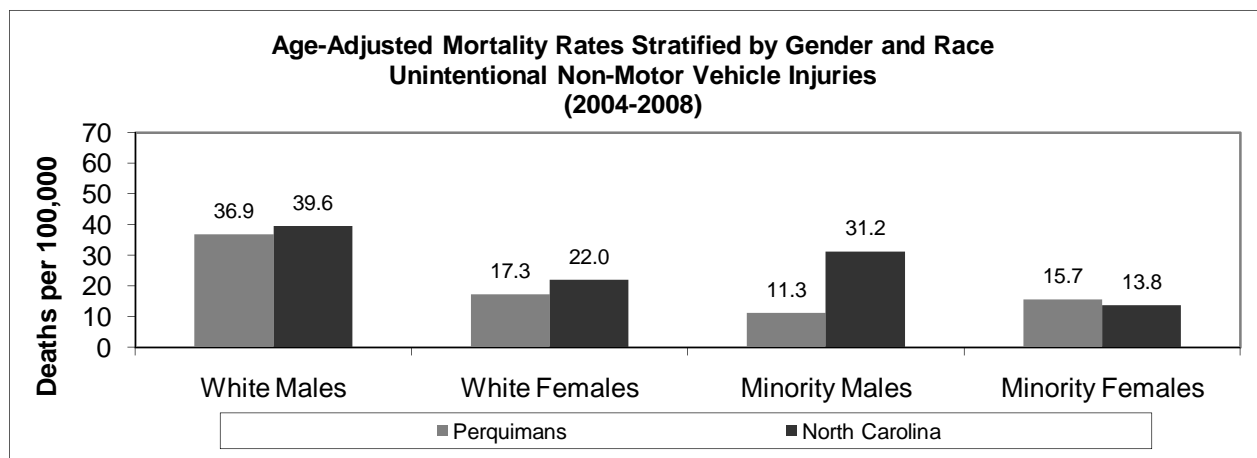
Gender and Racial Disparities in Unintentional Non-Motor Vehicle Injury Mortality

Figure 23 compares the 2004-2008 age adjusted mortality rates due to unintentional injuries among white males, minority males, white females, and minority females in Perquimans County and NC. In Perquimans County, the number of deaths due to unintentional non-motor vehicle injury was below the threshold in minorities, so reliable stratified race comparisons are not possible on the county level.

At the state level, significant gender disparities are apparent (Figure 23). The data show that the mortality rate for minority males (31.2) is more than twice the rate among minority females (13.8) and the mortality rate among white males (39.6) is 44.4% higher than the rate among white females (22.0), which is in contrast to the ratio seen amongst whites in Perquimans County.

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

Figure 23



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

Nephritis, Nephrosis, and Nephrotic Syndrome

Nephritis, nephrosis, and nephrotic syndrome are renal (kidney) disorders. Nephritis is any inflammation of the kidneys, while nephrotic syndrome (also known as nephrosis) is a kidney disease resulting from damage to the blood vessels that filter waste from the blood. These conditions can result from infections, drug exposure, malignancy, hereditary disorders, immune disorders, or diseases that affect multiple body systems (e.g. diabetes and lupus) (50). This complex of kidney disorders represented the ninth leading cause of death in Perquimans County for the period from 2004 to 2008 (Table 43, cited previously), and cost county residents \$47,247 in hospital charges in 2008 (51).

Kidney Disease Mortality

For the period from 2004 through 2008, there were 18 deaths due to kidney disease in Perquimans County, resulting in an age-adjusted mortality rate of 19.2 per 100,000, compared to a state rate of 18.8 (Table 61, following page).

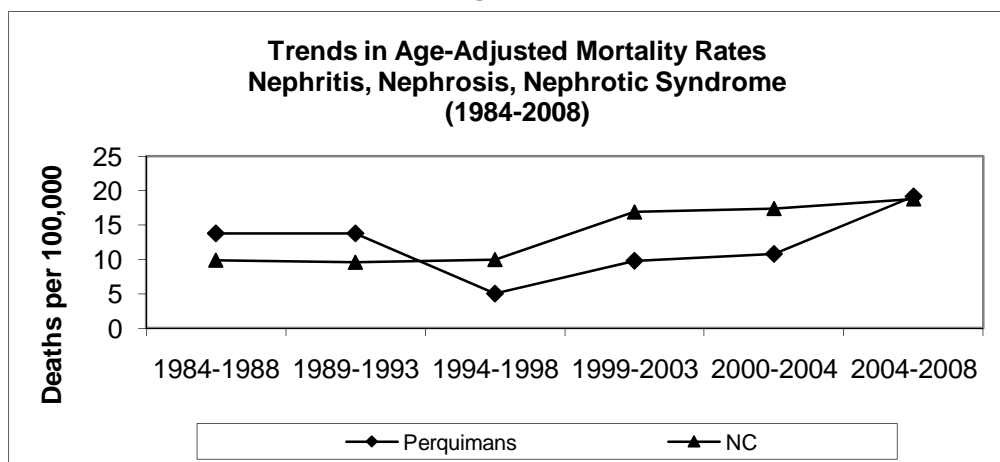
Table 61. Nephritis, Nephrosis and Nephrotic Syndrome Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	18	19.2	3	8.5	9	20.9	3	44.5	3	21
State Total	8,089	18.8	2,561	18.9	2,710	12.6	1,188	38.2	1,630	32.9

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

Mortality rates due to kidney disease increased overall in the state and in Perquimans County between 1984 and 2008 (Figure 24). A significant increase in state and county kidney disease mortality rates occurred after 1998. Data for the most recent five-year aggregate shows that the state mortality rates remain high but have leveled (Figure 24). The county mortality rates have shown a steady increase. Some portion of this increase noted between 1998 and 2003 may be an artifact due to the conversion from ICD-9 to ICD-10 coding protocols. Kidney disease is one parameter for which the ICD coding change makes a considerable difference (see discussion at the beginning of this chapter). If the 1999-2003 and 2000-2004 data points (ICD-10 coding) were converted to ICD-9 coding to match previous data points the recent apparent increase would not be as great.

Figure 24

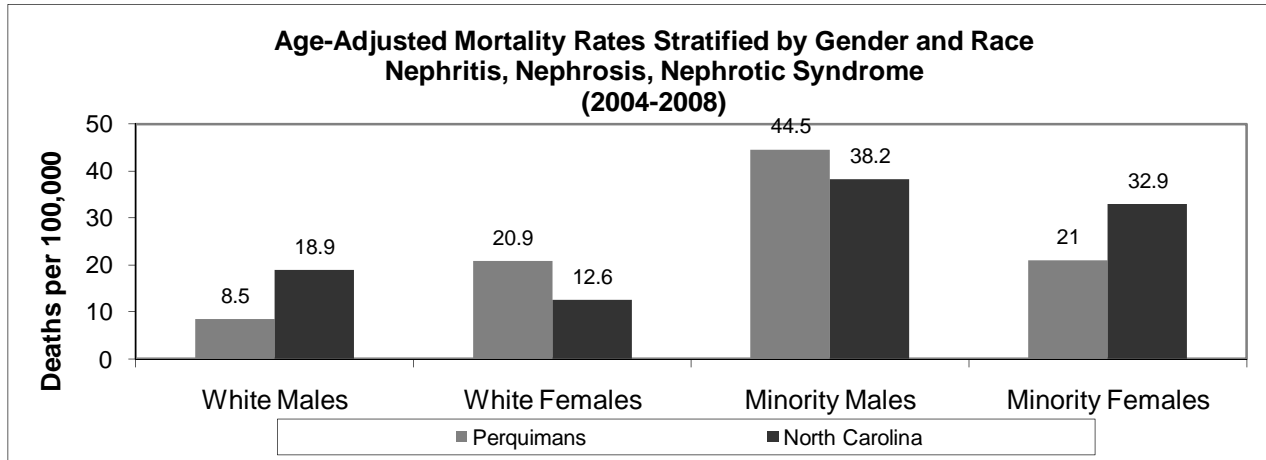


Source: NC State Center for Health Statistics. County-level Data. County Health Data Books. Various Years. Mortality. Race-Sex Specific Age-Adjusted Rates by County. <http://www.schs.state.nc.us/SCHS/data/databook>.

Gender and Racial Disparities in Kidney Disease Mortality

Gender and racial disparities could not be analyzed for Perquimans County as the numbers of deaths related to kidney disease were below the threshold for meaningful mortality rate comparisons in all of the race-sex groups. On the state level, however, the renal disease mortality rate was 33.3% higher among white males (18.9) than among white females (12.6) and 13.9% higher among minority males (38.2) than among minority females (32.9). Also statewide, the mortality rate among minority males in NC was 50.5% higher than that of white males and the mortality rate among minority females was 61.7% higher than that of white females (Figure 25, following page).

Figure 25



Source:

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

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 (50).

Chronic Liver Disease and Cirrhosis Mortality

For the period from 2004 through 2008, liver diseases composed the eleventh leading cause of death in Perquimans County (Table 43, cited previously). During this period, ten people died of chronic liver disease/cirrhosis in Perquimans County, resulting in a mortality rate of 11.3 deaths per 100,000 (Table 43, cited previously). The corresponding state rate was 9.1.

Table 62. Chronic Liver Disease and Cirrhosis Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	10	11.3	8	25.7	0	0	2	21	0	0
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

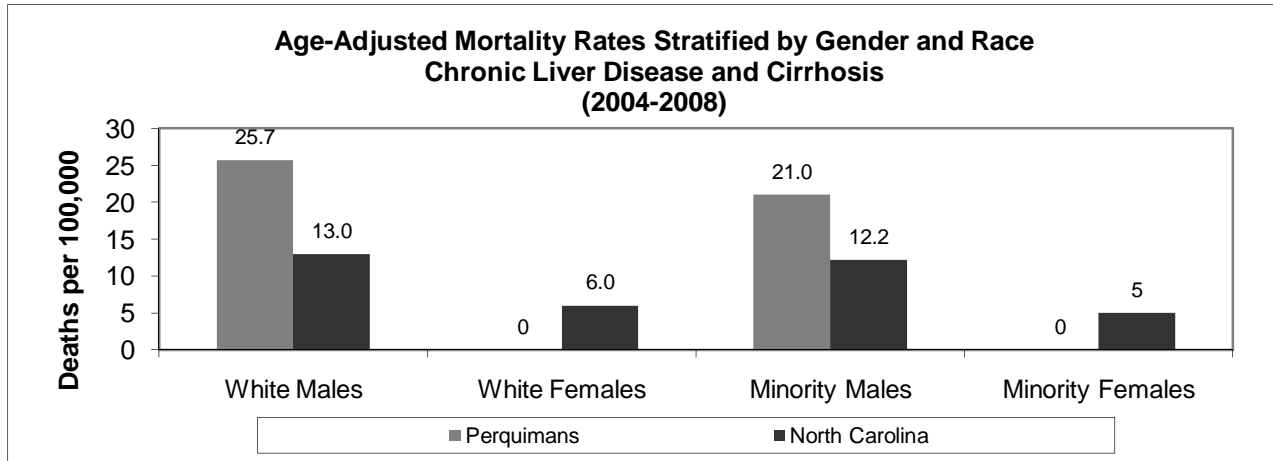
Since 1984, the mortality rate for chronic liver disease/cirrhosis has decreased overall in Perquimans County and in the state.

Gender and Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality

At the county level the numbers of chronic liver disease/cirrhosis deaths were below the threshold for meaningful mortality rate comparisons among all race-sex groups except white males. 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 (Figure 26).

Figure 26



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>.

Homicide

Homicide was the 13th leading cause of mortality in Perquimans County for the period 2004-2008 and was responsible for five deaths in that five-year aggregate (Table 43, cited previously). The county mortality rate for the 2004-2008 period was 9.0 deaths per 100,000 population, compared to a statewide rate of 7.2 (Table 63).

Table 63. Homicide Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	5	9	1	5.3	0	0	4	53.6	0	0
State Total	3,208	7.2	1,005	6	409	2.5	1,476	26.2	318	5.3

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

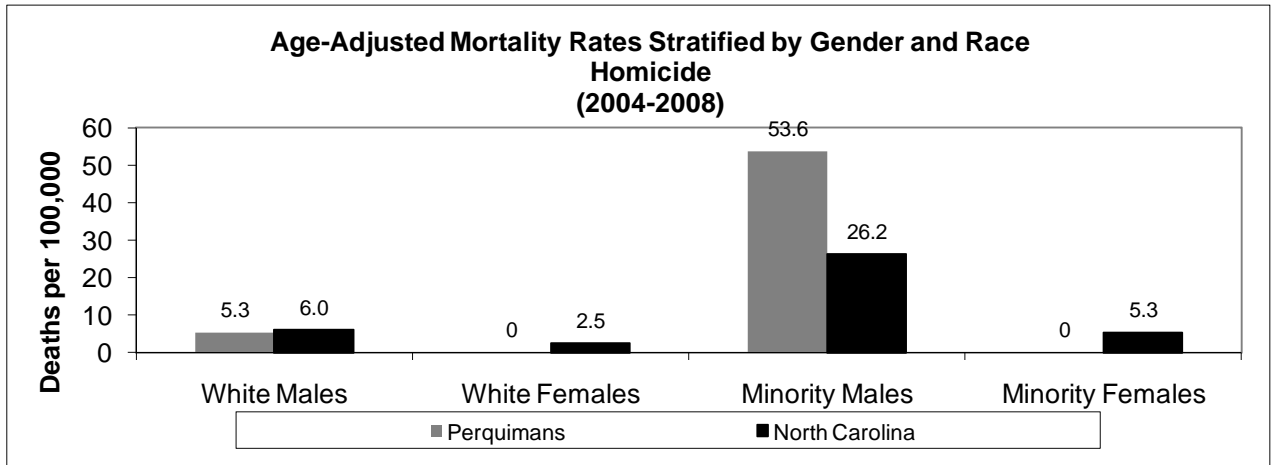
The Healthy Carolinians 2010 homicide rate goal is 5.0 per 100,000 (52). At the national level, homicide is the second leading cause of death for persons 15 to 24 years of age and the third leading cause of death for persons 10-14 and 25-34. Homicide is *the* leading cause of death for African-Americans in the 15-24 and 25-34 age ranges. The Healthy People 2010 goal is to reduce homicide rates to no more than 3.0 deaths per 100,000 (54).

The homicide rate in Perquimans County has fluctuated broadly between 1984 and 2008 (likely because of small and varying numbers of events), but has increased overall. The homicide rates for NC have been less volatile and have decreased slightly since 1984.

Gender and Racial Disparities in Homicide Mortality

During the 2004-2008 period, the number of homicide related deaths in Perquimans County were too few to calculate any meaningful mortality rates for comparison. At the state level, the homicide rate among minority males (26.2) was 77.1% higher than the rate for white males (6.0), and the rate among minority females (5.3) is 52.8% higher than the rate among white females (2.5) (Figure 27). The rate among minority males is 79.8% higher than the rate among minority females. The rate among white males is 58.3% higher than the rate among white females.

Figure 27



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

HIV/AIDS-see Communicable Diseases

Communicable Disease

Health professionals are required to report cases of certain communicable diseases to the NC DHHS through their local health department. Table 64 presents Perquimans County and NC average data for several important infectious diseases subject to this requirement.

Reportable Communicable Diseases

There were no cases of Hepatitis A, Hepatitis B, or Whooping Cough in Perquimans County between 2000 and 2005. There were three cases of Salmonellosis, but the incidence rate was unavailable (Table 64).

Table 64. Communicable Disease Incidence Rates (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
Perquimans	0	n/a	0	n/a	3	n/a	0	n/a	0	n/a
State Total	920	n/a	1,222	n/a	8,985	n/a	250	2.7	622	n/a
	a		a		a		b	b	a	

Sources:

a-NC Communicable Disease Information <http://www.epi.state.nc.us/epi/gcdc/pdf/CDbyDiseasebyYear2000-2005.pdf>

b-NC Tuberculous Control. <http://www.epi.state.nc.us/epi/gcdc/tb/ratebycounty.html>

Sexually Transmitted Diseases

Sexually Transmitted Disease awareness and education will remain an area of focus for the residents of Perquimans County. Targeted audiences include residents between the ages of 15-19 and 20-24, as the incidence rates for these age groups remains higher than any other age group for chlamydia and gonorrhea for NC as a whole in 2009. For HIV, the 20-24 year old age group had the highest incident rate with the 45-49 age group following for NC as a whole in 2009. African American males and females are targeted as they have a higher incidence rate for chlamydia, gonorrhea, syphilis, and HIV, for the state as a whole.

In 2008, the NC STD Surveillance Data System underwent extensive changes as NC implemented NC Electronic Disease Surveillance System (NC EDSS). During this transition, chlamydia and gonorrhea morbidity counts for some counties may have been affected. Report totals for 2009 should be considered with this in mind. Reports are summarized by the date received at the Communicable Disease Surveillance Unit rather than by date of diagnosis.

Table 65 provides incidence rates for the most prevalent STDs in Perquimans County, as well as HIV/AIDS.

Table 65. Sexually Transmitted Disease Incidence, Cases per 100,000 Population (Years as Noted)

County	Gonorrhea, 2004-2008				I° & II° Syphilis, 2004-2008				Chlamydia 2007 Total Rate	HIV 2007 Total Rate
	Total		Minority		Total		Minority			
	Number	Rate	Number	Rate	Number	Rate	Number	Total Rate		
Perquimans	105	169.0	83	502.4	1	1.6	1	6.1	364.8	8.1
State Total	79,172	178.4	62,494	552.9	1,384	3.1	934	8.3	345.6	21.9
Source	a	a	a	a	a	a	a	a	b	b

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

b- NC-CATCH <http://www.ncpublichealthcatch.com/ReportPortal/design/view.aspx>

North Carolina 2009 HIV/STD Surveillance Report. Communicable Disease Branch.
<http://www.epi.state.nc.us/epi/hiv/pdf/std09rpt.pdf>

Chlamydia

- Table 65, shows that the 2007 incidence rate for chlamydia was 364.8 per 100,000 in Perquimans County, a rate 5.3% higher than the state incidence rate (345.6).
- For NC, between 2005-2009 in the 20-24 year old age group, Chlamydia incidence rates exceed all other age groups, with the 15-19 year old age group following.
- From 2006-2008, Perquimans County's Chlamydia rates remained below the state level.

Gonorrhea

- According to Table 65, the 2004-2008 Perquimans County incidence rate for gonorrhea (169.0) was 5.3% lower than the state rate.
- The Healthy Carolinians 2010 goal for gonorrhea is 191 cases per 100,000 (52). The Healthy People 2010 target is approximately 19 cases per 100,000 (54).
- Gonorrhea incidence in Perquimans County is 11.5% lower than the Healthy Carolinians goal, but is 88.8% higher than the national goal.
- NC gonorrhea incidence rates between 2005-2009 in the 20-24 year old age group exceed all other age groups, with the 15-19 year old age group following.
- Minority populations are disproportionately burdened by gonorrhea. The 2004-2008 incidence rate for gonorrhea among minority Perquimans County residents (502.4) was 66.4% higher than the

overall Perquimans County gonorrhea incidence rate. At the state level the minority rate was 67.7% higher than the overall rate (Table 65).

- Trend data for gonorrhea indicates that since 1998, the incidence of gonorrhea has decreased overall in Perquimans County; statewide, gonorrhea incidence has decreased slightly.

Syphilis

- Primary and secondary syphilis are the communicable stages of the disease and as such are the cases that are reported. One new case of syphilis was reported for the period 2004-2008 in Perquimans County yielding a county incidence rate of 1.6 cases per 100,000 (Table 65).
- Statewide, the incidence rate was 3.1 cases per 100,000. The Perquimans County syphilis rate is above both the Healthy Carolinians goal of approximately 0.3 cases per 100,000 (52) and the Healthy People 2010 target of 0.2 cases per 100,000 (54).
- Aggregate data show that the syphilis incidence in the state has fallen since 1997. The local rates are low, however, and based on a very small number of events, they should be interpreted with caution.
- NC syphilis incidence rates between 2005-2009, in the 20-24 year old age group exceed all other age groups, with the 25-29 year old age group following.

HIV/AIDS

HIV/AIDS Incidence

- HIV disease case reports represent all new diagnoses with HIV regardless of the stage of the disease and is sometimes referred to as “HIV infection.” Cases are counted by the date of diagnosis for the initial HIV diagnosis. In NC, about one-fourth to one-third of the new HIV disease reports represent persons who are initially diagnosed with HIV infection and AIDS at or near the same time (concurrent).
- HIV disease cases diagnosed in prisons are not included in county totals.
- From 2005-2009, Perquimans County’s HIV rates have been lower than the state rate.
- Based on a three-year average (2007-2009), Perquimans County ranked 53 in the state for HIV disease cases.
- The 2007 HIV incidence rate in Perquimans County (8.1 cases per 100,000 population) was 63.0% lower than the state rate (21.9) (Table 65, cited previously).

Table 67. N.C. HIV Disease 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	1,600	1,642	1,807	1,782	1,710	18.5	18.6	20.0	19.3	18.5
Perquimans	2	1	0	2	2	17.0	8.3	0.0	15.6	15.6

North Carolina 2009 HIV/STD Surveillance Report. Communicable Disease Branch. <http://www.epi.state.nc.us/epi/hiv/pdf/std09rpt.pdf>

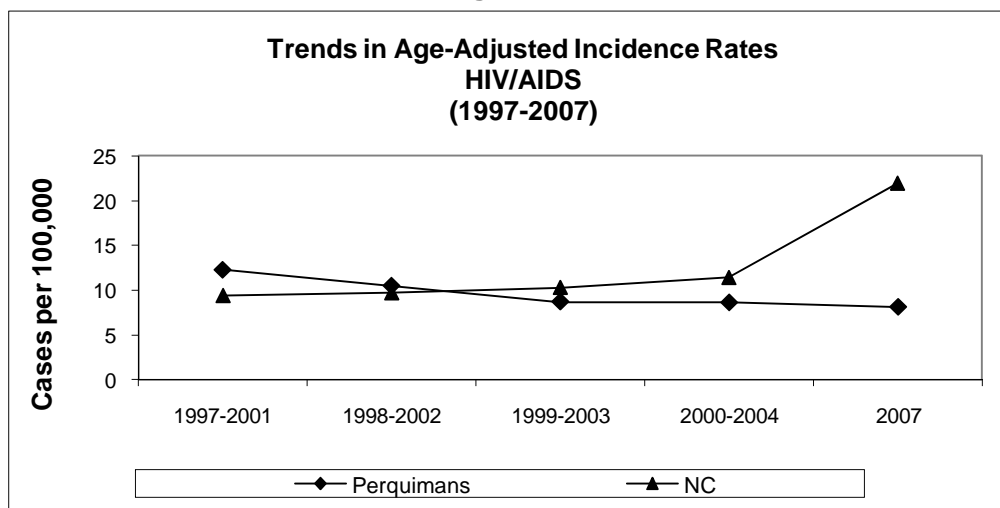
Table 67. N.C. HIV Disease Cases and County Comparison, 2005-2009

RESIDENCE	2005 Cases	2006 Cases	2007 Cases	2008 Cases	2009 Cases	2005 Rate	2006 Rate	2007 Rate	2008 Rate	2009 Rate
North Carolina	1,600	1,642	1,807	1,782	1,710	18.5	18.6	20.0	19.3	18.5
Perquimans	2	1	0	2	2	17.0	8.3	0.0	15.6	15.6

North Carolina 2009 HIV/STD Surveillance Report. Communicable Disease Branch. <http://www.epi.state.nc.us/epi/hiv/pdf/std09rpt.pdf>

- The HIV/AIDS rate was fairly constant between 1997 and 2004 (Figure 28). There was a significant increase between 2004 and 2007. The incidence rate in Perquimans County has been steadily decreasing since 1997, but the current county incidence rate still exceeds the target rate of approximately 1.5 new cases per 100,000 set by Healthy Carolinians 2010 (52).
- For the 2009 NC HIV cases (HIV or AIDS), rates for the 20-24 year old age group exceeds all other age groups, with the 45-49 age group following.

Figure 28



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

HIV/AIDS Mortality

As presented in Table 68, three deaths in Perquimans County were attributable to HIV/AIDS over the period from 2004 through 2008. While the county mortality rate computed on the basis of these deaths were slightly higher than the state HIV/AIDS mortality rate, the local rate is likely unstable and should be interpreted with caution.

Table 68. HIV/AIDS Mortality (2004-2008)

County	Overall		White Males		White Females		Minority Males		Minority Females	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Perquimans	3	5	0	0	0	0	1	11.3	2	23.5
State Total	1,982	4.4	357	2.1	74	0.5	1,013	20.3	538	9.3

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

Table 69. 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
Perquimans	1	1	1	0	2	8.5	8.3	8.0	0.0	15.6

North Carolina 2009 HIV/STD Surveillance Report. Communicable Disease Branch. <http://www.epi.state.nc.us/epi/hiv/pdf/std09rpt.pdf>.

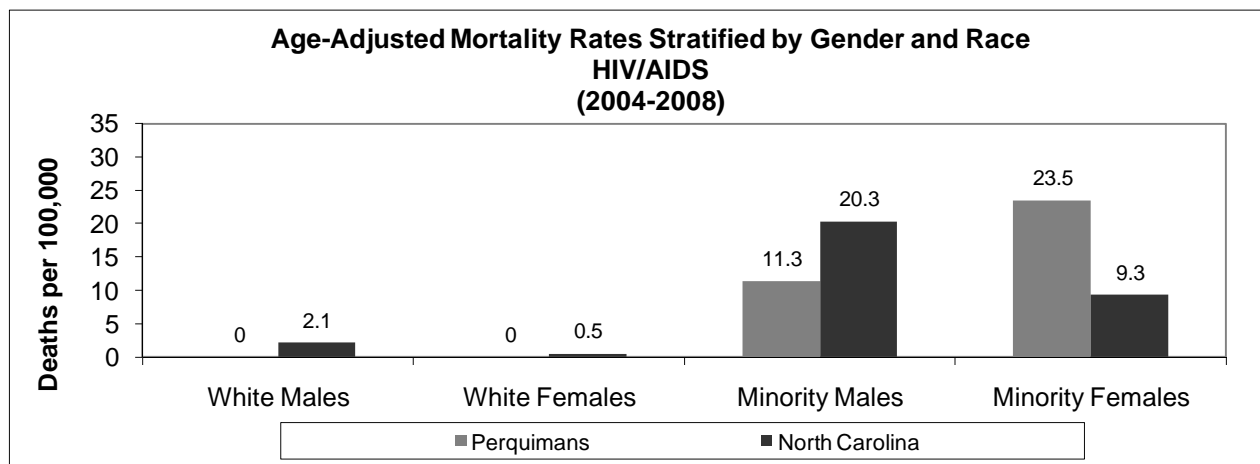
- AIDS case reports represent only persons with HIV infection who have progressed to this later, more life threatening stage of disease. AIDS cases are counted by the date of AIDS diagnosis.

Regional and statewide HIV/AIDS mortality rates rose dramatically between the discovery of the disease in the early 1980s and 1994-1998. Since then, both the state and regional rates have decreased. The county HIV/AIDS mortality rate was more volatile over the period cited, likely due to small and varying numbers of annual events.

Gender and Racial Disparities in HIV/AIDS Mortality

Minority males are disproportionately affected by HIV/AIDS in the state as a whole, with a mortality rate of 20.3 per 100,000 which is 89.7% higher than the rate for white males (2.1) (Figure 29).

Figure 29



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

Maternal and Child Health

Adult and Teen Pregnancy and Birth Rates

- The average number of live births for all counties in NC increased every year between 2002 and 2007, and remained fairly stable between 2007 and 2008. This is significantly higher than the comparable Perquimans County average throughout the reporting period.
- 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 Perquimans County for the period from 2005 to 2007 was 79.6 which was 5.1% lower than the average NC county pregnancy rate of 83.9 (Table 70).
- In Perquimans County between 2005 and 2007, 30.5% of all live births occurred among minority mothers. Of the Perquimans County live births among girls ages 15-19, 50.0% occurred among minority mothers. These local percentages are higher than the state averages.
- In 2006, Perquimans County had a 27.1% higher percentage of births to Medicaid mothers than the state (71.1% vs. 51.8%).
- In 2006, Perquimans County had 28.8% more births to health department mothers when compared with the NC County average. There were 38.5% more births to WIC mothers than the NC county average.

Table 70. 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 ⁶	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			
Perquimans	79.6	64.1	30.5	8.4	17.5	13.3	79.9	61.3	50.0	7.6	27.3	10.6	71.1	27.3	55.4
NC County Avg.	83.9	68.2	27.8	9.2	17.3	11.5	62.6	47.9	40.0	11.2	29.9	14.6	51.8	21.2	40.0
	a	a	a	a	a	a	b	b	b	b	b	b	c	c	c

* Calculated Value

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

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

3--Based on race of mother.

4--5 lbs 8 ozs or less.

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

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

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

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

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

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

- According to more recent data from the NC SCHS, the overall pregnancy rate in Perquimans County in 2008 for women ages 15-44 was 67.4, compared to a state rate of 83.9. Among white women in this age group the county pregnancy rate was 64.6 (NC=78.6); among minority women the county rate was 72.8 (NC=91.2). Among teens aged 15-19, the overall 2008 pregnancy rate was 56.3 compared to a rate of 58.6 statewide. Among white teens, the county rate was 33.6 (NC=47.8); among minority teens the pregnancy rate was 109.4 (NC=77.7) (58).

Adolescent Pregnancies and Births

- Because of very small numbers of pregnancies, a pregnancy *rate* for adolescents 10-14 years of age has not been calculated for Perquimans County.
- During the period from 2005 through 2008 there were a total of two pregnancies among 10-14 year-olds in Perquimans County, both occurring in 2006 (58).

Table 71. Perquimans County Adolescent Pregnancies (Ages 10-14)

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

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

Abortion

- For women between the ages of 15 and 44, the most recently calculated abortion rate in Perquimans County (2008) was 12.6; a number below the overall state abortion rate of 14.4 (58).
- According to data, the annual abortion rates for Perquimans County women ages 15-44 have fluctuated since 2003 and have shown a decrease since 2005. NC abortion rates have fluctuated less dramatically, but are higher than Perquimans County.
- For teenagers between the ages of 15 and 19, the 2008 abortion rate in Perquimans County was 14.1, which is higher than the statewide teen abortion rate of 12.5 (58).
- Teen abortion rates also fluctuated in Perquimans County and the state during the reporting period. The state and the regional rates have shown an overall decrease, but county rates have shown an overall increase.

Pregnancy Risk Factors

From Table 72:

- The percentage of high parity births among women aged <30 in Perquimans County from 2000-2004 was only 3.3% lower than the comparable state rate. 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 Perquimans County women age 30 and older was 6% lower than the state rate.
- The percentage of short interval births (less than six months between pregnancies) was 16.5% lower in Perquimans County than statewide.
- Between 2004 and 2008, 13.2% of babies in Perquimans County were born to mothers who smoked a proportion 12.9% higher than the state percentage of 11.5%.

Table 72. 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				
Perquimans	86	17.4	30	18.8	46	10.6	86	13.2
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

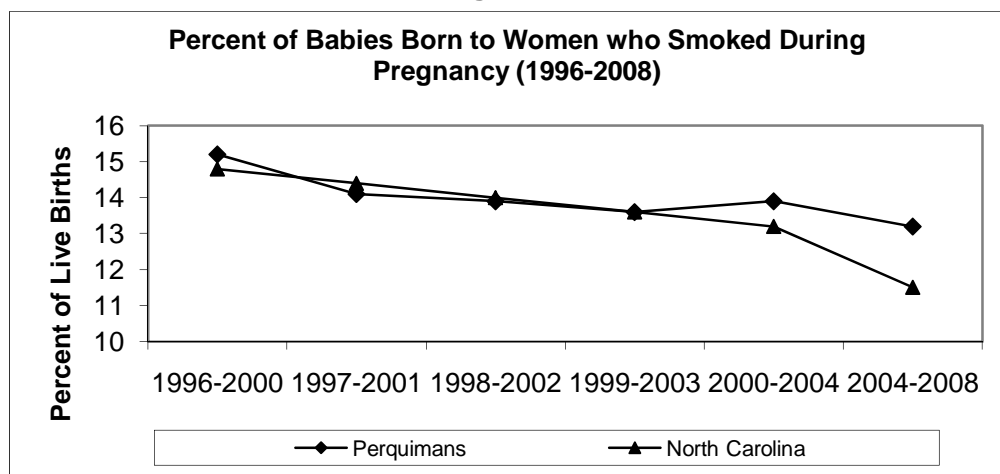
a - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2006 County Health Data Book. 2004-2008 Number At Risk NC Live Births due to High Parity by County of Residence. <http://www.schs.state.nc.us/SCHS/data/databook/>

b - NC State Center for Health Statistics. County-level Data. County Health Databooks. 2006 County Health Data Book. 2004-2008 NC Live Births by County of Residence; Number with Interval from Last Delivery to Conception of Six Months or Less. <http://www.schs.state.nc.us/SCHS/data/databook/>

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

- The percentage of babies born to Perquimans County mothers who smoked decreased overall between 1998 and 2008, but remains above the comparable figure for the state as a whole (Figure 30).

Figure 30



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

- Almost 82.5% of pregnant women in Perquimans County received prenatal care in the first trimester in 2004-2008, a proportion just slightly higher than the state rate of 82.1% (Table 73, following page).
- A lower percentage of black women received prenatal care in the first trimester in Perquimans County than NC as a whole (72.8% vs. 75.0%). The percentage of black Perquimans County women who received prenatal care in the first trimester was approximately 11.8% lower than the comparable percentage for Perquimans County women overall (Table 73).

Table 73. Women Receiving Prenatal Care in the First Trimester (1997-2004)

	1997-2001		1998-2002		1999-2003		2000-2004		2004-2008	
	Total	Black	Total	Black	Total	Black	Total	Black	Total	Black
Perquimans	82	72.4	82	71.8	81	67	81.3	69.3	82.5	72.8
State Total	84.0	74.7	84.0	75.1	84.0	75.4	83.7	75.4	82.1	75.0

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

Pregnancy Outcomes

Low Birth Weight and Very Low Birth Weight

- For 2004-2008, the total percentage of low birth weight births (below 2500 grams or 5.5 pounds) was slightly higher in Perquimans County than in NC as whole (9.3% vs. 9.1%). The percentage of white low birth weight babies in Perquimans County was slightly higher than the comparable state rate (7.6% vs. 7.4%) (Table 74, following page).
- The percent of low birth weight babies was slightly lower among minorities in Perquimans County than among minorities statewide (13.1% vs. 13.6%), and 42% higher than among whites in Perquimans County.
- The overall percentage of very low birth weight births in Perquimans County was higher than the state rate, but the percentage of very low birth weight births among black residents of the county was 12.5% higher than the comparable state average.

Table 74. 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
Perquimans	61	9.3	34	7.6	27	13.1	15	2.3	8	4
State Total	57,823	9.1	33,941	7.4	23,882	13.6	11,649	1.8	5,198	3.5
Source	a	a	a	a	a	a	b	b	c	c

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

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

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

- Since 1996, the percentage of low weight births has increased overall in Perquimans County, but remained relatively stable in NC. Currently the county and state rates are virtually the same.

Infant Mortality

According to Table 75:

- For 2004-2008, the total Perquimans County infant mortality rate (13.8) was 39.1% higher than the statewide infant mortality rate (8.4).
- In 2008 alone, there were three infant deaths in Perquimans County, resulting in an overall infant mortality rate of 22.2. Due to the small number of events, this rate may be unstable.
- Statewide, the overall infant mortality rate in 2008 was 8.2; among minorities statewide the infant mortality rate was 13.5, twice the rate for whites statewide (6.0).

Table 75. Infant (<1 year) Death Rate per 1,000 Live Births (1999-2008)

County	1999-2003			2000-2004			2004-2008			2008					
	Total	White	Minority	Total	White	Minority	Total	White	Minority	White Infant Deaths	White Infant Death Rate	Minority Infant Deaths	Minority Infant Death Rate	Total Infant Deaths	Total Infant Death Rate
	Perquimans	14.9	10.0	24.8	18.4	10.2	33.7	13.8	11.2	19.4	3	30.9	0	0.0	3
State	8.7	6.3	14.9	8.5	6.2	14.4	8.4	6.2	14.3	558	6.0	508	13.5	1,066	8.2
NC County Avg.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5.6	n/a	5.1	n/a	10.7	n/a

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

Due to funding and lack of resources, Healthy Carolinians of the Albemarle has chosen not include Low Birth Weight Babies, Very Low Birth Weight Babies, and Infant Mortality as a focus area. However, several priorities chosen, including smoking, poor eating habits, and lack of exercise, are risk factors for the above mentioned. By concentrating on the priorities listed above, the risks associated with LBW and VLBW babies, and infant mortality can be reduced.

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 5th grade schoolchildren. Dental hygienists use a standardized technique to measure the prevalence of decayed and filled teeth among these children. Table 76 presents the results of the 2008-2009 screenings in Perquimans County and in NC.

Compared to NC county averages in 2008-2009 (Table 76):

- A higher proportion of kindergarteners and 5th graders were screened in Perquimans County.
- Perquimans County kindergarteners had a higher prevalence of untreated decay, a lower average number of decayed, missing, and filled teeth per child (DMFT) and a higher average number of decayed teeth (DT) per child.
- Perquimans County 5th 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.

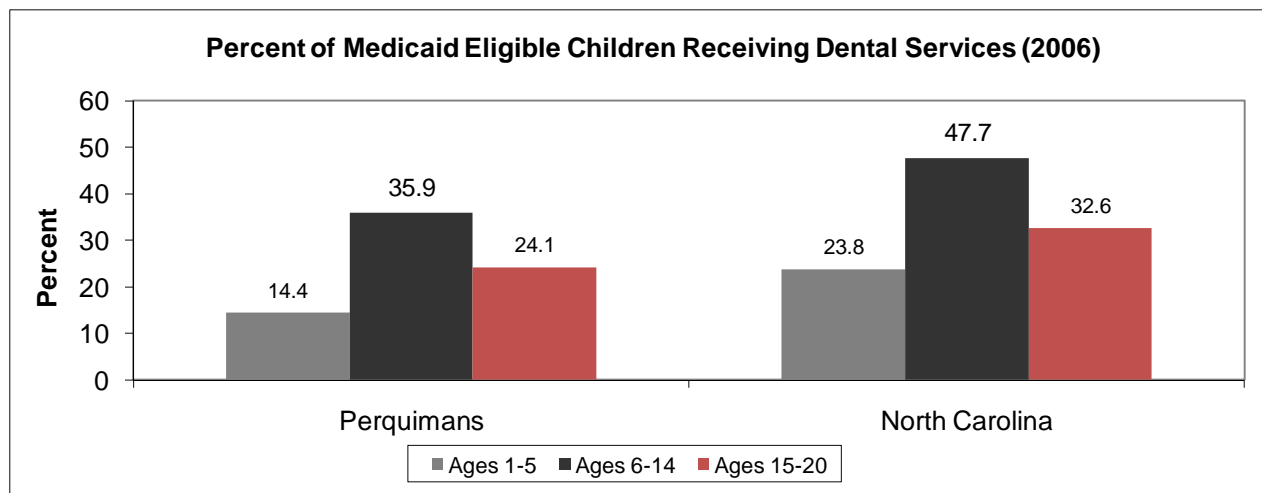
Table 76. Child Oral Health Screening Results (2008-2009)

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		Kindergarten	5th Grade	Kindergarten	5th Grade	Ages 0-5	Ages 6-14	Ages 15-20
Perquimans	95	97			26	2.0	39.0	1.33	0.29	0.73	0.04	14.4	35.9	24.1
North Carolina	83 ^a	77 ^a			17 ^a	4 ^a	44 ^a	1.50 ^a	0.56 ^a	0.47 ^a	0.05 ^a	23.8 ^b	47.7 ^b	32.6 ^b

Sources: a-NC DHHS Oral Health Section. County Level Oral Health Status Data. http://www.communityhealth.dhhs.state.nc.us/dental/asses_2.htm
 b-Annie E. Kasey Foundation. Kids County Data Center. <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>

- Compared to NC averages, a smaller percentage of Perquimans Medicaid eligible youth of all ages received dental services in 2006 (Figure 31).

Figure 31



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

Adult Oral Health

- Perquimans County residents are surveyed about their dental health status and dental health behaviors in the state's annual Behavioral Risk Factor Surveillance System (BRFSS) Survey as part of the nine-county North East Region II sample. However, the small number of participants (n=479 in 2004 and n=510 in 2005) across the sample of which the county is a part yields data too limited to interpolate reliably to a single county, so it is not presented here.
- Adult dental health issues were assayed in the 2010 Perquimans County Community Health Survey, and those results are presented in Chapter Four of this report.

- It was mentioned several times during the workgroup; “Do people really understand how dental hygiene affects someone’s overall health?” “Is it really deemed important?” The majority agreed with these statements.
- There is a Dental Clinic housed at Camden County Health Department and a Mobile Dental Unit available in Chowan County. Chowan’s Dental Unit is open all day on Wednesday. Camden’s clinic is open on Tuesday and Thursday afternoons. Dr. Regis Dandar sees children birth through 12th grade. Criteria include any parental concerns, lack of dental home, and obvious dental need. Fees are based on income; sliding fee scale is used. Medicaid, Health Choice, and insurance are billed. Perquimans County residents may access services from either of these counties. These services were not mentioned during the workgroup.
- Fifty eight percent of survey respondents had visited a dentist within the past 12 months.

Mental Health and Substance Abuse

Table 77 presents data on utilization of mental health, developmental disability, and substance abuse services (MH/DD/SAS) by Perquimans County residents. Between 2008 and 2009, the number of Perquimans County residents served by state mental retardation centers increased while the number served by substance abuse treatment centers and state psychiatric hospitals decreased by 50% each, and also decreased significantly statewide.

The number of people served by the MH/DD/SAS local management entity/area programs in Perquimans County has increased overall between 2006 and 2009 (Table 77).

Table 77. Utilization of 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
Perquimans	0	3	12	6	18	9	401	374	406	416
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 78 (following page) are out of date, they present interesting historical information on hospitalizations of Perquimans County residents for mental disorders and substance abuse. For the period in question (1996-1998), lower *numbers* of Perquimans County residents were hospitalized for either problem compared to the Albemarle Region and the average NC county. These numbers compute to *rates* for hospital utilization for mental disorders that were higher in Perquimans than in the region. During the three-year aggregate period 1996-1998, 655 Perquimans County residents were hospitalized for mental health disorders and 274 were hospitalized for alcohol and drug abuse.

Table 78. 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
Perquimans	655	200.6	274	83.9
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 University Health Systems of Eastern North Carolina on behalf of Bertie Memorial Hospital and Chowan Hospital, tracks emergency department utilization by patients with substance abuse diagnoses for the period from 2002 through 2005 (60). These data represent *principal* diagnoses (not admitting diagnoses) and include alcohol abuse, tobacco use disorder, cannabis abuse, opioid abuse, cocaine abuse, amphetamine abuse, and non-specific drug abuse.

According to the data in Table 79, the number of emergency department admissions for substance abuse diagnoses have increased overall between 2002 and 2005.

Table 79. Emergency Department Utilization, Substance Abuse Diagnoses, Bertie Memorial and Chowan Hospitals (2002-2005)

Hospital	Number of Emergency Department Admissions				
	2002	2003	2004	2005	Total
Bertie Memorial Hospital	13	15	12	21	61
Chowan Hospital	26	22	31	40	119

Source: University Health Systems of Eastern North Carolina. Emergency Department admissions at Bertie Memorial Hospital and Chowan Hospital, 2002-2005

The majority of the substance abuse diagnosis at each location over the four year period cited were alcohol abuse, accounting for 59% of all substance abuse diagnoses (38 of 61) at Bertie Memorial Hospital and 71% (84 of 119 diagnoses) at Chowan Hospital. The second most frequent substance abuse diagnoses at both hospitals was cocaine abuse, accounting for 20% of the total at Bertie Memorial Hospital (12 of 61) and 14% of the total at Chowan Hospital (17 of 119) (60).

Further examination of the data provided by University Health Systems reveals some interesting information about the patients whose diagnoses are summarized below (Table 80, following page).

- The largest percentage of substance abuse diagnoses at Bertie Memorial Hospital occurred in the 25-34 age group; the largest percentage at Chowan Hospital occurred in the 35-44 age group.
- The smallest percentage of substance abuse diagnoses at Bertie Memorial Hospital occurred in the youngest age group (0-17); the smallest percentage at Chowan Hospital occurred in the oldest age group (65 and older).

Table 80. Emergency Department Substance Abuse Diagnoses, Bertie Memorial and Chowan Hospitals, by Age, Race and Gender (2002-2005)

Location	Total Diagnoses #	Diagnoses, by Age Category											
		0-17		18-34		35-44		45-54		55-64		65 and older	
		#	%	#	%	#	%	#	%	#	%	#	%
Bertie Memorial Hospital	61	2	3.0	13	21.3	16	26.2	17	27.9	6	9.8	7	11.5
Chowan Hospital	119	11	9.2	31	26.1	38	31.9	22	18.5	15	12.6	2	1.7

Source: University Health Systems of Eastern North Carolina. Emergency Department admissions at Bertie Memorial Hospital and Chowan Hospital, 2002-2005

- Males accounted for 77% (47 of 61) of the substance abuse diagnoses at Bertie Memorial Hospital and 75% (89 of 119) at Chowan Hospital. At Bertie Memorial Hospital, the majority of substance abuse diagnoses were among blacks (80%, 49 of 61), 18% (11 of 61) occurred among whites, and approximately 2% (1 of 61) occurred among Hispanics. At Chowan Hospital, 48% (57 of 119) of substance abuse diagnoses occurred among whites, 45% (54 of 119) occurred among blacks, and 5% (6 of 119) occurred among Hispanics (60).
- Albemarle Hospital Emergency Department Utilization for Mental Health issues totaled 444 patients seen in the ER from October 1 2009 – September 30, 2010. The majority of patients were seen for substance abuse, alcohol related issues, and suicidal ideations.
- Thirty seven percent of survey participants have been told they have a mental illness by a doctor.
- East Carolina Behavioral Health Services (ECBH) provide mental health services to several counties including Perquimans. It is important to note that mental health issues and service availability was an important community issue highlighted during the Perquimans County Community Health Assessment data presentation/workgroup. During the workgroup, mental health services in this area were deemed positive, and a big improvement in mental health services for their area. It was believed that professionals are aware of mental health services and how there are utilized, but the general public is not aware of the services or how to utilize them. Not having a “central location/building” hinders this service. It was stated that ECBH staff do provide presentations describing the mental health services available and how to utilize them. Workgroup participants did deem Perquimans County as a very strong, faith-based community. As noted in the presentation, as well as the survey results, many residents are more likely to go to their pastor for mental health issues as opposed to an organized service. It was recommended that ECBH do presentations for the Minister’s Council, as well as law enforcement officials to better link them with this service.
- It was decided that mental health services and resources need more recognition to the general public and the ECBH should be made aware of these findings so they may provide more awareness to the public. At this time, the partnership decided mental health resources are sufficient in the community and it will not be a priority focus area for Healthy Carolinians of the Albemarle.

Obesity

Adult Obesity

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

Of the survey participants, 26.2% have been told by a doctor they are overweight or obese.

Perquimans County residents are surveyed about their height, weight, and eating behaviors in the state’s annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of the nine-county North

East Region II sample. However, the small number of participants (n=479 in 2004 and n=510 in 2005) across the sample of which the county is a part, yields data too limited to interpolate reliably to a single county, so it is not presented here.

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

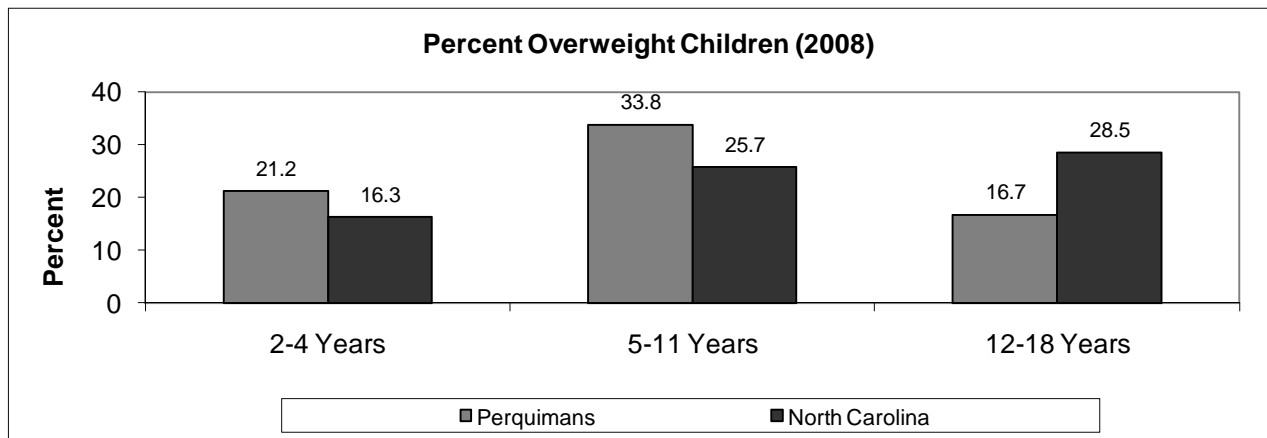
$$\text{BMI} = (\text{weight in kilograms}) / (\text{height in meters})^2$$

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 Perquimans County sample was composed of 156 2-4 year-olds, 65 5-11 year-olds, and 24 12-18 year-olds (61). 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 (61).

According to NC-NPASS data for children who are overweight (Figure 32):

- Perquimans County has a higher proportion of 2-4 year-olds who are overweight than the state as a whole.
- Perquimans County has a higher proportion of 5-11 year-olds who are overweight than the state as a whole.
- Perquimans County has a lower proportion of 12-18 year-olds who are overweight than the state as a whole.

Figure 32

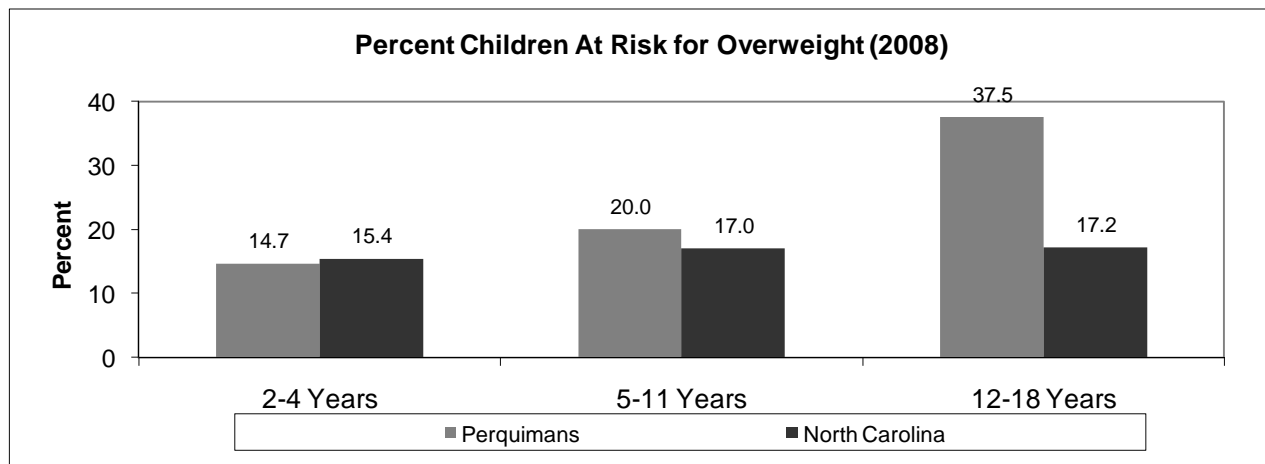


North Carolina Nutrition and Physical Activity Surveillance System* (NC-NPASS) 2008. <http://www.eatsmartmovemorenc.com/Data/Data.html>
 *Data is limited to data on children seen in North Carolina Public Health Sponsored WIC and Child Health Clinics and some School Based Health Centers

According to NC-NPASS data for children who are *at risk* of becoming overweight (Figure 33):

- Perquimans County has a slightly lower proportion of 2-4 year-olds at risk than the state as a whole.
- Perquimans County has a higher proportion of 5-11 year-olds at risk than the state as a whole.
- Perquimans County has a higher proportion of 12-18 year-olds who are at risk of being overweight than the state as a whole.

Figure 33



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

In addition to NC-NPASS information, data on childhood obesity in Perquimans County also is available from a school-based study conducted by ARHS. In FY 2004-05, ARHS measured the height and weight of children in kindergarten through fifth grade at two elementary schools in Perquimans County. The height and weight data were supplemented with survey data on eating and physical activity behaviors collected from the parents of the children in the study (61). Aggregate results for the Perquimans County Schools in the study are presented on the following page.

- A total of 827 students participated in the study. The mean age of the participants was 8.2 years.
- BMI results are as follows:
 - Underweight – 0.9%
 - Normal weight – 49.5%
 - At risk of overweight – 21.3%
 - Overweight – 28.4%

Asthma

One way the burden of asthma in a community can be assessed is by reviewing hospital records. According to hospital records from 2008, information regarding Perquimans County patients regardless of the location of their hospitalization is summarized below (Table 81, following page):

- The total hospitalization rate due to asthma (including children and adults) in Perquimans County in 2008 (231.4) was 50.1% higher than the rate for the state as a whole (115.4). The recent county rate is 49.0% higher than the Healthy Carolinians goal of 118 (52).

- For children age 0-14, the Perquimans County asthma hospitalization rate of 190.4 is higher than the state rate of 151.9 per 100,000. The Perquimans County asthma hospitalization rate for children is 9.1% higher than the Healthy People 2010 target of 173 (54). Note, however, that the county rate is based on a small number of events (n=4) and is likely unstable.

Table 81. Asthma Hospitalization Rates (2008)

County	Asthma Hospitalizations Per 100,000 (2008 Hospital Discharge Reports)			
	Total		Ages 0-14 Years	
	Number	Rate	Number	Rate
Perquimans	30	231.4	4	190.4
State Total	10,644	115.4	2,778	151.9

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

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 patients with a diagnosis of asthma for the period from 2002 through 2005 (60). These data represent *principal* diagnosis (not admitting diagnosis).

According to the data in Table 82, the number of emergency department admissions for asthma have decreased overall between 2002 and 2005 at Bertie Memorial Hospital and increased overall at Chowan Hospital.

Table 82. Emergency Department Utilization, Asthma Diagnosis, Bertie Memorial and Chowan Hospitals (2002-2005)

Hospital	Number of Emergency Department Admissions				
	2002	2003	2004	2005	Total
Bertie Memorial Hospital	102	111	92	95	400
Chowan Hospital	191	191	147	203	732

Source: University Health Systems of Eastern North Carolina. Emergency Department admissions at Bertie Hospital and Chowan Hospital, 2002-2005

Further examination of the data provided by University Health Systems (Table 83, following page) reveals some interesting demographic information about the patients whose diagnoses are summarized below:

- The largest percentage of asthma diagnoses at Bertie Memorial Hospital occurred in the 0-17 age group; the largest percentage at Chowan Hospital occurred in the same age group.
- The smallest percentage of asthma diagnoses at Bertie Memorial Hospital occurred in the 55-64 age group; the smallest percentage at Chowan Hospital occurred in the 35-44 age group.

Table 83. Emergency Department Asthma Diagnoses, Bertie Memorial and Chowan Hospitals, by Age, Race and Gender (2002-2005)

Location	Total Diagnoses #	Diagnoses, by Age Category											
		0-17		18-34		35-44		45-54		55-64		65 and older	
		#	%	#	%	#	%	#	%	#	%	#	%
Bertie Memorial Hospital	400	151	37.8	82	20.5	43	10.8	53	13.3	25	6.3	46	11.5
Chowan Hospital	732	268	36.6	207	28.3	63	8.6	78	10.6	65	8.9	51	6.9

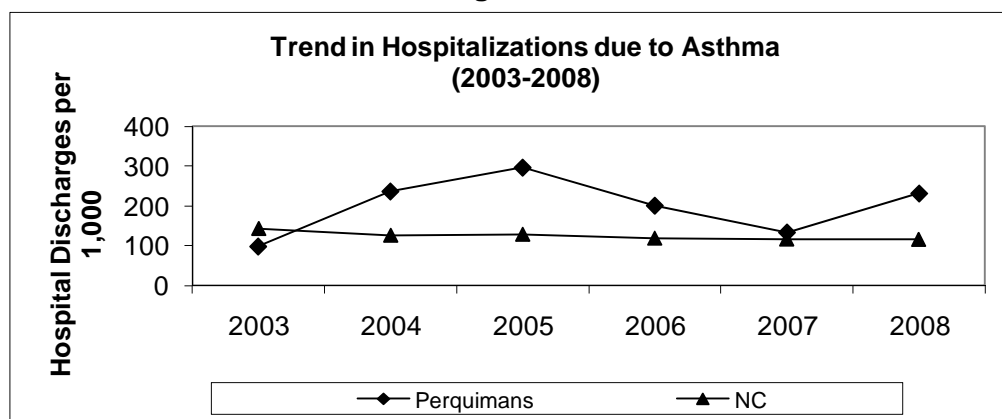
Source: University Health Systems of Eastern North Carolina. Emergency Department admissions at Bertie Memorial Hospital and Chowan Hospital, 2002-2005

Males accounted for just over half (50.5%) of the asthma diagnoses at Bertie Memorial Hospital; at Chowan Hospital females accounted for 51.8% of the asthma diagnoses. At Bertie Memorial Hospital, the vast majority of asthma diagnoses (84%) were among blacks (338 of 400); and 15% (59 of 400) occurred among whites. At Chowan Hospital, 70% (515 of 732) of asthma diagnoses occurred among blacks, 29% (210 of 732) occurred among whites, and 0.4% (3 of 732) occurred among Hispanics (60).

Albemarle Hospital Emergency Room Utilization for Asthma diagnosis from October 1, 2009 – September 30, 2010 totaled 642 patients seen. Of those, 46 were admitted or seven percent and one percent transferred out.

Since 2003, the Perquimans County total hospitalization rate due to asthma has fluctuated dramatically. The 2008 rate is 57.5% higher than the 2003 rate (Figure 34).

Figure 34



In 2000, The North Carolina School Asthma Survey was performed statewide in NC by a group of researchers from the School of Public Health at the University of North Carolina at 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 Perquimans County, and according to the results of this survey (63):

- 11% of school children surveyed had been diagnosed with asthma
- 19% of children surveyed had experienced undiagnosed wheezing
- 30% of children surveyed currently experienced wheezing
- 15% of Perquimans County children have missed school, 16% have limited activities, and 19% experience sleep disturbances due to asthma

Albemarle Pediatric Asthma Coalition (APAC) 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, and public proclamations for Asthma Awareness Month and World Asthma Day have been accomplished in the region.

Of survey participants, 15.5% have been told they have asthma by a doctor.

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).

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

Chapter Four: Community Health Survey & Stakeholder Interview Methodology

Primary Community Health 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 included seven counties and data was needed for each county, so a stratified two-stage cluster sampling method was employed. Statistical power analysis suggested that 80 surveys per county would yield an 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 10 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 NC PHP&R. The sample selected included four households in each of 20 census blocks in each of seven counties, for a total of 560 surveys.

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

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

2010 COMMUNITY HEALTH SURVEY



ALBEMARLE REGIONAL HEALTH SERVICES
Partners in Public Health

Perquimans County

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

- Perquimans County Health Dept. → 252-426-2100

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

- Perquimans County Sheriff's Office → 252-426-5615

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 Perquimans 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 Perquimans 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 Perquimans County. (Think about health care options, access, cost, availability, quality, etc.)	7.6%	21.8%	<u>52.6%</u>	8.0%
Question 2 Perquimans 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.)	2.1%	9.2%	<u>67.7%</u>	20.2%
Question 3 Perquimans 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.)	2.7%	6.7%	<u>67.3%</u>	22.4%
Question 4 There are plenty of ways to earn a living in Perquimans County. (Think about job options and quality of jobs, job training/higher education opportunities, etc.)	38.0%	<u>49.4%</u>	10.1%	1.3%
Question 5 Perquimans County is a safe place to live. (Think about safety at home, in the workplace, in schools, at playgrounds, parks, shopping centers, etc.)	1.3%	7.6%	<u>78.5%</u>	11.4%
Question 6 There is plenty of support for individuals and families during times of stress and need in Perquimans County. (Examples include neighbors, support groups, faith community outreach, agencies, organizations, etc.)	3.8%	20.3%	<u>64.6%</u>	10.1%
Question 7 Perquimans County has clean air.	0%	8.9%	<u>77.2%</u>	12.7%
Question 8 Perquimans County has clean water.	7.6%	38.0%	<u>48.1%</u>	5.1%

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 Perquimans County.

SHOW QUESTION PICK LIST

Question 9

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

38.5% Cancer
28.2% Diabetes
20.5% Heart Disease
11.5% Obesity/Overweight
15.4% Stroke

Question 10

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

55.1% Alcohol Abuse
50.0% Drug Abuse
16.7% Having unsafe sex
14.1% Smoking/tobacco use
17.9% Unhealthy eating habits

Question 11

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

23.1% Lack of affordable health insurance/health care
15.4% Lack of education/dropping out of school
17.9% Underemployment/lack of well-paying jobs
10.3% Poverty
6.4% Lack of health care providers

PART 3: Community Service Problems and Issues

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

Question 12

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

IF NO, SKIP TO NEXT SERVICE

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

Adult day care/respite care

0%Lack of information

0%Cost

0%Service not available

0%Language/Cultural barriers

0%Lack of transportation

3.5%No problem with this service

96.2%Did not need this service

Assistance with housing costs/subsidized housing

0%Lack of information

0%Cost

0%Service not available

0%Language/Cultural barrier

0%Lack of transportation

2.1%No problem with this service

97.9%Did not need this service

Assistance with food costs/food stamps

0%Lack of information

0%Cost

0%Service not available

0%Language/Cultural barrier

0%Lack of transportation

8%No problem with this service

92%Did not need this service

Health Promotion/Wellness programs

0%Lack of information

0%Cost

0%Service not available

0.7%Language/Cultural barrier

0%Lack of transportation

9.6%No problem with this service

89.7%Did not need this service

Medical case management for an ongoing health problem

0%Lack of information

1.3%Cost

0%Service not available

0%Language/Cultural barrier

0%Lack of transportation

18.2%No problem with this service

80.5%Did not need this service

Legal services

0%Lack of information

1.3%Cost

2.0%Service not available

0%Language/Cultural barrier

0%Lack of transportation

5.8%No problem with this service

88.1%Did not need this service

Emergency medical care

1.6%Lack of information

0%Cost

3%Service not available

0%Language/Cultural barrier

0%Lack of transportation

13.3%No problem with this service

82.1%Did not need this service

Hospital care

2%Lack of information
2%Cost
1.4%Service not available
0%Language/Cultural barrier

0%Lack of transportation
32.7%No problem with this service
61.2%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
4.5%No problem with this service
95%Did not need this service

Enrolling in Medicaid or Medicare

2%Lack of information
0%Cost
0%Service not available
0%Language/Cultural barrier

0%Lack of transportation
14.5%No problem with this service
83%Did not need this service

Mental health care or counseling

0%Lack of information
0%Cost
3%Service not available
0%Language/Cultural barrier

0%Lack of transportation
6.5%No problem with this service
90%Did not need this service

Drug or alcohol treatment program

0%Lack of information
0%Cost
0%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

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
15.5%No problem with this service
84%Did not need this service

Home health care

0%Lack of information
0.8%Cost
1.6%Service not available
0%Language/Cultural barrier

0%Lack of transportation
3.9%No problem with this service
93.8%Did not need this service

Nutrition service

1.8%Lack of information
0%Cost
0%Service not available
0%Language/Cultural barrier

0%Lack of transportation
0.8%No problem with this service
97.5%Did not need this service

Purchasing medical equipment

0%Lack of information
0.8%Cost
1.6%Service not available
0%Language/Cultural barrier

0%Lack of transportation
18.4%No problem with this service
79.3%Did not need this service

Getting prescription medications

0%Lack of information
10.8%Cost
0%Service not available
0%Language/Cultural barrier

0%Lack of transportation
39.8%No problem with this service
49.4%Did not need this service

Smoking cessation

2.2%Lack of information
0%Cost
0%Service not available
0%Language/Cultural barrier

0%Lack of transportation
2.4%No problem with this service
95.4%Did not need this service

Dental care

0%Lack of information
14.8%Cost
3.8%Service not available
0%Language/Cultural barrier

0%Lack of transportation
36.1%No problem with this service
45.3%Did not need this service

PART 4: Personal Health

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

Question 13

How would you rate your own personal health?

16.4% Excellent 38.7% Very Good 30.8% Good 13.5% Fair 0.6% Poor

Question 14

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

(Pick all the answers that apply.)

41% Health insurance *my employer provides*
7.7% Health insurance *my spouse's employer provides*
1.3% Health insurance *my school provides*
3.8% Health insurance *my parent or my parent's employer provider*
17.9% Health insurance I bought for myself
5.1% Medicaid
35.9% Medicare
3.8% Veteran's Administration benefits
11.5% 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?

18.2% Yes ___ No

Question 16

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

(Pick all the answers that apply.)

<u>92.7%</u> Doctor's office	<u>0%</u> Company nurse
<u>1.2%</u> Health department	<u>0%</u> Community or Rural Health Center
<u>0.5%</u> Hospital clinic	<u>12.5%</u> Urgent Care Center
<u>13.2%</u> Hospital emergency room	___ Other: _____
<u>1.6%</u> Student Health Services	

Question 17

In what cities are the medical providers you visit located?

(Pick all the answers that apply.)

<u>0%</u> Ahoskie	<u>0%</u> Franklin	<u>0%</u> Suffolk
<u>7.4%</u> Chesapeake	<u>0%</u> Gatesville	<u>2.2%</u> Virginia Beach
<u>2.2%</u> Dare County	<u>2.8%</u> Greenville	<u>0%</u> Williamston
<u>20.0%</u> Edenton	<u>32.3%</u> Hertford	<u>1.1%</u> Windsor
<u>59.0%</u> Elizabeth City	<u>21.1%</u> Norfolk	___ Other: _____

Question 18

Where do you usually get advice on your health?

(Pick all the answers that apply.)

<u>79.2%</u> Doctor's office	<u>2.8%</u> Urgent Care Center
<u>2.1%</u> Health department	<u>37.0%</u> Family
<u>0.6%</u> Hospital clinic	<u>12.0%</u> Friends
<u>2.8%</u> Hospital emergency room	<u>9.7%</u> Media (television, news, radio, magazine)
<u>1.6%</u> Student Health Services	<u>21.4%</u> internet or other computer-based info
<u>0%</u> Company nurse	___ Other: _____
<u>0%</u> Community or Rural Health Center	

Question 19

About how long has it been since you last visited a doctor for a routine ("well") medical checkup? Do not include times you visited the doctor because you were sick or pregnant.

71.0% Within the past 12 months
10.5% 1-2 years ago
7.9% 3-5 years ago
9.0% More than 5 years ago
1.6% 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.**

- 58.5% Within the past 12 months
- 9.4% 1-2 years ago
- 4.0% 3-5 years ago
- 13.7% More than 5 years ago
- 3.3% 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?

- 2.5% Children’s Developmental Services Agency/Developmental Evaluation Center
- 11.5% Counselor or therapist in private practice
- 22.0% Doctor
- 0% Emergency Room
- 2.8% Employee Assistance Program
- 10.5% Local Mental Health Facility
- 7.2% Minister/pastor
- 2.8% School counselor
- 3.7% Vocational Rehabilitation/Independent Living
- 46.0% I don’t know

Question 22

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

- 9.9% High
- 27.8% Moderate
- 61.5% 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?

- 12.7% Always
- 2.1% Usually
- 4.5% Sometimes
- 23.3% Rarely
- 57.4% Never

Question 24

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

- 10.1% 1 day
- 7.9% 2 days
- 6.1% 3 days
- 6.6% 4 days
- 2.9% 5 days
- 1.9% 6 days
- 9.0% 7 days
- 8.7% I didn’t drink alcohol on any of the past 7 days
- 48.0% I never drink alcohol

Question 25

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

<u>90.7%</u> 0 times	<u>0%</u> 4 times
<u>6.2%</u> 1 time	<u>0%</u> 5 times
<u>0%</u> 2 times	<u>2.8%</u> 6 times
<u>0%</u> 3 times	<u>0.3%</u> 7 times

Question 26

Do you smoke cigarettes?

19.2% Yes
61.1% I have never smoked cigarettes
19.7% I used to smoke but have quit

Question 27

How many cigarettes do you smoke per day?

(Please check only one (1) answer.)

81.1% Doesn't smoke
5.9% Less than half a pack per day
7.3% Between half a pack and one (1) pack per day
5.3% More than one (1) pack a day
0.4% 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?

23.6% Yes 76.4% No

Question 29

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

1.8% In restaurants 10.2% At home 8.9% At work 1.3% In the car

Question 30

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

18.8% Not at all
5.2% Less than once per week
8.6% Once per week
29.3% 2-3 times per week
9.2% 4-6 times per week
28.2% 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?

- 18.8% None
- 5.2% Less than once a week
- 8.6% Once a week
- 29.3%** 2-3 times a week
- 9.2% 4-6 times a week
- 28.2% Daily

Question 32

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

- 1.2% My job is physical or hard labor
- 3.3% I don’t have enough time for physical activity
- 2.5% I’m too tired for physical activity
- 7.5% I have a health condition that limits my physical activity
- 0% I don’t have a place to exercise
- 0.7% Weather limits my physical activity
- 0% Physical activity costs too much (equipment, shoes, gym expense)
- 4.1% Physical activity is not important to me

Question 33

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

- 8.9% None
- 44.3%** 1-5 servings
- 40.5% 6-10 servings
- 5.1% 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?

- 1.3% None
- 27.8% 1-5 servings
- 57.0%** 6-10 servings
- 11.4% 11-15 servings
- 2.5% More than 15 servings

Question 35

Are grocery stores in or near your neighborhood?

- 76.7%** Yes _____ No

Question 36

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

69.4% Yes _____ No

Question 37

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

17.7% None
73.4% 1-5 times
7.6% 6-10 times
1.3% 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?

15.5% Asthma
4.9% Depression
21.1% Diabetes
40.8% High blood pressure
32.1% High cholesterol
3.7% Mental Illness
26.2% 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?

25.5% Yes
_____ No, why not?
I. 2.8% Lack of Information
II. 0% Cost
III. 4.5% Service Not Available
IV. 0% Language or Cultural Barrier
V. 0% Lack of Transportation
VI. 2.8% 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?

22.4% Within the past 12 months
0.3% 1-2 years ago
2.8% 3-5 years ago
0.7% More than 5 years ago
0% I don't know/don't remember

3.7% 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?

31% Yes ____ N/A because I'm under age 40 (*now skip to question 43*)

____ No, why not?

I. 0% Lack of Information

II. 3.4% 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 a mammogram every 1-2 years was not necessary

Question 42

How long has it been since your last mammogram?

24.1% Within the past 12 months

5.1% 1-2 years ago

2.9% 3-5 years ago

0% More than 5 years ago

0.1% I don't know/don't remember

2% I have never had a mammogram

Question 43

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

39.4% Yes

____ No, Why?

I. 0.5% Lack of Information

II. 0% Cost

III. 0% Service Not Available

IV. 0% Language or Cultural Barrier

V. 0% Lack of Transportation

VI. 9.1% 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?

31.7% Within the past 12 months

5.9% 1-2 years ago

5.6% 3-5 years ago

3.5% More than 5 years ago

2.8% 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?

45.7% 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>0%</u> Alcohol	<u>0%</u> Gang violence
<u>0%</u> Drugs	<u>0%</u> Reckless driving/speeding
<u>2.3%</u> Sex	<u>4.2%</u> Eating disorder (e.g. anorexia or bulimia)
<u>0%</u> Tobacco	<u>5.5%</u> My child is not engaging in any high risk behaviors.

Question 47

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

9.3% Yes ____ No

Question 48

Do you or your child need more information about any of the following issues?

(Check all answers that apply.)

<u>0%</u> Alcohol	<u>0%</u> Reckless driving/speeding
<u>0%</u> Drugs	<u>0%</u> Eating disorder (e.g. anorexia or bulimia)
<u>0%</u> Sex	<u>0%</u> Mental health issues (e.g. depression, anxiety)
<u>0%</u> Tobacco	<u>0%</u> Fitness/nutrition
<u>0%</u> STDs	____ Other: _____
<u>0%</u> HIV	<u>2.0%</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)

54.8% Yes, smoke detectors only 0% Yes, carbon monoxide detectors only
41.5% Yes, both 3.7% No

Question 50

Does your household have a Family Emergency Plan?

66.0% Yes 34.0% No

Question 51

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

44.4% No 15.4% 3 days 24.4% 1 Week 6.2% 2 weeks 8.9% More than 2 weeks

Question 52

Did you get your H1N1 Flu vaccine?

31.2% Yes, why?

11.5% Feel I am at risk, or a household member is at risk

2.2% I know someone who has been sick

12.7% My doctor recommended it

4.8% I always get the flu vaccine

68.7% No, why not?

0% I couldn't afford it

1.9% It was not available

14.7% I feel the vaccine is not safe

9.2% My physician does not recommend its use

7.2% H1N1 is not serious enough or I am not at risk

1.6% Prefer to wait and get vaccine later

5.6% The type available is not suitable for my age or medical condition

22.1% I never get vaccinated against flu

6.4% 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 Perquimans County? 24.2% Yes 75.8% No

Question 54

How old are you?

<u>6.4%</u> 18-24	<u>2.6%</u> 40-44	<u>16.7%</u> 60-64
<u>9.0%</u> 25-29	<u>5.1%</u> 45-49	<u>1.3%</u> 65-69
<u>5.1%</u> 30-34	<u>7.7%</u> 50-54	<u>9.0%</u> 70-74
<u>5.1%</u> 35-39	<u>10.3%</u> 55-59	<u>12.8%</u> 75 or older

Question 55

What is your sex? 43.6% Male 55.4% Female

Question 56

What is your race or ethnicity?

<u>21.8%</u> African American/Black	<u>0%</u> Native American
<u>1.3%</u> Asian/Pacific Islander	<u>73.8%</u> White/Caucasian
<u>0%</u> Hispanic/Latino	____ Other: _____

Question 57

What is your marital status?

<u>66.2%</u> Married	<u>2.6%</u> Separated	<u>16.4%</u> Never married
<u>7.6%</u> Widowed	<u>7.2%</u> Divorced	____ Other: _____

Question 58

What is the highest education level you have completed?

(Check only one (1) answer.)

- 10.6% Less than high school
- 35.2% High school diploma or GED
- 5.8% Associate's Degree
- 17.2% Some college but no degree
- 20.1% College degree (Bachelor's degree)
- 10.4% Graduate degree (Masters or Doctoral degree)

Question 59

What is your employment status?

(Check all answers that apply.)

19.5% Employed full-time

16.4% Employed part-time

8.4% Unemployed

40.5% Retired

0% Disabled; unable to work

3.3% Student

7.0% Homemaker

Question 60

What was your total household income last year, before taxes? (This is the total income, before taxes, earned by all people over the age of 15 living in your house.)

10.2% Less than \$20,000

7.8% \$20,000 to \$29,999

10.8% \$30,000 to \$49,999

14.4% \$50,000 to \$74,999

12.2% \$75,000 to \$100,000

7.8% Over \$100,000

36.9% No Answer

Question 61

How many individuals make up your household?

15.1% 1 person

4.8% 6 people

43.3% 2 people

0% 7 people

18.1% 3 people

0% 8 people

6.3% 4 people

0% 9 people

3.9% 5 people

Question 62

Are you the primary caregiver for any of the following?

(Check all answers that apply.)

2.2% Disabled child (under age 18)

0% Foster child (under age 18)

5.7% Disabled adult (age 18 or older)

2.0% Grandchild (under age 18)

6.8% Senior adult (age 65 or older)

THE END!

Thank you very much for completing the Community Health Survey!

Community Stakeholder Interviews Methodology

In May through June 2010, two UNC-Chapel Hill Master of Public Health graduate students, as part of their practicum, conducted nine telephone interviews with community leaders in Perquimans County. Working from county-specific lists of names identified by the ARHSAT, the interviewees were selected for participation by the coordinator and members of Healthy Carolinians of the Albemarle. Interviewees received a letter preceding the phone calls inviting them to participate in the community survey. To emphasize the importance of the invitation, the letter was signed by the local health director and the Healthy Carolinians of the Albemarle Coordinator. The interviewer contacted 13 community leaders and nine participated in the interview.

Interview subjects represented agencies in key sectors of the community, such as local health and human services, business, government, education, and law enforcement. Each interview was conducted according to a script of questions that asked each interviewee to describe the services provided by their agency, the population they served, barriers that community members faced when attempting to access those services, and what the agencies did to help their clients access their services. Respondents were also asked general opinion-type questions about Perquimans County as a whole. These questions were about services that were needed in the area and about the county's strengths and the challenges it was facing. At the end of the interview respondents were read eight statements about Perquimans County and asked whether they agreed or disagreed with the statements. Interviewees were all provided with assurance that no personally identifiable information, such as name or organizational affiliations, would be connected to their responses. A copy of the interview protocol and script appears in Appendix B.

Interview data was initially recorded in narrative form in Microsoft Word. Themes in the data were identified and representative quotes were drawn from the data to illustrate the themes. Interviewees were assured that personal identifiers such as names or organizational affiliations would *not* be connected in any way to the information presented in this report. Therefore, quotes included in the report may have been altered slightly to preserve confidentiality.

Interview Participants

Interviewees worked or volunteered for the following kinds of agencies or organizations (some subjects had multiple affiliations or worked for the same agency):

- Business organizations
- Non-profit organization
- Health services organization
- County government

Interview Results

Available Services

Business Services Opportunities for business networking and seminars

County Services: Social services, emergency medical services, sheriff, water services, recreation, schools and a senior program

Social Services: all state and federally mandated programs, e.g. food stamps, WIC, Medicaid, energy assistance, adult and child protective services, crisis intervention, emergency assistance (about twenty services total)

Public Health: all state-mandated services as part of a seven-county district health department

Town Services: police, fire, parks and recreation, garbage, water and sewer and electric services; Residents outside the towns would not have access to town services

Unmet Service Needs

Inadequately Funded Programs - 2 respondents

- Mental health
- Disasters

Poverty - 2 respondents

Mental health/substance abuse services - 3 respondents

After school programs - 1 respondent

Jobs for those who aren't college bound - 1 respondent

Dental Services - 1 respondent

Pharmacy Services - 1 respondent

Life Planning Education - 2 respondents

- Parenting skills
- Budgeting
- Etc.

New community facilities - 1 respondent

- Current buildings such as the senior center and libraries are old, too small, and unable to keep up with growth

More healthcare providers - 1 respondent

Don't know of any - 2 respondents

Client Population Served

Respondents felt that the services provided by their agencies or organizations are available to and used by all county residents, with the exception of the services targeted at the youth and elderly populations. There are some services targeted to the low-income population, such as the public health clinic.

Barriers to Service Access

Transportation: According to the respondents, the major barrier to accessing services in Perquimans County is the lack of transportation. Existing services are localized in one region of the county. People who live closer to Elizabeth City (Pasquotank County) may access services there.

Lack of knowledge: Respondents felt that residents not knowing what services were available and how to access them could be a barrier to service.

Community Strengths

Location and Community: Respondents thought that Perquimans County's location on the waterways, its natural resources and the relaxed community atmosphere were major strengths. Respondents felt citizens and organizations work well together.

The people who live here - 4 respondents

- Reliable
- When something needs to be done, they do it
- Friendly
- Many volunteers
- Community spirit

Good quality of life - 2 respondents

- Natural resources
- Good amenities
- Slow paced
- Family
- Businesses

Natural resources - 3 respondents

- Pristine waters (rivers, inner banks)
- Farmland

County Government Management - 3 respondents

- Commissioners are very conservative and have built up reserves for this difficult time.
- Superior fiscal management.
- Quality of the staff
- County is thinking progressively in terms of potential development

School System - 1 respondent

Excellent home health care - 1 respondent

Potential for development - 1 respondent

- Marketing
- Waterfront

Close to Hampton Roads area - 1 respondent

Community Challenges

Generally speaking, the respondents indicated that the major challenges Perquimans County faces are almost all related to job and the economy.

Lack of Jobs - 5 respondents

- Need for good paying jobs with benefits so that residents can work in the county and not have to go out of the area to work. Improves the county tax base.
- Cost of living is high relative to the number of jobs and pay scales

Lack of Industry/Infrastructures - 2 respondents

Changing demographics - 1 respondent

- The population of the county is older (aging and retirees)
- Meeting the needs and interests of this population

Slow economic development - 3 respondents

- Perquimans County is a very poor county

Need more police protection - 1 respondent

Finding a clear path to growth without ruining the beauty of the area - 1 respondent

Community Health Problems

When asked about the major health problems and health concerns in Perquimans County, respondents mentioned individual diseases/conditions, as well as broader public health concerns. The responses to the question were diverse, although there were several who mentioned obesity and cancer. Other responses included:

Obesity/Childhood Obesity - 5 respondents

- Poor diets
- Lack of exercise
- Good nutrition for school children

High Incidence of cancer - 3 respondents

- Don't know if there is a lot of support for people who have cancer
- Perquimans County is in "The Cancer Belt"
- Cancer may be related to agriculture/pesticides

Diabetes - 2 respondents

Blood pressure - 1 respondent

Lack of prenatal care - 1 respondent

Teen pregnancy - 1 respondent

Lack of mental healthcare - 1 respondent

Venereal diseases - 1 respondent

Lack of programs for the elderly - 1 respondent

Lack of access to healthcare for those who don't have insurance or can't afford it - 1 respondent

- People aren't getting preventative care
- Need more local doctors

Quality of Life

None of the interview subjects indicated that they had participated in the Perquimans County Community Health Survey; therefore, the answers below are based on the responses of three subjects.

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

Agree - 5 respondents

- But not everyone takes advantage of it

Agree/Disagree - 4 respondents

- There isn't a hospital in the county. The closest is 10-20 miles away depending on where you live
- Regionally - Yes, County - No
- Depends on where you live

Disagree - 1 respondent

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

- Agree - 8 respondents
 - Excellent Schools
- Disagree - 1 respondent
 - Education is weak at the high school level

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

- Agree - 9 respondents
 - 3 individuals strongly agreed with this statement

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

- Disagree - 9 respondents

5) Perquimans County is a safe place to live.

- Agree - 7 respondents
 - 1 individual agreed strongly with this statement
 - For the most part although every town has criminal elements
 - It depends on where you live
- Disagree - 2 respondents

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

- Agree - 5 Respondents
 - 1 individual agreed strongly with this statement
 - The community rallies around those in need
- Agree/Disagree - 1 respondent
 - If you're affiliated with a church
- Disagree - 2 respondents
- Don't know - 1 respondent
 - Haven't had this experience although aware of Red Cross, support groups, mental health services, food bank, etc.

7) Perquimans County has clean air.

- Agree - 9 respondents
 - 1 individual agreed strongly with this statement except for pollen season

8) Perquimans County has clean water.

- Agree - 9 respondents
 - 1 individual agreed strongly with this statement

Final Thoughts

ARHS does a great job! Good to have a pool of resources for rural counties!

Once you get involved in the community, it's a wonderful place to live.

Perquimans County is having a hard time looking towards the future. It used to be primarily agriculture, but is becoming less so. There is a general resistance to change.

People don't recognize the value of the water.

Wonderful place to live, but problems that a lot of rural towns have, but also have plusses that a lot of rural towns have.

Chapter Five: **Acting on the CHA Results**

Health Priorities

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

Top community responses for the following categories:

The 5 most important “health problems”:

- Cancer
- Diabetes
- Heart Disease
- Obesity
- Stroke
- Alzheimer’s (Other issues given by respondent)

Actual Leading Causes of Death:

- Heart Disease
- Total Cancer
- Cerebrovascular Disease
- Chronic Lower Respiratory Disease
- Alzheimer’s Disease

The 5 most important “unhealthy behaviors”:

- Alcohol Abuse
- Drug Abuse
- Unsafe Sex
- Smoking
- Unhealthy eating

The 5 most important “community social issues”:

- Lack of affordable health care/insurance
- Lack of education/dropping out
- Underemployment/Lack of well paying jobs
- Poverty
- Lack of health care providers
- Taxes (Other issues given by respondent)
- Water Pollution (Other issues given by respondent)

Community Priorities

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 were compared to the secondary data. After the data presentation, participants were divided into groups according to the county they represented. The group worked to identify 5-10 problems, service gaps, and/or education/awareness issues for their county using problem worksheets. The problems identified by the counties were as follows:

The following priority areas were identified for Perquimans County:

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

Priority Areas:

- Heart Disease
- Diabetes - even though Diabetes is not in the Top leading five causes of death, nor does the county rate exceed the state rate, Healthy Carolinians of the Albemarle still chose to keep this disease as a priority area.
- Obesity
- Smoking-Tobacco use
- High blood pressure
- Cancer
- Cerebrovascular Disease
- Mental Health

Although the priorities mentioned above are not the only areas of concern for Perquimans County, due to lack of funding and lack of resources, Healthy Carolinians of the Albemarle decided against adding any new priorities.

Next Steps

The next step Healthy Carolinians of the Albemarle plans to take is the development of the community action plans, which are due in June 2011. The Action Plans will reflect the priority health issues, strategies, and steps to implement change along with our target populations, and resource networking with the various community partners. This is a critical component that the partnership must take in selecting activities that are reasonable and relatively easy to implement and align with the 2020 Healthy People Objectives in Pasquotank, Perquimans, Camden, and Currituck Counties. Healthy Carolinians of the Albemarle Partnership members will utilize the information gathered during the community assessment process and the prioritization process to clearly define our community's health priorities, actions, and expected results. Healthy Carolinians of the Albemarle will meet on January 21, 2011 to begin this process. Partnership meetings will take place the third Friday of each month throughout this process and through the completion of the recertification process. All partnership members, as well as chairpersons from the two Healthy Carolinians of the Albemarle 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. Healthy Carolinians of the Albemarle will make flyers available to participants of the community health survey highlighting key issues for that population. With the help of ARHS, 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 new releases to the public about the findings made in each county. Copies of the assessment will be placed in the local libraries, and each county health department within the Albemarle Region, as well as in the libraries of; Elizabeth City State University, College of the Albemarle, and Mid-Atlantic Christian University. Healthy Carolinians of the Albemarle members will have copies of the assessment at their disposal to use in the community.

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Chapter 7: Appendices

Appendix A
Perquimans County Health Services Inventory

Adult Care

Brian Center Nursing Care

1300 Don Juan Rd
Hertford, NC 27944
252-426-5391
FAX 252-426-8434

Country Oaks

464 Two Mile Dessert Rd
Hertford, NC 27944
252-426-7464

Cooperative Extension

Perquimans County Cooperative Extension

601-A South Edenton Road Street
Hertford, NC 27944
252-426-5428
FAX 252-426-1646

Making healthy choices isn't always easy. North Carolina Cooperative Extension's educators help people sort fact from fad, providing research-based programs that promote a lifetime of good health.

Dental Care

Cathie Williams, RDH

Public Health Dental Hygienist
Oral Health Section of North Carolina Public Health
252-338-4488
FAX 252-338-4364
Cathie.Williams@ncmail.net

Provides preventative oral healthcare to children in Chowan, Camden, Currituck, Pasquotank, and Perquimans via a clinic at the Camden County Health Department and the Chowan County Mobile Unit

Douglas W. Perry, DDS PA

181 Perry Long Rd
Hertford, NC 27944
252-426-9140

Jack L. Boone, DDS

212 Ainsley Dr.
Hertford, NC 27944
252-426-5585
FAX 252-426-5766

Family Practice

Coastal Carolina Family Practice

Dr. Robert E. & Chris Lane
PO Box 650
600 S. Church St.
Hertford, NC 27944
252-426-5711
FAX 252-426-1999

Perquimans Medical Center

Dr. Neil L Denunzio, MD
333 Winfall Blvd
Winfall, NC 27985
252-426-9172

Health Department

Albemarle Regional Health Services

103 ARPDC St
Hertford, NC 27944
252-426-2100
FAX 252-426-2104

Albemarle Regional Health Services is the seven-county regional Public Health agency that serves 132,978 residents in rural, northeastern North Carolina. For over 68 years, the communities of the Albemarle region have been the recipients of quality Public Health services. The Public Health professionals and programs of Albemarle Regional Health Services are dedicated to disease prevention and the promotion of a healthy environment to reduce morbidity, mortality, and disability through quality service, education, and advocacy. Funding for Health Department programs come from the County, State, Federal and special grants. Foreign language assistance is available for individuals who do not speak English. Below is a general list of programs and services:

Clinical Services

- ◆ **Adult Health Clinic** - Comprehensive physical assessments and clinical services are provided for all adults in an effort to detect and prevent chronic diseases, which may cause disability or premature mortality.
- ◆ **Child Health Clinic** - Primary child health services are provided in an effort to detect problems so appropriate interventions can begin as early as possible.
- ◆ **Immunizations** - Immunizations are provided to children and adults in an effort to prevent communicable diseases such as polio, pertussis, tetanus, mumps, measles, rubella, diphtheria, and hepatitis. Adult immunizations include the annual influenza and pneumonia campaign, in addition to all recommended adult immunizations.

- ◆ **Communicable Disease Program**- provides detection and surveillance for diseases which are transmitted person to person or are considered to be a health threat to individuals and the public.
- ◆ **Family Planning** - helps women and men maintain optimal reproductive health and assists families in determining the number, timing, and spacing of their children.
- ◆ **Maternal Health** - Maternal Health Care services are provided in an effort to reduce infant mortality and ensure all pregnant women receive the highest level of health care. High Risk Perinatal Clinic was established to improve the pregnancy outcomes of women with pregnancy complications.
- ◆ **Breast and Cervical Cancer Control Program (BCCCP)** - provides access to screening services for financially and medically eligible women.

Additional Programs

- ◆ WIC Women Infant and Children Program - Nutritional support program for infants, children and pregnant, postpartum and breastfeeding women.
- ◆ Sexually Transmitted Diseases Clinic - STD and HIV diagnosis, treatment, and counseling are available on a walk-in-basis. There are no fees associated with STD services.
- ◆ Public Health Preparedness and Response - Work is focused on the communities in order to keep the public safe and prepared for any disaster. This is achieved by coordinating with local emergency management partners, response agencies, and medical partners. ARHS focuses specifically on Public Health related disaster and emergency events, including but not limited to, pandemics, disease outbreaks, bioterrorism, and natural disasters.
- ◆ Albemarle Regional Diabetes Care Program - Offers individualized counseling, 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

Hospitals

Albemarle Hospital

1114 N Road St
P.O Box 1587
Elizabeth City, NC 27909
252-384-4665

Chowan Hospital

Virginia Road
PO Box 629
Edenton, NC 27932
252-482-6268

Mental Health

Intensive Rehabilitation Health Care Service

109 N. Church St, Suite F
Hertford N.C 27944
252-426-1390
FAX 252-426-1412

William C. Bowens, M.D.

1072 Harvey Point Rd
Hertford, NC 27944
252-426-1442

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

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

Family Care Pharmacy

606 S. Church St.
Hertford, NC 27944
252-426-2214
FAX 252-426-5039

Woodard' Pharmacy

101 N Church St
Hertford, NC 27944
252-426-5527
FAX 252-426-1856

ARHS Community Health Assessment

Community Leader Telephone Interviews

Interview Protocol

Perquimans 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 Perquimans 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 Perquimans 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 Perquimans 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 Perquimans 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 Perquimans 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 Perquimans County as a whole.

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

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

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

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

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

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

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

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

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

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

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

5) Perquimans County is a safe place to live.

- 6) There is plenty of support for individuals and families during times of stress and need in Perquimans County.
- 7) Perquimans County has clean air.
- 8) Perquimans County has clean water.

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

Thank you for your time!