

2016 PASQUOTANK COUNTY COMMUNITY HEALTH ASSESSMENT

Albemarle Regional Health Services, Vidant Bertie, Vidant Chowan, and Vidant Roanoke-Chowan Hospitals, The Outer Banks Hospital, Sentara Albemarle Medical Center, Three Rivers Healthy Carolinians, Gates Partners for Health, and Healthy Carolinians of the Albemarle

*Comprehensive
Secondary Data
Report with
Primary Data
Summary*

March, 2017

Dear Community Member,

Your partnership in the Community Health Assessment process is important to the health of our residents. Albemarle Regional Health Services and Sentara Albemarle Medical Center continue to work together to provide this comprehensive report which illustrates the health status, health needs and improvements, as well as health resources in our communities. This document represents much time and effort by local health department staff, hospital staff, Healthy Carolinians members, and community members like you.

Factors such as the rural landscape of our counties and the diversity of our population continue to make the Albemarle region an exciting place to live, work, and learn, as well as create challenges in our systems of service delivery which drive the need for a continuum of programs. Through the Community Health Assessment process, we are allowed to analyze and prioritize our community's needs and strengths with the people of the seven counties.

Strategies are implemented to target needs identified in the 2016 Community Health Assessment priority health rankings selection in order to create increased opportunities for healthier outcomes in our communities. Relationships will continue to be formed and strengthened as we join together to address the needs. This document provides data and steps to ensure we empower our communities to seek available and potential resources.

Thank you for your continued interested in the health of our communities.

Sincerely yours,



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Coleen Santa Ana, MHA
President
Sentara Albemarle Medical Center

ACKNOWLEDGMENTS

The Community Health Assessment (CHA) process requires much work and dedication from those who are committed to identifying and solving health problems within our communities to improve the quality of life for our residents. The first phase of this process is forming a CHA Leadership Team. It is essential that the CHA Team involve people who have significant influence in the county, as well as the people who are most affected by health problems. People from throughout the county must be mobilized during this process, therefore a broad representation of county residents, agencies, and organizations were invited to be a part of this team.

This document was developed by Albemarle Regional Health Services, in partnership with Sentara Albemarle Medical Center, Vidant Bertie Hospital, Vidant Chowan Hospital, Vidant Roanoke Chowan Hospital, and The Outer Banks Hospital as part of a local community health assessment process. We would like to thank and acknowledge several agencies for their contributions and support in conducting this health assessment:

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Vidant Roanoke Chowan Hospital

Thank you also to our community for attending the focus groups and contributing information in other ways. Our partners also would like to thank the Center for Survey Research at East Carolina University for primary data collection assistance.

Independent public health consultants Sheila S. Pfaender and Annika Pfaender-Purvis provided secondary data collection and analysis and report development services for a comprehensive Community Health Assessment which is the source document from which this report was derived.

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Albemarle Home Care and Hospice	Bertie	Windsor	Home Care, Home Health	yes
Definitive Touch Home Care	Bertie	Aulander	Home Care	no
Home Life Care Inc	Bertie	Windsor	Home Care	no
Positive Step Home Care Agency	Bertie	Windsor	Home Care	no
Quality Home Staffing, Inc	Bertie	Windsor	Home Care	no
Sure Care Health Services	Bertie	Kelford	Home Care	no
Vidant Home Health and Hospice	Bertie	Windsor	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Camden	Camden	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Chowan	Edenton	Home Care, Home Health	yes
Continuum Home Care of Edenton	Chowan	Edenton	Home Care	no
Continuum Home Care and Hospice of Edenton Health Care Options	Chowan	Edenton	Hospice facilities	no
Home Life Care Inc	Chowan	Edenton	Home Care	no
Albemarle Home Care and Hospice	Currituck	Poplar Branch	Home Care, Home Health	yes
Outer Banks Home Care	Currituck	Harbinger	Home Care	no
Hertford-Gates Home Health Agency	Gates	Gatesville	Home Care, Home Health	no
Albemarle Home Care and Hospice	Pasquotank	Elizabeth City	Home Care, Home Health, Hospice facilities	yes
Carolina East Home Care Agency	Pasquotank	Elizabeth City	Home Care	no
Coastal Rehabilitation, Inc	Pasquotank	Elizabeth City	Home Care	no
Community Home Care and Hospice	Pasquotank	Elizabeth City	Hospice facilities	yes
East Carolina Home Care Inc	Pasquotank	Elizabeth City	Home Care	no
Home Life Care Inc	Pasquotank	Elizabeth City	Home Care	no
Lincare, Inc	Pasquotank	Elizabeth City	Home Care	no
Quality Home Staffing, Inc	Pasquotank	Elizabeth City	Home Care	no
ResCare HomeCare	Pasquotank	Elizabeth City	Home Care	no
Sentara Home Care Services	Pasquotank	Elizabeth City	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Perquimans	Hertford	Home Care, Home Health	yes

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INTRODUCTION

Local public health agencies in North Carolina (NC) are required to conduct a comprehensive Community Health Assessment (CHA) at least once every four years. The CHA is required of public health departments in the consolidated agreement between the NC Division of Public Health (NC DPH) and the local public health agency. Furthermore, a CHA is required for local public health department accreditation through the NC Local Health Department Accreditation Board (G.S. § 130A-34.1). As part of the US Affordable Care Act of 2011, non-profit hospitals are also required to conduct a community health needs assessment (CHNA) at least every three years. Recognizing that duplicate assessment efforts are a poor use of community resources, local health departments (LHDs) and non-profit hospitals across the state are developing models for collaboratively conducting the community health assessment process. For the Albemarle region, a partnership between Albemarle Regional Health Services and local hospitals has been a long-standing tradition, and the hospitals have helped fund and participate in previous community health assessments. This health assessment report is the culmination of the most recent partnership between Albemarle Regional Health Services (ARHS) and five regional hospitals: Vidant Bertie Hospital (VBER), Vidant Chowan Hospital (VCHO), Vidant Roanoke-Chowan Hospital (VROA), The Outer Banks Hospital (TOBH), and Sentara Albemarle Medical Center (SAMC).

In communities where there is an active Healthy Carolinians partnership, the CHA activity also usually includes that entity. Healthy Carolinians is “a network of public-private partnerships across North Carolina that shares the common goal of helping all North Carolinians to be healthy.” The members of local partnerships are representatives of the agencies and organizations that serve the health and human service needs of the local population, as well as representatives from businesses, communities of faith, schools and civic groups. In Pasquotank County, the local Healthy Carolinians coalition is Healthy Carolinians of the Albemarle, which also includes Camden, Currituck and Perquimans Counties.

The community health assessment, which is both a process and a document, investigates and describes the current health status of the community, the social factors impacting health, what has changed since the last assessment, and what still needs to change to improve the health of the community. The *process* involves the collection and analysis of a large range of data, including demographic, socioeconomic and health statistics, environmental data, and professional and public opinion. The *document* is a summary of all the available evidence and serves as a resource until the next assessment. The completed CHA serves as the basis for prioritizing the community’s health needs, and culminates in planning to meet those needs.

Albemarle Regional Health Services contracted with Sheila S. Pfaender, Public Health Consultant, and her team to assist in conducting the 2016 CHNA for the seven counties of the ARHS region, following the guidance provided by the *Community Assessment Guidebook: North Carolina Community Health Assessment Process*, published by the NC Office of Healthy Carolinians/Health Education and the NC State Center for Health Statistics (June 2014 revision). The assessment also adheres to the 2014 standards for community assessment stipulated by the NC Local Health Department Accreditation (NCLHDA) Program. An additional goal for this project was to meet the US Affordable Care Act/Internal Revenue Service Form 990 Schedule H requirements for not-for-profit hospitals in conducting a CHNA as cited in the December, 2014 Final Rule.

The ARHS Lead Regional CHA Coordinator worked with the consultant to develop a multi-phase plan for conducting the assessment. The phases included: (1) a research phase to identify, collect and analyze secondary demographic, socioeconomic, health and environmental data; (2) a data synthesis and analysis phase; (3) a period of data reporting and discussion among the project partners. In addition to this work, ARHS contracted with another vendor to assist with (4) a community input phase to elicit opinion and ideas regarding the assessment outcomes among community stakeholders. ARHS and its partners, particularly the Healthy Carolinians coalitions within the region worked on a final step: (5) a prioritization and decision-making phase. Upon completion of this work the CHNA partners and the community will have the tools they need to develop plans and activities that will improve the health and well-being of the people living in Pasquotank County.

ASSESSMENT METHODOLOGY

In order to learn about the specific factors affecting the health and quality of life of Pasquotank County residents, the CHNA data consultant tapped numerous readily available secondary data sources. For data on Pasquotank County demographic, economic and social characteristics sources included: the US Census Bureau; Log Into North Carolina (LINC); NC Office of State Budget and Management; NC Department of Commerce; Employment Security Commission of NC; NC Division of Aging and Adult Services; NC Department of Public Instruction; NC Department of Justice; NC Department of Juvenile Justice and Delinquency Prevention; NC Department of Administration; NC Division of Medical Assistance; NC Division of Child Development; NC State Board of Elections; NC Division of Health Services Regulation; the Cecil B. Sheps Center for Health Services Research; and the Annie E. Casey Foundation *Kids Count Data Center*. Local sources for socioeconomic data included: the Pasquotank County Department of Social Services; Pasquotank County Schools; and other Pasquotank County agencies and organizations. The consultant made every effort to obtain the most current data available at the time the report was prepared.

The primary source of health data for this report was the NC State Center for Health Statistics, including its County Health Data Books, Vital Statistics, and Cancer Registry units. Other health data sources included: US Centers for Disease Control and Prevention; NC DPH Epidemiology Section; NC Division of Mental Health, Developmental Disabilities and Substance Abuse Services; National Center for Health Statistics; Healthy North Carolina 2020; NC DPH Nutrition Services Branch; UNC Highway Safety Research Center; NC Department of Transportation; and the NC DPH Oral Health Section, as well as other *public domain* sources. *Local* health data from the county Health Department, county schools and emergency management services department were also accessed. Through the current ARHS partnership with the region's five hospitals, the consultant accessed de-identified hospital utilization data (primarily emergency department discharges and in-patient hospitalization discharges) that contributed greatly to the understanding of health issues in Pasquotank County.

Because in any community health assessment it is instructive to relate local data to similar data in other jurisdictions, Pasquotank County data is compared to like data describing the state of NC as a whole, as well as to data from Scotland County, a state-recommended "peer county". Also used for comparison is data for the average measure of each parameter in the seven counties in the ARHS jurisdiction: Pasquotank County, Camden County, Chowan County, Currituck County, Gates County, Pasquotank County and Perquimans County. In some cases Pasquotank County data is compared to US-level data, or to Healthy People 2020 goals or other standardized measures. Where appropriate, trend data has been used to show changes in indicators over time, at least since the 2013 Pasquotank County CHA, but sometimes further back than that.

Environmental data were gathered from sources including: US Environmental Protection Agency; NC Department of Environment and Natural Resources Divisions of Air Quality, Waste Management, and Environmental Health; and NC State Laboratory of Public Health.

As an additional part of the CHNA process, ARHS and its partners also conducted community listening sessions (i.e., *primary data* collection) among members of the public and community leaders. A brief summary of listening session results is provided in this document, but since the listening sessions are not the work of the secondary data consultant, the full description of the methodologies and results of the listening sessions are presented in a separate document.

This report represents a topical synthesis of all the *secondary data* researched in connection with the 2016 ARHS CHNA project. It is intended to serve as the master secondary data resource for guiding community deliberations about the most important health issues in Pasquotank County and how to solve them.

It should be noted at the onset that the secondary data consultant thoroughly cites and personally vouches for all data sources in the public domain. Local data cites the name of the provider of the information, and readers should judge for themselves the authority of those sources. Finally, as is typical in all time-limited activities such as community health assessment, all data were mined at a point in time in the recent past, and may not represent present conditions. Website URLs, numbers, entity names, program titles, etc. that appear in the data may no longer be current.

This comprehensive report is available on-line in PDF format on the ARHS website at: <http://www.arhs-nc.org/>.

CHAPTER ONE: DEMOGRAPHIC DATA

GEOGRAPHY

Pasquotank County is located in northeast NC and is part of the Coastal Plain region. It is made up primarily of flatlands and contains miles of waterfront with the Little River to the west, the Albemarle Sound to the south, and the Pasquotank River to the east. The county covers 289 square miles, 227 of land and 62 of water (1,2).

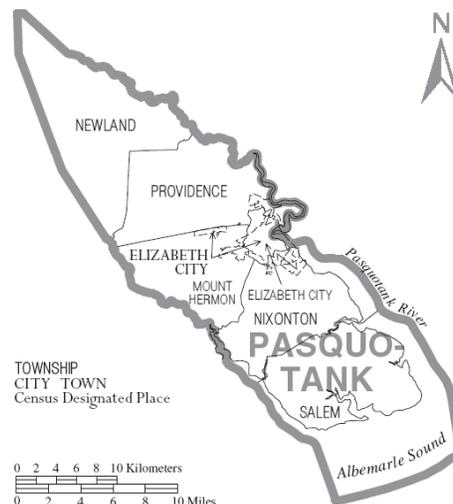
Elizabeth City is the county seat. Other towns include Nixonton and Weeksville. Norfolk, VA is the nearest metropolitan area, approximately 37 miles to the north. Raleigh, NC is about 166 miles to the west, and Wilmington, NC is 214 miles to the southwest. Adjacent to Pasquotank County are Perquimans County to the southwest, Camden County to the east, and Gates County to the northwest (1,2).

US Highway 17 runs through Elizabeth City northeast toward the Outer Banks and southwest toward Wilmington; it joins US 64, which leads west to Raleigh. Also running through the county seat is US Highway 158. This highway runs south to the Albemarle Sound and the Outer Banks and northwest to Gates County. The nearest interstate highway is I-95, approximately 30 miles west of the county (1,2).

The nearest commercial airport to the county is the Norfolk International Airport in Norfolk, VA, located 53 miles from Elizabeth City. The Newport News/Williamsburg International Airport in Newport News, VA is 80 miles from Elizabeth City, and the Pitt-Greenville Airport, in Greenville, NC, is 97 miles from Elizabeth City. The closest stop for any passenger railway system is in Norfolk, VA. The Greyhound bus line has a stop in Elizabeth City (3,4,5).

Pasquotank County topography ranges from sea level to 21 feet. The climate is relatively mild. The average minimum temperature for the month of January is 32 degrees, with the average maximum temperature in July being 89 degrees. The average monthly precipitation is four inches (1,6).

Figure 1. Map of Pasquotank County



HISTORY

Pasquotank County was originally inhabited by the Pasquotank Indians and was formed out of the Albemarle Precinct in 1660. It was established as its own county in 1668. The county was named for the Algonquian Indian word *pasketanki*, meaning “where the current divides or forks”. There are two rivers flanking the county, the Pasquotank River and the Little River, making the name quite appropriate. These rivers are significant because during the colonial period they defined transportation centers, provided fish, and made it possible to take the settler’s products directly to Caribbean ports and to the other colonies. The abundance of water also aided the farmers with their crops of tobacco, cotton, wheat and corn (7,8).

The town of Nixonton, along the Little River, was the county’s first settlement and commercial center. The county’s only incorporated town for nearly fifty years, Nixonton served as the county seat from 1785 until 1799. It was on land provided by, and thus named for, Zachariah Nixon. In 1799, a new ferry crossing was established just above The Narrows, a location where the river was narrow and easy to cross in any weather. A settlement developed on a landing in The Narrows and became a convenient stopping place for travelers, mariners, shippers and buyers. Originally called Redding, the legislature changed the name of the thriving settlement to Elizabeth Town in 1794 and later to Elizabeth City, which became the county seat in 1799. Other towns and communities in Pasquotank include Nixonton, Morgan’s Corner and Weeksville (7,8,9).

The first permanent settlers to North Carolina were Virginians, drawn to the region by reports of fertile bottom lands, abundant timber resources, and a favorable climate. Unlike the landing at Jamestown in 1607, the beginning of permanent settlements in this area was not a mass migration, but rather the chance wandering of those seeking unoccupied land, hunters in search of furs or meat, and explorers and adventurers. These settlers arrived in the Albemarle Sound area around 1650 and began purchasing land from local Indian tribes. The first group of six freeholders met in 1665 to organize community affairs. Present was William Drummond, the first governor of Albemarle, appointed in 1664 by Virginia governor William Berkeley on orders of the Lord Proprietors. Believed to also be present were the first two settlers of the area, Samuel Pricklove and George Durant. Albemarle was isolated and the general nature of its people independent, both believed to be factors contributing to unstable government in the colony’s early years of existence (8,9).

Other than Quaker meetings in private houses, early Albemarle County offered no formal religious life. Instrumental in the development and arrival of Quakerism were the missionaries William Edmundson and George Fox. With the Quakers being the only church available to the region, there were many converts, particularly in Perquimans and Pasquotank precincts (8,9).

The Albemarle region was governed by independent men for the first thirty years, and Quakers served in all levels of political office. Despite conflict for government control between the established church and the Quaker faction, the Quakers were quite dominant in early Pasquotank. A Quaker and a Lord Proprietor, John Archdale, was Governor from 1694 to 1696. The Quaker influence began to wane after a law was passed requiring officeholders to take an oath to serve the English crown. Not believing oaths should be made to any but God, the Quakers met opposition and were no longer permitted to hold public office (8,9).

During the Revolution, Pasquotank provided one brigadier general and multiple colonels, but there were no local engagements. There was no real imprint left by the War of 1812 either.

However, the Civil War placed an unforgettable mark in 1862, when ships were sent up the Pasquotank River and captured the town of Elizabeth City. Many homes, most stores and the courthouse were destroyed by fire. Credit is given to citizen Arthur Jones, subsequently known as 'Colonel' Arthur Jones although he was not affiliated with the military, who saw that the fire was spreading and took a wagon and team to the courthouse in order to load and save invaluable county documents and records. He drove the wagon to Parkville and hid the documents in a barn where they safely remained until the end of the hostilities in 1865. The years between 1862 and 1865 were cruel and gruesome times in many ways, but the worst was yet to come after peace was restored. The era of "Reconstruction" lasted for years and made its blight on Pasquotank. On a positive note, the lack of friendliness between Pasquotank and neighboring counties of Virginia quickly disappeared due to the common bond resulting from the hostilities (8,9).

A distinguished citizen of Pasquotank, George W. Brooks of Elizabeth City, is credited with having "broken the back" of the cruel, corrupt carpet-bag rule. Leading citizens of Alamance and Caswell counties had been imprisoned in 1870 without charges, simply because they had supported the Confederacy. When orders of the state courts were contemptuously disregarded by military government, Brooks issued a Federal *writ of habeas corpus* requiring the military to produce its prisoners. Although an appeal was made to President Grant, the Federal injunction was forced to be honored and the rights of individuals were restored with innocent men no longer being subjected to persecution by martial law (8,9).

Somewhere around 1880, a new wave of prosperity swept over Pasquotank, and other than the depression years, it has continued. Blooded livestock appeared soon after 1900, followed by new crops of soybeans, lespedeza and hybrid corn. Beef production and dairying was added to the hog and sheep raising. Machine methods in farming became necessary due to lack of good labor following the depression, and revolutionized the county's agriculture. Concrete grain elevators are now common sights about the countryside and farming is one of the county's most profitable activities (8,9).

The waterways of Pasquotank County are one of its definitive characteristics, not just during its early years but in present times as well. Sitting on the northern portion of the Albemarle Sound and bordered by two rivers, the county is an attractive destination for shipping, boating, fishing, diving and other water-related activities. Elizabeth City has become a favorite stop on the Intracoastal Waterway and combines a vast history, integrated economy, and diversified culture. A revitalization of the town included new docks and boat facilities, shops and a museum which interprets over 400 years of local history. Many changes have been brought to the county over the years, but in basic ways Pasquotank county and its people are still similar to their forefathers and inherited tradition (8,9).

POPULATION CHARACTERISTICS

General Population Characteristics

The following general population characteristics of Pasquotank County and its peer county were based on 2014 US Census data presented in the table below.

- As of the 2014 US Census estimate, the population of Pasquotank County was 39,787.
- The population of Pasquotank County was approximately evenly divided between males and females, which is the typical pattern.
- The overall median age in Pasquotank County was 37.6, 6.0 years *younger* than the median age for the seven-county ARHS region and 1.4 years younger than Scotland County, an assigned peer county. The median age in Pasquotank County was 0.6 years younger than the median age for NC as a whole.

**Table 1. General Demographic Characteristics
(US Census Bureau Estimate, 2014)**

Location	Total Population	Number Males	% Population Male	Median Age Males	Number Females	% Population Female	Median Age Females	Overall Median Age
Pasquotank County	39,787	19,556	49.2	35.7	20,231	50.8	39.6	37.6
Regional Average	19,258	9,467	49.2	42.0	9,791	50.9	45.1	43.6
Scotland County	35,576	17,509	49.2	37.2	18,067	50.8	41.1	39.0
State of NC	9,943,964	4,844,593	48.7	36.7	5,099,371	51.3	39.7	38.2

Note: percentages by gender are calculated.

Source: US Census Bureau, American Fact Finder, 2014 Population Estimates. PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2014. (Geographies as noted) <http://factfinder.census.gov>.

Population by Township

Pasquotank County is divided into six townships: Elizabeth City Township, Mount Hermon Township, Newland Township, Nixonton Township, Providence Township and Salem Township. The following population information was derived from 2010-2014 US Census data presented in the following table.

- Elizabeth City Township was the largest township by population in Pasquotank County, accounting for almost 28% of the county's population.
- Nixonton Township was the second-largest township in Pasquotank County, with almost 24% of the county's population.
- Salem Township was the smallest township in Pasquotank County, and was home to only approximately 5% of the overall county population.
- Nixonton Township was the "youngest" township in the county in terms of median age: 31.4 years.
- Newland Township was the "oldest" township in the county, with a median age of 42.9 years.

**Table 2. Population by Township, Pasquotank County
(US Census Bureau 5-Year Estimate, 2010-2014)**

Township	No. of Persons	% of County Population	Median Age
Elizabeth City Township	11,105	27.6	37.4
Mount Hermon Township	6,911	17.2	39.8
Newland Township	2,642	6.6	42.9
Nixonton Township	9,472	23.5	31.4
Providence Township	8,267	20.5	35.7
Salem Township	1,836	4.6	42.3
Pasquotank County Total	40,233	100.0	37.4

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-years estimates, Table S0101: Age and Sex. Geographies as noted. <http://factfinder.census.gov>.

Population Growth

The next table presents historical population counts and population projections from 1980 through 2030. From this data, it appears that years of significant increase in the Pasquotank County population may have ended in the present decade.

**Table 3. Decadal Population Growth
(1980-2030 [Projected])**

Location	Number of Persons and Percent Change										
	1980	1990	% Change 1980-1990	2000	% Change 1990-2000	2010	% Change 2000-2010	2020 (Projection)	% Change 2010-2020	2030 (Projection)	% Change 2020-2030
Pasquotank County	28,492	31,298	9.8	34,987	11.8	40,661	16.2	40,240	-1.0	40,366	0.3
<i>Regional Average</i>	13,908	14,941	7.4	16,550	10.8	19,416	17.3	19,673	1.3	20,377	3.6
Scotland County	32,273	33,763	4.6	35,998	6.6	36,157	0.4	34,488	-4.6	31,846	-7.7
State of NC	5,880,095	6,632,448	12.8	8,046,485	21.3	9,535,483	18.5	10,573,611	10.9	11,609,883	9.8

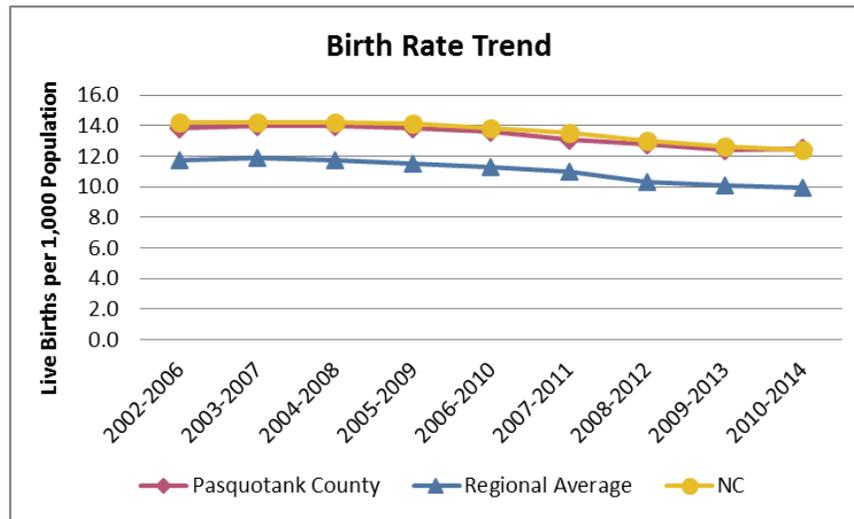
Note: percentage change is calculated.

Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population (Data Item 5001); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Birth Rate

Overall population growth is a function both of increase (via births and in-migration) and decrease (via deaths and out-migration). The following figure illustrates that the birth rate is declining in NC and all three other jurisdictions in the comparison.) In Pasquotank County, the birth rate decreased from 13.8 live births per 1,000 population in the 2002-2006 aggregate period to 12.5 live births per 1,000 population in the 2010-2014 aggregate period, a decrease of 9%. The birth rate for Pasquotank County was similar to the NC rate throughout the period cited, and both were higher than the comparable regional average.

Figure 2. Birth Rate Trend, Live Births per 1,000 Total Population (Five-Year Aggregates, 2002-2006 through 2010-2014)



Source: NC State Center for Health Statistics, Health Data, County Level Data, County Health Databooks 2008 through 2016. <http://www.schs.state.nc.us/schs/data/databook/>.

Population Density

The Pasquotank County population is projected to *decrease* in density after attaining a 2010 high. In every period cited in the table below, Pasquotank County was the most or second-most densely populated jurisdiction among those being compared.

Table 4. Decadal Population Density (1980-2030 [Projected])

Location	Persons per Square Mile					
	1980	1990	2000	2010 (Estimate)	2020 (Projection)	2030 (Projection)
Pasquotank County	124.83	137.94	153.81	184.83	139.03	139.46
<i>Regional Average</i>	50.91	55.99	62.72	75.55	55.73	57.50
Scotland County	101.06	105.79	112.8	118.24	107.67	99.42
<i>State of NC</i>	120.39	136.14	165.19	191.93	196.47	215.72

Source: Log Into North Carolina (LINC) Database, Topic Group Population and Housing, Total Population, Population Density (Data Item 5004); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Race and Ethnicity

The population of Pasquotank County is more racially diverse than both the ARHS region and NC as a whole. For example, according to 2014 data from the US Census Bureau cited below, the non-white population in Pasquotank County was approximately 42% of the total population, a proportion 40% higher than the comparable proportion in NC as a whole (30%) and 20% higher than the comparable proportion for the region (35%). The non-white population in Pasquotank County was 21% smaller than the non-white population in Scotland County (53%).

According to data in the following table, in Pasquotank County:

- Whites composed 58.3% of the total population; regionally the comparable figure was 64.8% and statewide the figure was 69.6%.
- Blacks/African Americans composed 37.4% of the total population; regionally the comparable figure was 31.8% and statewide the figure was 21.5%.
- American Indians and Alaskan Natives composed 0.1% of the total population; regionally the comparable figure was 0.3% and statewide the figure was 1.2%.
- Asians, Native Hawaiians and Other Pacific Islanders composed 1.7% of the total population; regionally the comparable figure was 1.0% and statewide the figure was 2.4%.
- Hispanics/Latinos of any race composed 4.4% of the total population; regionally the comparable figure was 3.0% and statewide the figure was 8.7%.

**Table 5. Population Distribution by Race/Ethnicity
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total	Number and Percent													
		White		Black or African-American		American Indian and Alaskan Native		Asian, Native Hawaiian and Other Pacific Islander		Some Other Race		Two or More Races		Hispanic or Latino of Any Race	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	40,233	23,437	58.3	15,041	37.4	32	0.1	693	1.7	264	0.7	766	1.9	1,757	4.4
<i>Regional Average</i>	19,334	12,534	64.8	6,146	31.8	64	0.3	192	1.0	92	0.5	306	1.6	584	3.0
Scotland County	36,034	16,820	46.7	13,916	38.6	284	0.8	220	0.6	214	0.6	1,158	3.2	919	2.6
State of NC	9,750,405	6,784,901	69.6	2,093,389	21.5	113,798	1.2	237,913	2.4	293,865	3.0	226,539	2.3	848,597	8.7
Source	a	a	b	a	b	a	b	a	b	a	b	a	b	c	b

a - US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B02001: Race. (Geographies as noted).

<http://factfinder.census.gov>

b - Percentages were calculated

c - US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B03003: Hispanic or Latino Origin. (Geographies as noted). <http://factfinder.census.gov>.

Race and Ethnicity by Township

The following information about racial and ethnic population diversity at the township level in Pasquotank County was derived from 2010-2014 US Census data presented in the table below.

- All townships in Pasquotank County *except* Elizabeth City Township were predominately white.
- Elizabeth City Township was the township with by far the largest *number* of Black/African Americans, 5,956; this figure represented 14.8% of the total county population and 39.6% of all Black/African American persons in the county.
- Providence Township was the township with the largest *number* of whites, 5,910; this figure represented 14.7% of the total county population and 25.2% of all the white persons in the county.
- Elizabeth City Township also was the township with the largest *number* of Hispanics/Latinos, 883; this figure represented 2.2% of the total county population and 50.3% of all Hispanic/Latino persons in the county.

**Table 6. Population by Race/Ethnicity, by Township, Pasquotank County
(US Census Bureau 5-Year Estimate, 2010-2014)**

Township	Persons Self-Identifying as of One Race											Two or More Races		Hispanic or Latino (of any race)	
	Total Population	White		Black or African American		American Indian and Alaska Native		Asian, Native Hawaiian or Other Pacific Islander		Some Other Race					
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Elizabeth City Township	11,105	4,752	11.8	5,956	14.8	0	0.0	36	0.1	183	0.5	178	0.4	883	2.2
Mount Hermon Township	6,911	4,370	10.9	2,234	5.6	32	0.1	132	0.3	33	0.1	110	0.3	203	0.5
Newland Township	2,642	1,705	4.2	898	2.2	0	0.0	21	0.1	0	0.0	18	0.0	76	0.2
Nixonton Township	9,472	5,185	12.9	3,770	9.4	0	0.0	240	0.6	25	0.1	252	0.6	314	0.8
Providence Township	8,267	5,910	14.7	1,969	4.9	0	0.0	233	0.6	20	0.0	135	0.3	202	0.5
Salem Township	1,836	1,515	3.8	214	0.5	31	0.1	0	0.0	3	0.0	73	0.2	79	0.2
Pasquotank County Total	40,233	23,437	58.3	15,041	37.4	63	0.2	662	1.6	264	0.7	766	1.9	1,757	4.4

Note: percentages are calculated from population figures. Percentage figures describe a racial or ethnic group as a proportion of the overall county population.

Sources: US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B02001: Race. (Geographies as noted). <http://factfinder.census.gov>, and US Census Bureau, American Fact Finder, 2014 ACS 5-year estimates. Table B03003: Hispanic or Latino Origin. (Geographies as noted). <http://factfinder.census.gov>.

Age

The following information about the age (and gender) distribution of the Pasquotank County population was derived from 2014 US Census Bureau estimates presented in the next table. Generally, these data demonstrate that Pasquotank County had a population distribution skewed *slightly younger* than the distribution for the state as a whole.

- In terms of both numbers (3,235) and percent (8.1%), the largest segment of the population in Pasquotank County was the age group 20-24. This is the same as in NC as a whole, where this segment composes 7.2% of the state's population.
- Persons 65 years of age or older composed 15.4% of the population in Pasquotank County, but 14.6% of the population of NC.
- Persons 19 years of age and younger composed 24.9% of the population in Pasquotank County, and 25.8% of the population of NC.

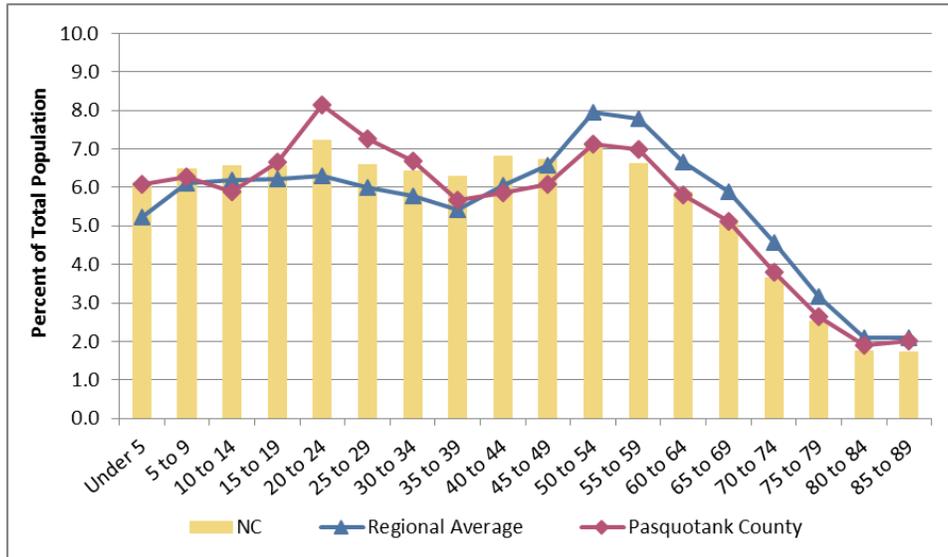
**Table 7. Population Distribution by Age and Gender, Number and Percent
(US Census Bureau Estimate, 2014)**

Age Group	Pasquotank County						North Carolina					
	No. in Population			% of Total Population			No. in Population			% of Total Population		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
All ages	39,787	19,556	20,231	100.0	49.2	50.8	9,943,964	4,844,593	5,099,371	100.0	48.7	51.3
Under 5	2,419	1,262	1,157	6.1	3.2	2.9	607,476	310,355	297,121	6.1	3.1	3.0
5 to 9	2,501	1,313	1,188	6.3	3.3	3.0	644,895	328,815	316,080	6.5	3.3	3.2
10 to 14	2,342	1,181	1,161	5.9	3.0	2.9	651,864	332,271	319,593	6.6	3.3	3.2
15 to 19	2,645	1,309	1,336	6.6	3.3	3.4	652,941	333,645	319,296	6.6	3.4	3.2
20 to 24	3,235	1,654	1,581	8.1	4.2	4.0	718,261	376,049	342,212	7.2	3.8	3.4
25 to 29	2,887	1,537	1,350	7.3	3.9	3.4	654,475	324,122	330,353	6.6	3.3	3.3
30 to 34	2,664	1,363	1,301	6.7	3.4	3.3	637,775	312,509	325,266	6.4	3.1	3.3
35 to 39	2,259	1,136	1,123	5.7	2.9	2.8	625,513	305,953	319,560	6.3	3.1	3.2
40 to 44	2,334	1,204	1,130	5.9	3.0	2.8	677,245	331,038	346,207	6.8	3.3	3.5
45 to 49	2,423	1,212	1,211	6.1	3.0	3.0	668,371	327,819	340,552	6.7	3.3	3.4
50 to 54	2,836	1,385	1,451	7.1	3.5	3.6	699,194	338,657	360,537	7.0	3.4	3.6
55 to 59	2,777	1,299	1,478	7.0	3.3	3.7	658,373	314,339	344,034	6.6	3.2	3.5
60 to 64	2,308	1,063	1,245	5.8	2.7	3.1	584,219	273,695	310,524	5.9	2.8	3.1
65 to 69	2,037	944	1,093	5.1	2.4	2.7	505,469	236,107	269,362	5.1	2.4	2.7
70 to 74	1,517	669	848	3.8	1.7	2.1	362,314	165,643	196,671	3.6	1.7	2.0
75 to 79	1,052	473	579	2.6	1.2	1.5	251,577	109,253	142,324	2.5	1.1	1.4
80 to 84	754	288	466	1.9	0.7	1.2	173,620	69,325	104,295	1.7	0.7	1.0
85 and older	797	264	533	2.0	0.7	1.3	170,382	54,998	115,384	1.7	0.6	1.2

Source: US Census Bureau, American Fact Finder, 2014 Population Estimates. PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Muncipios: April 1, 2010 to July 1, 2014. <http://factfinder.census.gov>. (Geographies as noted) <http://factfinder2.census.gov>. Percentages are calculated.

The following figure compares the age distribution of the NC population to the age distribution of the populations in Pasquotank County and the ARHS Region. Note that the age distribution profile in Pasquotank County is more similar to the profile for NC as a whole than to the profile for the ARHS region.

Figure 3. Population Distribution by Age, Pasquotank County, ARHS Region and NC (US Census Bureau Estimate, 2014)



Source: US Census Bureau, American Fact Finder, 2014 Population Estimates. PEPAGESEX: Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municípios: April 1, 2010 to July 1, 2014. <http://factfinder.census.gov> (Geographies as noted) <http://factfinder2.census.gov>.

Age by Township

The discussion below is based on the 2014 US Census Bureau Estimates presented in the table below:

- Elizabeth City Township was the township with the highest proportion of persons under the age of 18 (24.8%).
- Newland Township had the highest proportion of persons ages 65 and older (16.5%).

Table 8. Population by Age, by Township, Pasquotank County (US Census Bureau 5-Year Estimate, 2010-2014)

Township	Percent of Total Population						
	<18	18-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65 Years and Over
Elizabeth City Township	24.8	10.0	12.9	10.8	13.3	11.9	16.2
Mount Hermon Township	20.7	9.0	10.2	18.6	17.7	12.0	11.8
Newland Township	16.4	13.0	10.6	13.0	19.9	10.6	16.5
Nixonton Township	22.1	18.7	11.8	10.6	11.9	11.4	13.6
Providence Township	22.2	9.1	17.3	10.7	13.9	12.2	14.6
Salem Township	20.1	11.8	12.9	11.8	9.1	21.7	12.8
Pasquotank County Total	22.1	12.0	12.9	12.3	14.1	12.1	14.4

Source: US Census Bureau, American FactFinder, 2014 ACS 5-year Estimates. Table S0101 Age and Sex (geographies as listed); <http://factfinder2.census.gov>. Some age groups calculated.

Elderly Population

Because the proportion of the Pasquotank County population age 65 and older is slightly larger than the proportion of that age group statewide, it merits closer examination. The population segment age 65 and older often requires more and different health and social services than the rest of the population, and understanding how that population will change in coming years will be an important consideration in planning to meet the future health and human service needs of the community.

The following information regarding the elderly population in Pasquotank County was extracted from the multi-part table below, which was developed from 2000 and 2010 US Census figures and current projections for the years 2020 and 2030 from the NC Office of State Budget and Management.

- The proportion of every age group in Pasquotank County age 65 and older will increase through the year 2030.
- Though all segments of the elderly population will grow, the segment expected to grow by the largest percentage in the twenty years between 2010 and 2030 is the age group 65-74, which is predicted to grow by 53% over that period, from 7.3% to 11.2% of the total county population.
- The segment of the population expected to grow by the second largest percentage between 2010 and 2030 is the group aged 75-84, which is predicted to grow by 49% over that period, from 4.5 % to 6.7% of the total county population.
- The segment of the Pasquotank County population age 65 and older is projected to total 8,115 persons by 2030.

Table 9. Growth Trend for the Elderly (Age 65 and Older) Population, by Decade (2000 through 2030)

Location	2000 Census Data								
	Total Population (2000)	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Pasquotank County	34,897	4,911	14.1	2,532	7.3	1,769	5.1	610	1.7
<i>Regional Total</i>	116,155	17,502	15.1	9,504	8.2	6,011	5.2	1,987	1.7
<i>Regional Average</i>	16,594	2,500	15.3	1,358	8.4	859	5.2	284	1.7
Scotland County	35,998	4,082	11.3	2,261	6.3	1,354	3.8	467	1.3
State of NC	8,049,313	969,048	12.0	533,777	6.6	329,810	4.1	105,461	1.3
Source	1	1	1	1	5	1	5	1	5

Location	2010 Census Data								
	Total Population (2010)	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Pasquotank County	40,661	5,513	13.6	2,963	7.3	1,813	4.5	737	1.8
<i>Regional Total</i>	135,913	21,119	15.5	12,006	8.8	6,579	4.8	2,534	1.9
<i>Regional Average</i>	19,416	3,017	16.1	1,715	9.3	940	4.9	362	1.9
Scotland County	36,157	4,914	13.6	2,822	7.8	1,479	4.1	613	1.7
State of NC	9,535,483	1,234,079	12.9	697,567	7.3	389,051	4.1	147,461	1.5
Source	2	2	2	2	5	2	5	2	5

**Table 9. Growth Trend for the Elderly (Age 65 and Older) Population, by Decade
(2000 through 2030)
Continued**

Location	2020 (Projected)								
	Total Projected Population	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Pasquotank County	40,331	6,628	16.4	3,891	9.6	2,002	5.0	735	1.8
<i>Regional Total</i>	138,650	27,070	19.5	15,597	11.2	8,460	6.1	3,013	2.2
<i>Regional Average</i>	19,807	3,867	20.6	2,228	11.7	1,209	6.6	430	2.4
Scotland County	34,482	6,548	19.0	4,096	11.9	1,856	5.4	596	1.7
State of NC	10,574,718	1,778,807	16.8	1,056,828	10.0	530,540	5.0	191,439	1.8
Source	3	3	5	3	5	3	5	3	5

Location	2030 (Projected)								
	Total Projected Population	# Population Age 65 and Older	% Population Age 65 and Older	# Age 65-74	% Age 65-74	# Age 75-84	% Age 75-84	# Age 85+	% Age 85+
Pasquotank County	40,366	8,115	20.1	4,528	11.2	2,692	6.7	895	2.2
<i>Regional Total</i>	142,641	33,125	23.2	18,048	12.7	11,082	7.8	3,995	2.8
<i>Regional Average</i>	20,377	4,732	24.4	2,578	13.0	1,583	8.3	571	3.2
Scotland County	31,846	7,309	23.0	3,867	12.1	2,699	8.5	743	2.3
State of NC	11,609,883	2,314,948	19.9	1,256,441	10.8	792,733	6.8	265,774	2.3
Source	4	4	5	4	5	4	5	4	5

1 - US Census Bureau, American FactFinder. Profile of General Demographic Characteristics: 2000 (DP-1), SF1;

<http://factfinder2.census.gov>.

2 - US Census Bureau, American FactFinder. Profile of General Population and Housing Characteristics: 2010 (DP-1); website:

<http://factfinder2.census.gov>.

3 - NC Office of State Budget and Management, Facts and Figures, County Projections. Age, Race and Sex Projections. Age Groups - Total: July 2020 - Totals. http://www.osbm.nc.gov/demog/countytotals_standardagegroups.

4 - NC Office of State Budget and Management, Facts and Figures, County Projections. Age, Race and Sex Projections. Age Groups - Total: July 2030 - Totals. http://www.osbm.nc.gov/demog/countytotals_standardagegroups.

5 – Percentages are calculated using age group population as numerator and total population as denominator.

Demographic Characteristics of the Elderly Population

The next table summarizes a variety of data describing the educational and financial status of the population age 65 and older. Among the jurisdictions presented for comparison in the table, the elderly population in Pasquotank County had:

- the second-lowest proportion with less than a high school diploma or GED (27.7%);
- the second-highest proportion with a graduate or professional degree (16.5%);
- the second-highest proportion living below 100% poverty (11.9%);
- the lowest proportion (tied with NC) living between 100% and 199% poverty (24.4%);
- the second-lowest proportion living alone (26.4%);
- the highest proportion in the labor force (16.6%); and
- the second-highest median household income (\$35,603), \$579 higher than the NC average.

In addition, according to US Census Bureau estimates, 40.7% of the Pasquotank County population age 65 or older had some sort of disability (10).

Table 10. Demographic Characteristics of the Population Age 65+ (US Census Bureau Estimate, 2014)

Location	% with Less than HS Diploma	% with Graduate or Professional Degree	% Below Poverty Level	% at 100%-199% Poverty Level	% Homeowners	% Living Alone	% Persons Age 65+ in Labor Force	Median Household Income Householders Age 65+
Pasquotank County	27.7	16.5	11.9	24.4	80.0	26.4	16.6	\$35,603
<i>Regional Average</i>	28.0	15.0	11.5	26.9	87.3	25.2	14.2	\$36,210
Scotland County	33.9	13.4	13.6	33.2	78.7	30.9	9.3	\$26,115
<i>State of NC</i>	22.3	21.6	9.9	24.4	81.7	28.0	15.7	\$35,024

Source: NC Division of Aging and Adult Services. Data Reports. County Aging Profiles. https://ncdhhs.s3.amazonaws.com/s3fs-public/documents/files/county-aging-profiles_0.pdf.

Non-English Speaking Population

The foreign-born population in a community is one that potentially does not speak English, and so is of concern to service providers.

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

According to US Census Bureau estimates summarized in the table below:

- There were 1,680 foreign-born residents residing in Pasquotank County in 2014. Using a base 2014 county population figure of 39,787, foreign-born residents made up 4.2% of the total county population at that time.
- Since 1990, the largest influx of foreign-born persons in Pasquotank County—700 people, or 42% of the total foreign born population in 2014—arrived between 2000 and 2009.

Table 11. Growth of the Foreign-Born Population (Before 1990 through 2014)

Location	Number of Persons Arriving				
	Total	Before 1990	1990-1999	2000-2009	After 2010
Pasquotank County	1,680	658	266	700	56
<i>Regional Total</i>	4,680	2,125	831	1,577	147
<i>Regional Average</i>	669	304	119	225	21
Scotland County	933	277	326	207	123
<i>State of NC</i>	834,327	225,160	241,832	324,570	42,765

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimates, Table B05005: Year of Entry by Citizenship Status in the United States. <http://factfinder2.census.gov>.

Linguistic Isolation

“Linguistic isolation”, reflected as an inability to communicate because of a lack of language skills, can be a barrier preventing foreign-born residents from accessing needed services. The US Census Bureau tracks linguistically isolated households according to the following definition:

A linguistically isolated household is one in which no member 14 years and over (1) speaks only English, or (2) speaks a non-English language and speaks English “very well”. In other words, all members 14 years old and over have at least some difficulty with English.

The following information about linguistically isolated households is derived from the 2010-2014 five-year US Census Bureau estimates presented in the table below.

- Of the 37,574 persons five years old and older in Pasquotank County in the period cited, an estimated 5.3% (1,991 persons) spoke a language other than English. Of these, an estimated 36.3% (723 persons) were linguistically isolated.
- The largest *number* of linguistically isolated persons in Pasquotank County in the period cited occurred within the Spanish-speaking population (n=468), and the highest *proportion* of linguistically isolated persons in the county (49.8%) was also noted in that population.

**Table 12. Household Language by Linguistic Isolation
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total Population 5 years and older	Spanish Speakers			Other Indo-European Languages			Asian & Pacific Island Languages			Other Languages		
		% of Population	% Speaking English Very Well	% Speaking English Less than Very Well	% of Population	% Speaking English Very Well	% Speaking English Less than Very Well	% of Population	% Speaking English Very Well	% Speaking English Less than Very Well	% of Population	% Speaking English Very Well	% Speaking English Less than Very Well
Pasquotank County	37,574	2.5	50.2	49.8	1.7	65.4	34.6	0.8	88.7	11.3	0.3	100.0	0.0
<i>Regional Average</i>	18,095	1.8	47.8	50.8	0.8	87.3	12.7	0.7	33.6	37.9	0.1	57.1	14.3
Scotland County	33,686	1.9	51.9	48.1	0.6	72.8	27.2	0.6	53.0	47.0	0.1	63.9	36.1
<i>State of NC</i>	9,132,159	7.4	56.5	43.5	1.6	75.6	24.4	1.5	56.7	43.3	0.5	71.8	28.2

Source: US Census Bureau, American Fact Finder, Table B16002: Household Language by Linguistic Isolation, 2014 American Community Survey 5-Year Estimates. <http://factfinder.census.gov>.

Age Distribution of the Latino Population

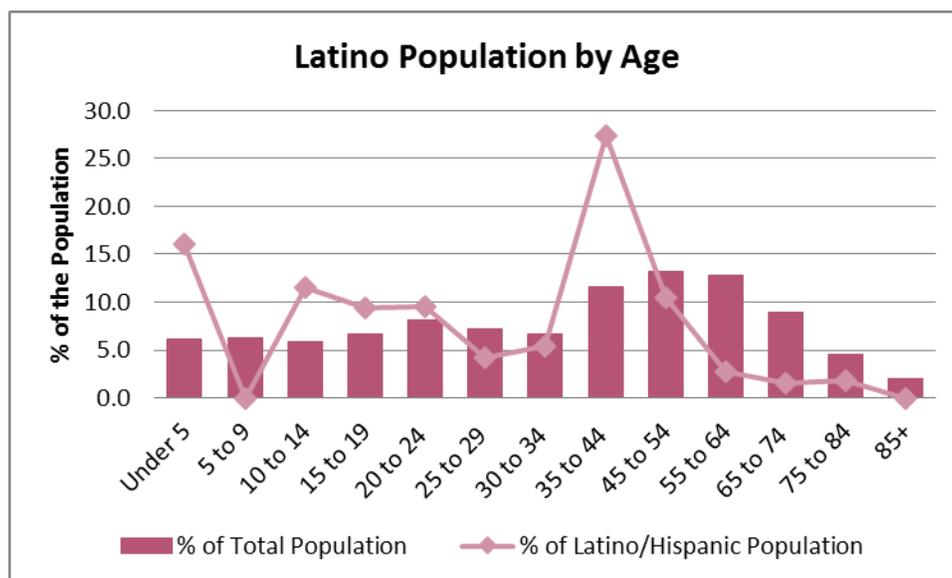
Since the Hispanic/Latino population is the principal linguistically-isolated group in Pasquotank County, further knowledge of the characteristics of this group is helpful in anticipating service needs.

In Pasquotank County, as in other counties in NC, a major impetus for immigration—at least until the economic downturn that began in 2008—was the prospect of employment opportunities. One would expect then that the age groups predominant in this population would be those in their “prime” for work, especially the physical labor-type jobs in construction, agricultural, and fishing industries available to them in the coastal region of the state. The spouses of these workers would be in the midst of their childbearing years, so it might also be expected that this population would have children.

The following figure presents a graphic profile of the 2010-2014 US Census Bureau estimates for population by age group for the total Pasquotank County population compared to the same profile for the Hispanic/Latino population.

- The age profile of the Hispanic/Latino population in Pasquotank County displays peaks in the age groups under 5, 10-24 and 35-44, in proportions significantly *higher* than in the overall county population. There were lower proportions for Hispanics/Latinos than for the general population in all the other age groups.

Figure 4. Age Distribution of Overall and Latino Populations in Pasquotank County, Percent
(US Census Bureau 5-Year Estimate, 2010-2014)



Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimates. Table B010011: Sex by Age (Hispanic or Latino) (geographies as noted); <http://factfinder2.census.gov>. Percentages are calculated

Special Populations

Military Veterans

A population group that sometimes needs special health services is military veterans. The following table summarizes information about that population for the aggregate period 2010-2014.

The population in Pasquotank County had the *largest* proportion of military veterans among the jurisdictions under comparison. Veterans composed 12.6% of Pasquotank County's overall adult civilian population in the period cited.

Although Pasquotank County was home to the largest proportion of military veterans among the comparators, it had the smallest proportion of veterans over the age of 65: 32.9%. Veterans over the age of 65 composed 40.9% in the veteran population in the region, 40.6% statewide, and 36.7% in Scotland County. Nationally, 45.1% of the veteran population was age 65 or older.

**Table 13. Veteran Status of Population
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Civilian Population 18 years and over					% Veterans by Age				
	Total	# Non-Veterans	% Non-Veterans	# Veterans	% Veterans	18 to 34 years	35 to 54 years	55 to 64 years	65 to 74 years	75 years and over
Pasquotank County	30,526	26,680	87.4	3,846	12.6	7.5	32.7	26.9	17.0	15.9
<i>Regional Total</i>	104,388	91,634	87.8	12,754	12.2	n/a	n/a	n/a	n/a	n/a
<i>Regional Average</i>	14,913	13,091	87.5	1,822	12.5	6.4	30.6	22.0	22.8	18.1
Scotland County	27,297	24,735	90.6	2,562	9.4	3.5	31.4	28.4	19.6	17.1
State of NC	7,380,446	6,670,975	90.4	709,471	9.6	9.0	28.0	22.4	21.7	18.9
National Total	239,305,217	218,604,506	91.3	20,700,711	8.7	8.4	24.7	21.9	22.4	22.7

Source: US Census Bureau, American Fact Finder. Veteran Status, 2014 American Community Survey 5-Year Estimate. Table S2101: Veteran Status; <http://factfinder2.census.gov>.

Blind and Visually-Impaired Persons

The table below presents data on the number of blind or visually-impaired persons in the jurisdictions being compared. In 2011, there were 154 blind or visually-impaired persons living in Pasquotank County, and a total of 463 persons with those disabilities region-wide. Note that no update to this data was available.

**Table 14. Blind and Visually-Impaired Persons
(2011)**

Location	Number Blind/Visually Impaired (2011)
Pasquotank County	154
<i>Regional Total</i>	463
<i>Regional Average</i>	66
Scotland County	121
State of NC	20,972

Source: Log into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 520); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

Special Needs Registry

Camden County shares a Special Needs Registry database with Pasquotank County. The purpose of the registry is to provide emergency responders with important information about people who might need specialized help in an emergency. Situations where this information could be used include, but are not limited to: hurricanes and floods; wide-spread, prolonged power outages; tornado or other severe weather causing significant damage; chemical release; and other community-level emergencies. The Special Needs Registry is a voluntary program; it is not a guarantee of immediate or preferential treatment and is not a substitute for 911. Pasquotank-Camden Emergency Management is responsible for maintaining the registry and various community agencies assist with the circulation of registry applications. The list is updated annually. As of November, 2015 there were 154 total registrants (including persons from both target counties) (11).

CIVIC ENGAGEMENT

Electoral Process

One measure of a population's engagement in community affairs is its participation in the electoral process. The following two tables summarize current voter registration and historical voter turnout data. Note that turnout in any particular election is at least partially determined by the voters' interest and investment in the particular issues on the ballot at that time.

Registered Voters

- According to the State Board of Elections, the proportion of the voting age population registered to vote in Pasquotank County in 2016 was 88.3% (see the footnote to the table, below).
- Approximately 35% of the registered voters in Pasquotank County were Black/African American, a percentage lower than the proportion this racial group represented in the overall county population (37.4%) in 2014.

Table 15. Registered Voters, by Race/Ethnicity, Number and Percent (As of 1/9/16)

Location	Estimated Voting Age Population (2015)	Number and Percent of Voting Age Population Registered to Vote ¹											
		Total		White		Black		American Indian		Other		Hispanic	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	30,782	27,178	88.3	15,223	49.5	10,615	34.5	56	0.2	1,284	4.2	186	0.6
<i>Regional Average</i>	15,357	13,476	87.8	8,765	58.7	4,220	26.2	24	0.1	466	2.8	64	0.4
Scotland County	27,291	21,967	80.5	10,752	39.4	8,905	32.6	1,429	5.2	881	3.2	151	0.6
<i>State of NC</i>	7,752,543	6,436,922	83.0	4,539,092	58.5	1,443,414	18.6	52,540	0.7	401,876	5.2	130,982	1.7

Source:

¹ The total number of registered voters reported by the NC State Board of Elections is based on the sum of registrations by party affiliation, and does not necessarily equal the sum of registrations by race. Therefore, the sum of the percentages does not equal 100%.

a - Log Into North Carolina (LINC) Database, Topic Group Government, Voters and Elections, Voting Age Population (Data Item 1714), 2012; http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

b - NC State Board of Elections, Data and Statistics, Voter Registration Statistics, By Date;

http://www.ncsbe.gov/webapps/voter_stats/.

c - Percentages are calculated

Voter Turnout

It is apparent from the data below that voter turnout was higher in every jurisdiction cited in elections that included a presidential race (2004 and every four-years). (Note that this data is no longer available at the source.)

Table 16. Voter Turnout in General Elections (2004-2012)

Location	% Registered Voters that Voted				
	2004	2006	2008	2010	2012
Pasquotank County	56.00	26.00	64.66	34.91	61.96
<i>Regional Average</i>	58.57	35.29	68.67	44.37	65.81
Scotland County	57.00	41.00	62.01	37.96	61.60
<i>State of NC</i>	64.00	37.00	69.93	43.75	68.42

Source: NC State Board of Elections, Elections Central, Elections Results Data (years as noted), General Elections;

<http://www.sboe.state.nc.us/content.aspx?id=69>.

RELIGIOUS LIFE

The fabric of a community is often maintained and repaired through its citizens' participation in organized religion. Increasingly, health and human service providers have come to realize that the faith community can be an important partner in assuring the health and well-being of at least its members if not larger segments of the population.

The following table lists the religious bodies in Pasquotank County as of 2010 (no more recent data was available at the source.) These data, gathered in January 2016, show that in 2010 there was a range of options for exploring faith and religion within the county.

**Table 17. Religious Bodies in Pasquotank County
(2010)**

Religious Bodies	Number of Congregations	Number of Adherents
African Methodist Episcopal Zion Church	11	1,488
Assemblies of God	1	275
Bahai	0	8
Calvary Chapel Fellowship Churches	1	0
Catholic Church	1	1,545
Christian Church (Disciples of Christ)	3	283
Christian Churches and Churches of Christ	3	443
Church of God (Cleveland, Tennessee)	1	210
Church of God of Prophecy	1	35
Church of Jesus Christ of Latter-day Saints	2	938
Church of the Nazarene	1	81
Churches of Christ	1	36
Convention of Original Free Will Baptists	1	149
Episcopal Church	1	443
Evangelical Lutheran Church in America	1	159
Evangelical Methodist Church	1	0
International Pentecostal Church of Christ	1	125
International Pentecostal Holiness Church	2	550
Jehovah's Witness	1	0
National Missionary Baptist Convention, Inc.	1	182
Non-denominational	20	3,113
Presbyterian Church (U.S.A.)	1	147
Salvation Army	1	204
Seventh-Day Adventist Church	1	166
Southern Baptist Convention	12	4,761
United Holy Church of America, Inc.	1	0
United Methodist Church	7	2,656
United Pentecostal Church International	1	0
TOTAL	79	17,997

Source: Association of Religious Data Archives (ARDA), US Congregational Membership: Reports, County Membership Report, Browse Reports, Counties;
<http://www.thearda.com/rcms2010/>.

COMMUNITY SERVICES AND ORGANIZATIONS

Law Enforcement

Pasquotank County Sheriff's Department

The Pasquotank County Sheriff's Office, made up of 69 employees, is a full-service law enforcement agency for the county's more than 40,661 residents. This agency offers patrol services to Pasquotank County's areas and provides varying degrees of support to all of the surrounding counties and to the Elizabeth City Police Department and Elizabeth City State University Security (12).

Municipal Police Departments

Elizabeth City Police Department

In addition to carrying out traditional police department functions, the Elizabeth City Police Department works to offer citizens a platform upon which to bring ideas, thoughts, and concerns to the forefront. It has incorporated many community policing initiatives such as "Coffee with a Cop" "Kids N Cops School Lunch" and "Adopt-A-Block" programs to develop collaboration with citizens, youth, neighborhoods and community stakeholders. Established programs including "Volunteers in Police Service (VIPS)" and "Police Athletic League (PAL)" continue to be a priority as well. In 2015, the Elizabeth City Police Department incorporated a "Law Enforcement Explorer's Program" to further encourage and provide guidance to young people in the community, particularly those interested in pursuing a career in the public safety profession. The "Explorer's Program" emphasizes discipline, responsibility, and integrity and encourages exploration of careers including that of Police Officer, Communications Officer, Community Policing and Forensic Crime Scene Technician (13).

Fire and Rescue Departments

The six fire departments that serve Pasquotank County are listed in the table below.

**Table 18. Fire Departments in Pasquotank County
(October, 2016)**

Department Name	Location
Elizabeth City Fire Department, Station 1	Elizabeth City
Elizabeth City Fire Department, Station 2	Elizabeth City
Pasquotank-Newland Volunteer Fire Department	Newland
Pasquotank-Nixonton Volunteer Fire Department	Elizabeth City
Pasquotank-Providence Volunteer Fire Department	Weddington
Weeksville Volunteer Fire Department	Elizabeth City

Source: Fire Department Directory, North Carolina, Pasquotank County.
<http://www.firedepartment.net/directory/north-carolina/pasquotank-county>.

Public Library

The Pasquotank County Library, located in Elizabeth City, is the public library serving the people of Pasquotank County. While the Library provides a host of traditional services and

programs for its patrons, it is also an electronic doorway to the informational highway. In addition to stressing services to all its patrons, it offers a growing series of services to teenagers including a collection of books especially geared to their interest. The library also reaches out to the community by participating in community events. The library is part of the East Albemarle Regional Library System, which effectively expands the library's holdings (14).

Senior Center

The Senior Center, located in Elizabeth City, offers a wide variety of exciting programs, trips and activities for the senior citizens of Elizabeth City and Pasquotank County. The Center strives to create a "family" atmosphere that promotes social, mental, physical and emotional overall well-being of adults age 55 and older (15).

The Senior Center operates with an emphasis on exercise, and therefore maintains a Workout Room that houses treadmills, a rowing machine, stationary bikes, free weights, and a Nu Step machine. In addition, the Center offers numerous fitness programs and classes, including Exercise Yoga, Strength and Flex, Silver Sneakers, Tai Chi, line dancing, and aerobics. In addition, the Senior Center offers many additional activities besides fitness programs, such as clubs, games, a pool room, art classes and trips.

Other Community Services and Organizations

It is a nearly impossible task to create a print catalogue or listing of community resources that is current beyond its print date. Therefore, this CHNA document provides instead *links* to on-line or telephone resources that provide information on community organizations and services available to Pasquotank County residents. These particular community resource directories and guides have been included because they are sponsored and/or maintained by entities likely to remain in existence, and because they cover a range of community resources.

[Note that Health and Health Care Resources, while included in some of the directories and guides cited below, are listed separately in an appendix to this CHA.]

Pasquotank County Community Resource Directories and Guides

Elizabeth City Chamber of Commerce

Extensive, categorized lists of businesses, services, organizations and things to do in Pasquotank County/Elizabeth City. Search banner heading tabs: Business Directory, Visit, and Live and Work.

Portal - <http://www.elizabethcitychamber.org/>.

Pasquotank County Government Directory of Services

Lists of live links to services provided by the county.

Portal: <http://www.co.pasquotank.nc.us/>.

Albemarle Alliance for Children and Families

Maintains links to support services targeted to families of children throughout the Albemarle Region.

Portal - <http://albemarleaf.org/links.php>

Pasquotank County Department of Social Services

The agency maintains a brief list of community resources

Portal: <http://www.co.pasquotank.nc.us/DSS/otherresources.htm>.

Housing Resources in Pasquotank County

Provides a list of housing resources focused on subsidized housing, private landlords who accept Section 8 vouchers, and emergency shelters.

Portal: -

http://www.nchousing.org/need_help/housing_location/resources/Pasquotank%20County%20Housing%20Resources.xls/view

NC 2-1-1 for Pasquotank County

The United Way sponsors a telephone and/or on-line referral program via which the public can find assistance with housing, food, healthcare, utility payments, and more. Inquiries involve entering the area of need and the target county, city, and/or zip code into the search categories at the website listed below.

For telephone assistance, information seekers can simply call 2-1-1 24 hours a day, 7 days a week to speak with a trained specialist.

Portal - <http://www.unitedwaync.org/nc211>.

CHAPTER TWO: SOCIOECONOMIC DATA

ECONOMIC CLIMATE

Tier Designation

The NC Department of Commerce annually ranks the state's 100 counties based on economic well-being and assigns a Tier Designation. The parameters included in the assignment include unemployment rate, median household income, population growth, and assessed property value per capita. The 40 most distressed counties are designated as Tier 1, the next 40 as Tier 2, and the 20 least distressed as Tier 3. The Tier system is incorporated into various state programs, including a system of tax credits (Article 3J Tax Credits) that encourage economic activity and business investment in less prosperous areas of NC. In 2016, Pasquotank County and Scotland Counties were assigned Tier 1 designations (16).

County Revenue Indicators

The state of NC monitors gross collections of state sales and use taxes in counties. While the majority of these taxes go to the state, these collections do provide some of the money available to the county to fund public services. Changes in these collections point to changes in overall economic activity and fiscal confidence in a county, as depicted in the time series of figures presented in the table below.

- For the period covering FY2005-06 through FY2014-15, gross collections of state sales and use taxes in Pasquotank County were only about 34% of the average for all NC counties.
- Pasquotank County collections fell after FY2006-07 but appeared to recover in FY2009-10, when they rose significantly and remained higher than in FY2005-2006.

**Table 19. NC State Sales and Use Tax Gross Collections
(FY2005-06 through FY2014-15)**

Location	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Pasquotank County	16,838,820	17,568,842	16,381,292	16,178,950	19,290,971	21,161,267	19,123,519	20,833,041	18,184,638	19,293,923
Regional Average	5,235,545	5,294,336	5,066,629	4,936,479	6,981,295	7,998,729	7,314,849	7,651,788	7,379,530	7,730,478
NC County Average	45,605,858	46,004,427	46,029,546	43,169,210	50,252,290	55,679,535	49,906,563	50,164,100	52,548,980	57,312,401

Source: NC Department of Revenue, Tax Publications and Reports, State Sales and Use Tax Reports by Fiscal Year, by County Summary (years as noted); <http://www.dornrc.com/publications/fiscalyearsales.html>.

Local governments in Pasquotank County have made recent revenue figures available to this project. The two tables below describe building permit totals for Pasquotank County and the City of Elizabeth City. Stable or increasing building permitting activity can be an indicator of continued or increasing confidence in the local economy.

- The number of building permits issued county-wide over the period cited appeared to decrease annually; the value of those permits was variable but the figures for 2012 and 2014 were similar.
- The number of building permits issued in the City of Elizabeth City appeared to be stable from year to year, while the evaluation of construction appeared to be more variable.

**Table 20. Building Permit Totals, Pasquotank County
CY2012-CY2015 (Jan-Aug)**

Item	2012		2013		2014		2015 (Jan-Aug)	
	# Issued	Est. Value	# Issued	Est. Value	# Issued	Est. Value	# Issued	Est. Value
Single Family Dwelling	36	\$6,958,100	25	\$4,397,243	24	\$4,889,419	29	\$5,112,910
Additions	7	\$409,550	5	\$101,000	4	\$99,882	4	\$117,000
Garages	16	\$354,700	10	\$244,123	11	\$254,725	12	\$312,000
Sheds	3	\$14,900	4	\$7,700	6	\$43,000	4	\$18,700
Decks/Porches	18	\$140,137	21	\$140,897	15	\$221,200	15	\$67,413
Pools	3	\$55,000	11	\$258,840	7	\$244,262	6	\$176,900
Renovations	19	\$422,935	6	\$78,872	8	\$160,738	6	\$179,068
Residential Modular	4	\$625,100	9	\$1,004,000	6	\$1,017,274	5	\$874,934
Residential Other	13	\$133,095	16	\$274,842	56	\$643,560	13	\$275,756
Commercial Office	1	\$500,000	1	\$89,000	3	\$2,116,000	1	\$4,150,000
Commercial Warehouse	1	\$1,250,000	0	\$0	0	\$0	0	\$0
Commercial Retail	0	\$0	0	\$0	2	\$727,712	0	\$0
Commercial Signs	3	\$6,800	4	\$28,500	4	\$18,800	3	\$13,900
Commercial Modular	0	\$0	0	\$0	0	\$0	1	\$80,000
Commercial Other	9	\$72,850	14	\$170,880	17	\$303,650	5	\$615,349
MFG S/W	15	\$385,000	10	\$414,000	13	\$312,400	6	\$240,100
MFG D/W	4	\$306,400	5	\$307,700	7	\$475,210	6	\$580,240
MFG T/W	0	\$0	0	\$0	0	\$0	0	\$0
Elect for Residential	188	\$0	198	\$0	168	\$0	111	\$0
Plumbing for Residential	86	\$0	67	\$0	63	\$0	40	\$0
Mech for Residential	154	\$0	165	\$0	134	\$0	90	\$0
Gas for Residential	39	\$0	40	\$0	34	\$0	20	\$0
Insulation for Residential	53	\$0	43	\$0	44	\$0	39	\$0
Elect for Commercial	26	\$0	25	\$0	25	\$0	16	\$0
Plumbing for Commercial	5	\$0	3	\$0	8	\$0	1	\$0
Mech for Commercial	9	\$0	6	\$0	8	\$0	3	\$0
Gas for Commercial	3	\$0	6	\$0	5	\$0	3	\$0
Insulation for Commercial	3	\$0	1	\$0	4	\$0	2	\$0
TOTALS	718	\$11,634,567	695	\$7,517,597	676	\$11,527,832	441	\$12,814,270

Source: Personal communication, Rodney Bunch, County Manager, Pasquotank County, to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, November 2, 2015

**Table 21. Building Permit Totals, City of Elizabeth City
CY2012-CY2015 (Jan-Aug)**

	2012	2013	2014	2015 (Jan-Aug)
New Single Family	39	48	47	28
Total Permits	173	176	174	139
Estimated Construction Evaluation	\$17,582,977	\$14,320,262	\$20,645,915	\$17,819,815

Source: Personal communication, Richard Olson, City Manager, City of Elizabeth City, to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, September 1, 2015.

Income

While revenue indicators give us some idea of economic health from the community economic development standpoint, income measures tell us about the economic well-being of individuals in the community. Among the more useful income measures are personal income, family

income, and household income. For comparison purposes, personal income is calculated on a per capita basis; family income and household income are viewed as a median value for a target population. The following are definitions of each of the three income categories:

- *Per capita personal income* is the income earned per person 15 years of age or older in the reference population.
- *Median household income* pertains to the incomes of all the people 15 years of age or older living in the same household (i.e., occupying the same housing unit) regardless of relationship. For example, two roommates sharing an apartment would be a household, but not a family.
- *Median family income* pertains to the income of all the people 15 years of age or older living in the same household who are related either through marriage or bloodline. For example, in the case of a married couple who rent out a room in their house to a non-relative, the household would include all three people, but the family would be just the couple.

The table below summarizes recent income data for Pasquotank County and its typical comparators. (Note: although US data is included in the table, no comparisons are highlighted here.) Among the traditional comparator jurisdictions:

- Pasquotank County had the second-lowest income figures in every category except mean retirement income, and its measures were consistently and significantly below the comparable state averages.
- Median household income was highest region-wide and lowest in Scotland County, where the figure was almost \$16,000 lower than the state figure.
- Median family income was highest statewide and lowest in Scotland County, where it was over \$20,000 below the state average.
- Per capita personal income was highest statewide and lowest in Scotland County, where the figure was almost \$10,000 lower than the state figure.
- Mean retirement income was highest for the regional average and lowest in Scotland County, where the figure was over \$5,000 lower than the state figure.

**Table 22. Income Measures
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Household Income		Family Income		Per Capita Income		Retirement Income	
	Median Household Income	Difference from State	Median Family Income	Difference from State	Per Capita Income	Difference from State	Mean Retirement Income	Difference from State
Pasquotank County	\$45,664	-\$1,029	\$53,942	-\$3,386	\$22,466	-\$3,142	\$22,305	\$465
<i>Regional Average</i>	\$46,909	\$216	\$55,155	-\$2,173	\$22,680	-\$2,928	\$22,488	\$648
Scotland County	\$30,834	-\$15,859	\$36,940	-\$20,388	\$15,787	-\$9,821	\$16,700	-\$5,140
State of NC ¹	\$46,693	-\$6,789	\$57,328	-\$8,115	\$25,608	-\$2,947	\$21,840	-\$2,255
United States	\$53,482	n/a	\$65,443	n/a	\$28,555	n/a	\$24,095	n/a

Source: US Census Bureau, American Fact Finder, 2014 American Community Survey 5-Year Estimate. Table DP03: Selected Economic Characteristics; <http://factfinder2.census.gov>.

¹ The calculation in the "Difference from State" cell for NC reflects the difference between the State and the Nation.

The table below shows gender-based differences in median earnings.

- Male full-time, year-round workers in all comparator jurisdictions earn significantly more than their female counterparts, and the difference is *greatest* in Scotland County. The difference is second-largest (almost \$10,000) in Pasquotank County.

**Table 23. Median Earnings, by Gender
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Median Earnings				
	Male full-time, year-round workers	Difference from State	Female full-time, year-round workers	Difference from State	Difference between Male and Female
Pasquotank County	\$41,276	-\$2,161	\$31,563	-\$3,909	-\$9,713
<i>Regional Average</i>	\$43,748	\$311	\$34,502	-\$970	-\$9,246
Scotland County	\$41,158	-\$2,279	\$30,566	-\$4,906	-\$10,592
State of NC ¹	\$43,437	-\$6,263	\$35,472	-\$3,615	-\$7,965
United States	\$49,700	n/a	\$39,087	n/a	-\$10,613

Source: US Census Bureau, American Fact Finder, 2014 American Community Survey 5-Year Estimate. Table DP03: Selected Economic Characteristics; <http://factfinder2.census.gov>.

¹ The calculation in the "Difference from State" cell for NC reflects the difference between the State and the Nation.

Employment

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

- *Labor force*: includes all persons over the age of 16 who, during the week, are employed, unemployed or in the armed services.
- *Unemployed*: civilians who 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; also, laid-off civilians waiting to be called back to their jobs, as well as those who will be starting new jobs in the next 30 days.
- *Unemployment rate*: calculated by dividing the number of unemployed persons by the number of people in the civilian labor force.

Employment by Sector

The following table details the various categories of industry by sector in Pasquotank County and its three jurisdictional comparators for the 2nd Quarter of 2015, showing the number employed in each sector, the percentage of all employment that that number represents, and the average weekly wage for people employed in each sector.

- The sector in Pasquotank County that employed the largest percentage of the workforce (17.7%) was Health Care and Social Assistance, with an average weekly wage of \$718.
- Retail Trade accounted for the second largest percentage of the Pasquotank County workforce, at 15.7% (\$490), followed in third place by Educational Services, at 12.7% (\$673).

- Statewide, the sector employing the largest percentage of the workforce was Health Care & Social Assistance (14.1%), followed by Retail Trade (11.7%) and Manufacturing (11.0%).

**Table 24. Insured Employment and Wages by Sector
(2nd Quarter, 2015)**

Sector	Pasquotank County			Scotland County			Regional Average			North Carolina		
	Avg. No. Employed	% Total Employment in Sector ¹	Average Weekly Wage per Employee	Avg. No. Employed	% Total Employment in Sector	Average Weekly Wage per Employee	Avg. No. Employed	% Total Employment in Sector	Average Weekly Wage per Employee	Avg. No. Employed	% Total Employment in Sector	Average Weekly Wage per Employee
Agriculture, Forestry, Fishing & Hunting	127	0.8	\$527	73	0.6	\$593	1,166	3.3	\$615	28,946	0.7	\$597
Mining	*	n/a	*	*	n/a	*	0	0.0	n/a	2,780	0.1	\$1,069
Utilities	*	n/a	*	*	n/a	*	0	0.0	n/a	15,238	0.4	\$1,572
Construction	415	2.7	\$713	354	3.0	\$769	1,199	3.4	\$10,542	188,858	4.5	\$890
Manufacturing	621	4.0	\$917	2,143	18.2	\$916	1,314	3.7	\$779	460,067	11.0	\$1,036
Wholesale Trade	440	2.8	\$770	211	1.8	\$896	1,192	3.3	\$787	178,902	4.3	\$1,342
Retail Trade	2,447	15.7	\$490	1,645	14.0	\$398	5,017	14.0	\$447	487,995	11.7	\$504
Transportation & Warehousing	598	3.8	\$1,040	447	3.8	\$764	1,304	3.7	\$901	137,793	3.3	\$880
Information	129	0.8	\$927	63	0.5	\$1,079	217	0.6	\$986	76,944	1.8	\$1,344
Finance & Insurance	367	2.3	\$1,591	225	1.9	\$852	745	2.1	\$890	157,807	3.8	\$1,486
Real Estate & Rental & Leasing	134	0.9	\$623	68	0.6	\$559	704	2.0	\$548	54,949	1.3	\$817
Professional, Scientific & Technical Services	587	3.8	\$988	115	1.0	\$844	1,075	3.0	\$915	219,166	5.3	\$1,338
Management of Companies & Enterprises	35	0.2	\$863	34	0.3	\$721	35	0.1	\$863	81,596	2.0	\$178
Administrative & Waste Services	489	3.1	\$582	666	5.7	\$480	2,001	5.6	\$552	289,504	6.9	\$630
Educational Services	1,980	12.7	\$673	1,229	10.5	\$709	5,475	15.3	\$798	380,457	9.1	\$796
Health Care & Social Assistance	2,760	17.7	\$718	2,019	17.2	\$736	5,176	14.5	\$710	587,137	14.1	\$862
Arts, Entertainment & Recreation	136	0.9	\$285	62	0.5	\$385	499	1.4	\$455	70,577	1.7	\$553
Accommodation & Food Services	1,682	10.8	\$248	1,105	9.4	\$248	3,396	9.5	\$291	401,515	9.6	\$306
Other Services	741	4.7	\$425	151	1.3	\$472	1,420	4.0	\$479	106,428	2.6	\$590
Public Administration	1,943	12.4	\$827	1,148	9.8	\$692	3,776	10.6	\$638	240,222	5.8	\$830
Unclassified	*	n/a	*	*	n/a	*	0	0.0	n/a	534	0.0	\$746
TOTAL/AVERAGE ALL SECTORS	15,631	100.0	\$734	11,758	100.0	\$673	35,711	100.0	\$1,233	4,167,415	100.0	\$875

¹ Percent Total Employment in Sector values were calculated by dividing the Avg. Number of Employed within a sector by the total employees in All Sectors.

* Disclosure suppressed

Source - Quarterly Census Employment and Wages (QCEW), 2015. NC Employment Security Commission, Labor & Economic Analysis Division (LEAD), 4D:

<http://d4.nccommerce.com/>.

Largest Employers

The table below lists the largest 25 employers in Pasquotank County as of the end of the 2nd Quarter, 2015.

- No employer listed employed more than 1,000 people.
- The largest employers (500-999 employed) were the Pasquotank County Board of Education, Sentara Albemarle Medical Center, and the US Department of Homeland Security.

**Table 25. Largest 25 Employers in Pasquotank County
(2nd Quarter, 2015)**

Rank	Employer	Industry	No. Employed
1	Pasquotank County Board Of Education	Education & Health Services	500-999
2	Sentara Albemarle Medical Center	Education & Health Services	500-999
3	U S Dept. Of Homeland Security	Public Administration	500-999
4	Elizabeth City State University	Education & Health Services	250-499
5	Wal-Mart Associates Inc.	Trade, Transportation & Utilities	250-499
6	County Of Pasquotank	Public Administration	250-499
7	NC Dept. of Public Safety	Public Administration	250-499
8	District Health Dept. Of Albemarle	Education & Health Services	250-499
9	City Of Elizabeth City	Public Administration	250-499
10	College of the Albemarle	Education & Health Services	250-499
11	Moneysworth Linen Services Inc.	Other Services	250-499
12	Ollie's Bargain Outlet	Trade, Transportation & Utilities	250-499
13	URS Federal Services Inc.	Trade, Transportation & Utilities	100-249
14	Whitestone East Inc.	Professional & Business Services	100-249
15	D R S Inc.	Trade, Transportation & Utilities	100-249
16	Carolina Adventist Retirement	Education & Health Services	100-249
17	Food Lion	Trade, Transportation & Utilities	100-249
18	Tandem Inc. Dba McDonalds	Leisure & Hospitality	100-249
19	Lowe's Home Centers Inc.	Trade, Transportation & Utilities	100-249
20	Bank of Hampton Roads	Financial Activities	100-249
21	Farm Fresh	Trade, Transportation & Utilities	100-249
22	J W Jones Lumber Co Inc.	Manufacturing	50-99
23	T Com L P	Manufacturing	50-99
24	Kindred Nursing Centers East LLC	Education & Health Services	50-99
25	Hoffer Flow Controls Inc.	Manufacturing	50-99

Source: NC Department of Commerce, Economic Intelligence Development System (EDIS), Business Data, Top Employers, by County; <http://accessnc.commerce.state.nc.us/EDIS/business.html>.

Travel for Employment

Data gathered by the US Census Bureau on how many resident workers travel outside the county for employment can help demonstrate whether or not a county provides adequate employment opportunities for its own citizens. The economic impact of out-of-state employment is that those workers may pay taxes and spend part of their income out of state. The following table summarizes 2010-2014 estimated travel for employment data for Pasquotank County and its comparator jurisdictions.

- A majority—71%—of Pasquotank County resident workers were employed within the county.
- Of the 29% of Pasquotank County resident workers who left the county for work, a slightly higher percentage worked out of state (16%) than in another NC county (12%).
- Statewide, roughly 72% of resident workers worked in their county of residence; 26% worked in another county, and less than 3% worked out-of-state.

Table 26. Place of Work for Resident Workers Age 16 and Older (US Census Bureau 5-Year Estimate, 2010-2014)

Location	Percent of Residents					
	Total # Workers Over 16	% Working in NC	% Working in County	% Leaving County for Work	% Working out of County	% Working out of State
Pasquotank County	17,383	83.7	71.4	28.5	12.2	16.3
<i>Regional Average</i>	7,979	75.1	43.2	56.8	31.9	24.9
Scotland County	10,746	95.8	70.0	30.0	25.8	4.2
<i>State of NC</i>	4,280,414	97.5	71.8	28.2	25.7	2.5

Note: percentages are calculated and may include some rounding error.

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimate, Table S0801 Commuting Characteristics by Sex. <http://factfinder.census.gov>.

Modes of Transportation to Work

Besides serving as an indicator of environmentalism, the mode of transportation workers use to get to their places of employment can also point to the relative convenience of local workplaces and the extent of the local public transportation system. The next table compares data on modes of transportation to work from the 2000 US Census and a 2010-2014 US Census Bureau estimate.

- A very small percentage of Pasquotank County workers used public transportation to get to work in either 2000 or 2010-2014. Use of public transportation for getting to work was not common in any of the jurisdictions being compared.
- The proportion of workers who carpooled decreased in all jurisdictions between 2000 and 2010-2014, but the proportion was highest in both periods in Pasquotank County.
- The proportion of Pasquotank County workers who worked at home increased by 80% between 2000 and 2010-2014. Working-at-home increased by 67% statewide in the same period.

Table 27. Modes of Transportation to Work (US Census Bureau, 2000 and 5-Year Estimate, 2010-2014)

Location	Percent of Workers over 16											
	Total Workers over 16		Drove Alone		Carpooled		Used Public Transportation		Walked		Worked at Home	
	2000	2010-2014	2000	2010-2014	2000	2010-2014	2000	2010-2014	2000	2010-2014	2000	2010-2014
Pasquotank County	14,552	17,383	75.1	79.3	17.1	11.7	1.5	0.4	2.9	2.7	1.5	2.7
<i>Regional Average</i>	6,879	7,979	76.3	82.3	17.1	11.6	0.5	0.3	2.3	1.1	2.7	3.0
Scotland County	13,996	10,746	81.7	86.6	12.9	7.9	0.1	0.1	1.8	1.1	1.8	3.5
<i>State of NC</i>	3,837,773	4,280,414	79.4	81.2	14.0	10.2	0.9	1.1	1.9	1.8	2.7	4.5

Source:

a - US Census Bureau, American Fact Finder, Data Sets, Summary File 3 for 2000, Detailed Tables, Means of Transportation to Work for Workers 16 Years and Over; <http://factfinder.census.gov>.

b - US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimate, Table S0801: Commuting Characteristics by Sex. <http://factfinder.census.gov>.

Public Transportation in Pasquotank County

Public transportation in Pasquotank County is provided by the Inter-County Public Transportation Authority (ICPTA), operated by Albemarle Regional Health Services, which serves the five-county area of Camden, Chowan, Currituck, Pasquotank and Perquimans counties.

ICPTA's demand-response and subscription services are intended to assist the general public in accessing health and social services such as medical appointments and nutrition sites or attending activities related to daily living such as shopping, education, employment and recreation. Hours of operation are from 4:30 am - 7:30 pm, Monday through Friday, although it is possible to schedule transportation outside of this time frame with approval of management. While much travel is within the region, the service also transports passengers to other locations in NC and the Hampton Roads region of VA.

The ICPTA fleet of buses and vans are equipped with special features to transport the handicapped and the elderly; for example, vehicles are equipped with wheelchair lifts mounted at the rear and at the side for easy and safe loading and off-loading. Drivers are required to participate in road training, on-the-job training, emergency operating training, and periodic safety meetings (17).

The table below presents annual trip data for the ICPTA system for FY 2012 through FY2015.

- The largest number of trips each year cited represented travel for senior services.
- Travel for mental health services composed the second-largest ridership in FY2012-2014. Travel on account of DSS Medicaid composed the largest ridership in FY2015.

**Table 28. ICPTA Ridership Statistics
(FY2012 through FY2015)**

Category of Service	Number Trips Served			
	FY2012	FY2013	FY2014	FY2015
Total Human Service/Community Organization Trips	38,995	41,842	39,694	39,146
Senior Services	17,546	17,611	16,311	15,568
Mental Health	10,938	11,607	11,101	10,046
Department of Social Services - Medicaid	6,317	8,749	9,693	10,627
Department of Social Services – Work First	832	169	47	25
Department of Social Services - Other	0	0	29	4
Vocational Workshop (or equivalent)	2,247	1,868	2,310	2,851
Vocational Rehabilitation	0	9	64	1
Parks and Recreation	811	831	118	7
Nursing Home/Assisted Living Facility	195	122	0	0
Other	109	876	21	17

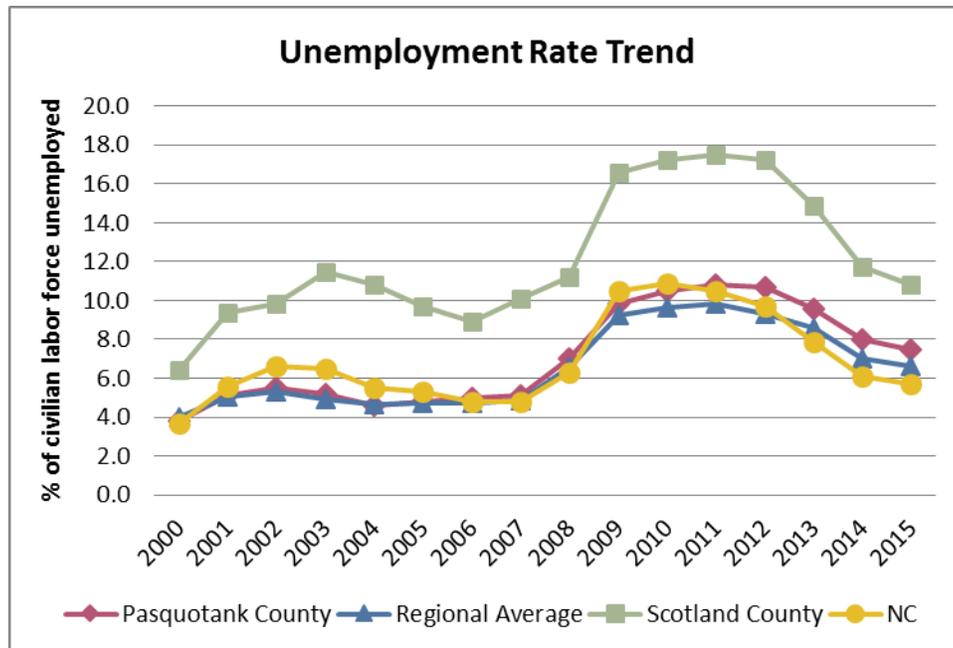
Source: Personal communication from Herb Mullen, Director of Transportation, Inter-County Public Transportation Authority to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, September 1, 2015.

Unemployment

The following figure plots the unemployment rate in Pasquotank County and its jurisdictional comparators for the period 2000 through 2015.

- Beginning with 2008 data (in 2007 in Scotland County), the unemployment rate began to rise sharply in all four jurisdictions, mirroring the onset of the national recession. Unemployment began to decrease in Pasquotank County and the ARHS Region beginning in 2012. The decrease statewide began in 2011.
- The unemployment in Scotland County was significantly higher than in the other jurisdictions throughout the period cited.
- Although post-recession unemployment figures have improved, none have returned to pre-recession levels.

Figure 5. Annual Unemployment Rate (2000-2015)



Source: North Carolina Department of Commerce, Labor and Economic Analysis Division (LEAD), D4 - Demand Driven Data Delivery System. Local Area Unemployment Statistics (LAUS) - Unemployment Rate, Unadjusted. <http://d4.nccommerce.com/LausSelection.aspx>.
 The unemployment rate is calculated by dividing the number of unemployed by the civilian labor force. The civilian labor force is the total employed plus the unemployed.
 Note: 2015 figures represent the average monthly rate from January through November

Poverty

The poverty rate is the percent of the population (both individuals and families) whose money income (which includes job earnings, unemployment compensation, social security income, public assistance, pension/retirement, royalties, child support, etc.) is below a federally established threshold; this is the “100%-level” figure.

The following table shows the decadal poverty rate for the period from 1970-2000 and the estimated poverty rate for five, five-year periods: 2006-2010 through 2010-2014. The data in

this table describe an overall rate, representing the entire population in each geographic entity. As subsequent data will show, poverty may have strong racial and age components that are not discernible in these numbers.

- In the ARHS region and the state of NC, the poverty rate fell each decade from 1970 through 2000 before beginning to rise again.
- The poverty rate in Pasquotank County was more erratic, but fell overall between 1970 and 2006-2010, and rose overall between 2006-2010 and 2010-2014.
- Pasquotank County had the second-highest poverty rate among the four jurisdictions from 2006-2010 through 2010-2014.

**Table 29. 100%-Level Poverty Rate
(US Census Bureau, Decades 1970-2000; and 5-Year Estimates, 2006-2010 through 2010-2014)**

Location	Percent of All People in Poverty								
	1970	1980	1990	2000	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Pasquotank County	26.8	17.7	19.8	18.4	18.1	19.9	18.0	18.4	19.5
<i>Regional Average</i>	31.8	21.5	18.1	16.5	16.4	17.5	17.3	18.1	17.7
Scotland County	29.9	17.3	18.6	20.6	29.5	29.7	30.6	32.3	31.2
<i>State of NC</i>	20.3	14.8	13.0	12.3	15.5	16.1	16.8	17.5	17.6
Source:	a	a	a	a	b	b	b	b	b

a - Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Item 6094);

http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

b - US Census Bureau, American Fact Finder, American Community Survey 5-Year Estimates (2010 through 2014). Table DP03: Selected Economic Characteristics, County (Geographies as listed); <http://factfinder2.census.gov>.

The next table expands the topic of poverty by presenting decadal poverty data stratified by broad racial group (white/black). It is clear from these data that Blacks/African Americans have much higher poverty rates than whites.

- Across all time periods and in all jurisdictions cited in the table, the poverty rate among blacks was significantly higher than the poverty rate among whites.

**Table 30. Persons in Poverty (100%-Level) by Race, by Decade
(1980-2000)**

Location	1980				1990				2000			
	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty	Total No. in Poverty	Total % in Poverty	% White in Poverty	% Black in Poverty
Pasquotank County	4,791	17.7	11.0	30.2	5,888	19.8	9.8	38.3	5,981	18.4	8.3	33.4
<i>Regional Average</i>	2,985	21.5	12.1	37.1	2,775	18.1	10.6	31.6	2,769	16.5	8.9	29.7
Scotland County	5,394	17.3	8.7	29.6	6,067	18.6	10.3	30.8	7,212	20.6	10.2	34.3
<i>State of NC</i>	839,950	14.8	10.0	30.4	829,858	13.0	8.7	27.1	958,667	12.3	8.5	22.9

a - Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Items 6094, 6096, 6098);

http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

The three figures that follow present similar racially-stratified 100%-level poverty data, but as five-year estimates and for an expanded scope of racial groups that includes Hispanics.

- In Pasquotank County, region-wide and statewide, poverty rates among minority groups are higher compared to white residents.

- In Pasquotank County over the period cited, the poverty rate among blacks averaged 2.5 times the rate among whites and the poverty rate among Hispanics averaged 3.7 times the rate among whites.

Figure 6. Poverty Rate by Race, Pasquotank County
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)

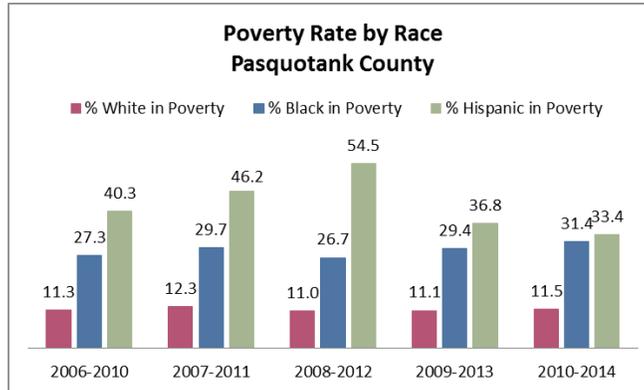


Figure 7. Poverty Rate by Race, ARHS Region
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)

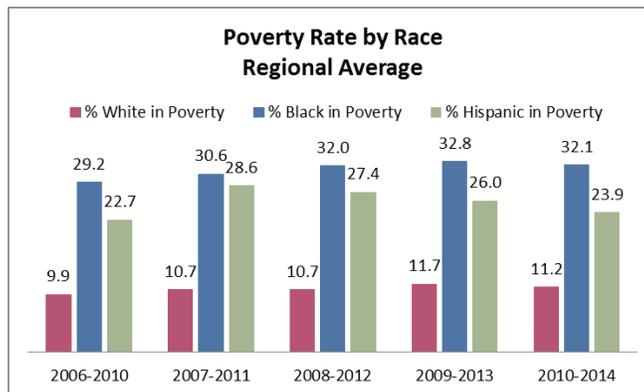
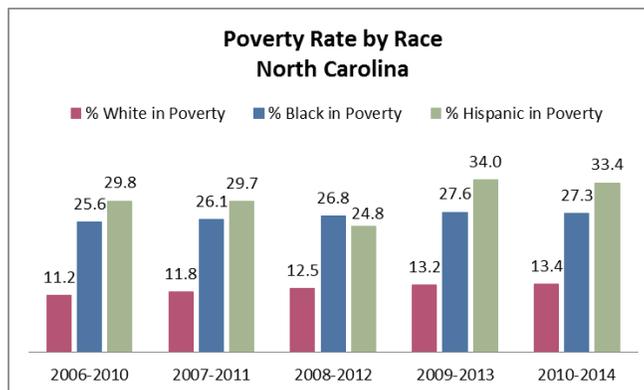


Figure 8. Poverty Rate by Race, North Carolina
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)



Source: US Census Bureau, American Fact Finder, ACS 5-Year Estimates, 2010 through 2014, Table S1701 Poverty Status in the Past 12 Months. <http://factfinder.census.gov/>

The table below further expands the topic of poverty by presenting decadal poverty data stratified by age group. It is clear from these data that children, and especially very young children, suffer disproportionately from poverty.

- In all four jurisdictions in every time period cited in the table, the poverty rate for children under the age of 18 exceeded the overall poverty rate. In most jurisdictions, the variance was greatest for children under six.

Table 31. Persons in Poverty (100%-Level) by Age, by Decade (1980-2000)

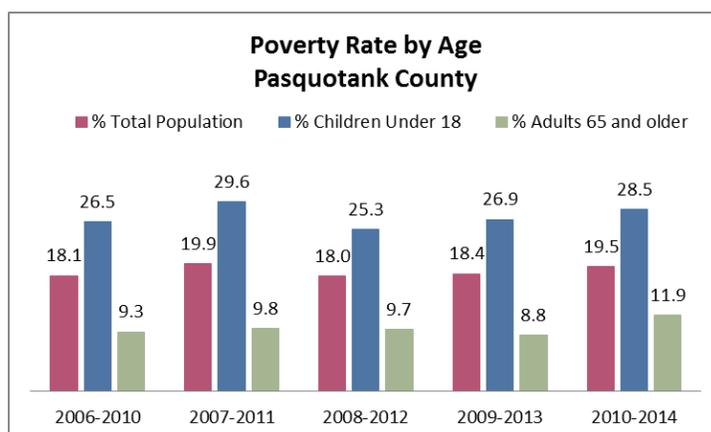
Location	1980				1990				2000			
	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty	Total % in Poverty	% Children Under 18 in Poverty	% Children Under 6 in Poverty	% Adults 65 or Older in Poverty
Pasquotank County	17.7	21.7	22.8	25.7	19.8	26.8	31.4	22.4	18.4	25.5	33.7	17.9
Regional Average	21.5	26.1	29.8	29.9	18.1	24.7	28.4	21.6	16.5	22.2	24.7	19.2
Scotland County	17.3	20.0	17.8	27.8	18.6	25.9	33.0	24.3	20.6	29.8	32.4	17.2
State of NC	14.8	18.3	19.7	23.9	13.0	16.9	19.1	19.5	12.3	15.7	17.8	13.2
Source:	a	a	a	a	a	a	a	a	a	a	a	a

Source: Log Into North Carolina (LINC) Database, Topic Group Employment and Income (Data Items 6094, 6100, 6102, 6104); http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show.

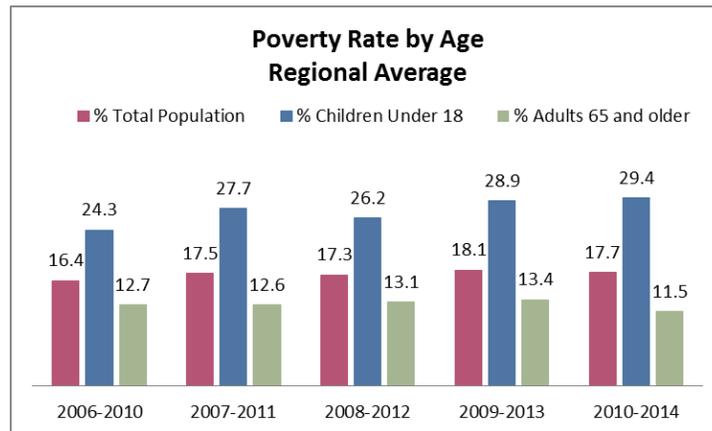
The three figures that follow present similar age-stratified 100%-level poverty data, but as more recent five-year estimates.

- In Pasquotank County, region-wide and statewide, poverty rates among children are higher compared to the overall rate.
- In Pasquotank County over the period cited, the poverty rate among children averaged 46% higher than the total poverty rate.
- The poverty rate among children in Pasquotank County has risen somewhat over time.

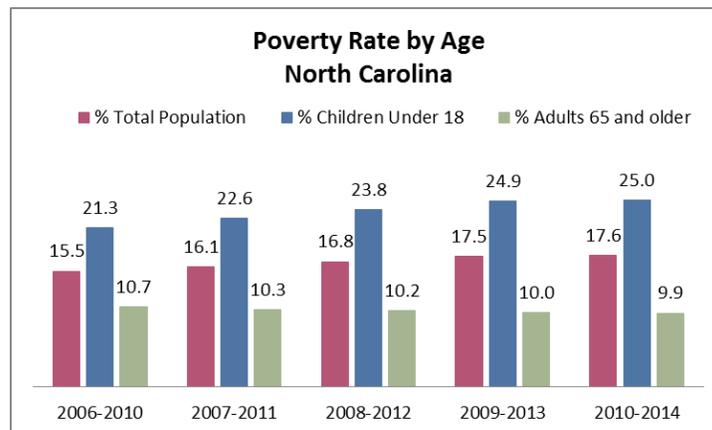
Figure 9. Poverty Rate by Age, Pasquotank County (US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)



**Figure 10. Poverty Rate by Age, ARHS Region
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)**



**Figure 11. Poverty Rate by Age, North Carolina
(US Census Bureau 5-Year Estimates, 2006-2010 through 2010-2014)**



Source: US Census Bureau, American Fact Finder, 2010 through 2014 ACS 5-Year Estimate, Table S1701: Poverty Status in the Past 12 Months. <http://factfinder.census.gov>.
Note that the 5-Year Estimates do not present figures for the 5/6 year-old age group.

Children Receiving Free or Reduced-price School Meals

Other data corroborate the impression that children, especially the very young, bear a disproportionate burden of poverty, and that their burden is increasing. One measure of poverty among children is the number and/or percent of school-age children who are eligible for and receive free or reduced-price school meals.

Students have to be eligible to receive meals; not everyone who is eligible will choose to enroll in the program and receive meals. To be eligible for *free* lunch under the National School Lunch Act students must live in households earning at or below 130 percent of the Federal poverty guidelines. To be eligible for *reduced-price* lunch students must live in households earning at or below 185 percent of the Federal poverty guidelines.

The following table presents data from the NC Department of Public Instruction showing the *percentage* of students in the named school jurisdiction who have been determined to be “*needy*”, the currently-preferred term describing children who are *eligible* for free-or reduced-price meals.

- The percentage of students in Elizabeth City/Pasquotank County Schools eligible for free or reduced-price school lunch has varied somewhat over time, but rose gradually between SY2006-07 and SY2013-14 and changed little in SY2014-15. This pattern was mirrored in the regional and state and Scotland County figures, except that all three decreased measurably in SY2014-15.

Table 32. Percent of Students Eligible for Free or Reduced price School Meals (SY2006-07 through SY2014-15)

Location	% of Students Determined to be "Needy" (% Eligible for Free- or Reduced-Price Meals)								
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14	SY2014-15
Elizabeth City/Pasquotank County	57.64	55.70	56.70	58.52	58.87	61.69	64.19	66.94	66.90
<i>Regional Average</i>	53.02	51.97	52.47	55.93	54.82	58.65	58.91	60.22	57.23
Scotland County	70.83	69.39	72.37	77.95	77.02	79.80	80.81	80.68	61.88
State of NC	48.46	48.39	49.85	53.68	53.86	55.94	56.14	57.56	52.83

Source: NC Department of Instruction, Data & Statistics, Other Education Data: Select Financial Data, Free and Reduced Meals Application Data (by school year). <http://www.ncpublicschools.org/fbs/resources/data/>.

To help readers grasp the numbers behind the percentages cited above, the following table, also based on data from the NC Department of Public Instruction, shows the *number* of students who *received* either free or reduced-price school lunch in several recent school years.

- The number of students in Elizabeth City/Pasquotank County Schools receiving free or reduced-price meals was rather steady until annual increases beginning in SY2011-12 and lasting through SY2014-15.

Table 33. Number of Students Receiving Free or Reduced-price School Meals (SY2006-07 through SY2014-15)

Location	No. Students RECEIVING Free or Reduced-Price Meals								
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14	SY2014-15
Pasquotank County	3,527	3,364	3,422	3,464	3,464	3,573	3,653	3,780	3,843
<i>Regional Average</i>	1,624	1,557	1,563	1,627	1,574	1,777	1,664	1,680	1,586
Scotland County	4,769	4,617	4,724	4,902	4,739	4,825	4,893	4,851	3,666
State of NC	671,831	679,877	703,887	752,708	759,361	793,893	803,302	820,009	753,817

Source: NC Department of Instruction, Data & Statistics, Other Education Data: Select Financial Data, Free and Reduced Meals Application Data (by school year). <http://www.ncpublicschools.org/fbs/resources/data/>.

County Economic Service Utilization

The Pasquotank County Department of Social Services (DSS) manages a number of programs that provide assistance to low-income people.

The *Food and Nutrition Services* program (formerly known as Food Stamps) helps eligible households buy the food they need for a nutritionally adequate diet. Benefits may be used to purchase most foods at participating stores; they may not be used to purchase tobacco, pet food, paper products, soap products, or alcoholic beverages (18).

Medicaid is a health insurance program for eligible low-income individuals and families who cannot afford health care costs. Medicaid may help pay for certain medical expenses including doctor bills, hospital bills, vision care, dental care, Medicare premiums, nursing home care, Personal Care Services (PCS), medical equipment, and other Home Health Services, in-home care under the Community Alternatives Program (CAP), mental health care, and most medically necessary services for children under age 21 ⁽¹⁹⁾

WorkFirst is North Carolina's Temporary Assistance for Needy Families (TANF) program, through which parents can get short-term training and other services, including cash supports, to help them become employed and self-sufficient ⁽²⁰⁾.

The table below presents local data on the economic services provided by Pasquotank County DSS for FY2014-15. Interpretation of trends is complicated by month-to-month differences in tabulation protocols and methodology.

Table 34. Economic Services Provided by Pasquotank County Department of Social Services (FY2014-15)

Program	Total Monthly Caseload												Annual Average
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	
Adult Medicaid	2,375	2,376	2,352	2,351	1,400	n/a	2,171						
Family & Children Medicaid	3,215	3,181	3,105	3,020	10	n/a	2,506						
Adult/Family & Children's Medicaid	n/a	n/a	n/a	n/a	n/a	8,146	9,156	9,193	9,604	9,099	8,962	6,226	8,627
Medicaid Combined in NC FAST	n/a	1,129	1,002	1,425	7,140	n/a	2,674						
Special Assistance	n/a	n/a	n/a	n/a	n/a	200	234	238	251	251	248	263	241
NC Health Choice	n/a	n/a	n/a	n/a	n/a	249	247	245	261	252	264	278	257
Food & Nutrition Services	4,186	4,126	4,149	4,195	4,177	4,168	4,199	4,173	4,173	4,119	4,087	4,102	4,155
WorkFirst Family Assistance	99	99	98	92	128	132	124	123	114	110	108	108	111

Source: Personal communication, Melissa Stokely, Director, Pasquotank County Department of Social Services, to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, August 31, 2015.

HOUSING

The following table presents US Census Bureau data on housing by type.

- An ever-increasing proportion of vacant housing units were noted in Pasquotank County.
- The percentage of owner-occupied housing units in Pasquotank County decreased slightly after 2006-2010.
- Pasquotank County had the lowest proportion of mobile homes in 2000 and 2010-2014, and the second-lowest proportion in 2006-2010.

**Table 35. Housing by Type
(US Census Bureau, 2000, and 5-Year Estimates, 2006-2010 and 2010-2014)**

Location	2000										
	Total Housing Units	Vacant Housing Units		Occupied Housing Units		Owner Occupied Units		Renter Occupied Units		Mobile Home Units	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	14,289	1,382	9.7	12,907	90.3	8,478	65.7	4,429	34.3	2,249	15.7
<i>Regional Average</i>	7,696	1,362	16.8	6,334	83.2	4,715	76.9	1,619	23.1	1,781	24.3
Scotland County	14,693	1,294	8.8	13,399	91.2	3,649	78.6	996	21.4	3,552	24.2
<i>State of NC</i>	3,523,944	391,931	11.1	3,132,013	88.9	2,172,355	69.4	959,658	30.6	577,323	16.4
Source:	a	a	a	a	a	a	a	a	a	b	b

a - US Census Bureau, American FactFinder, 2000 US Census, Summary File 1 (SF-1), 2000 Demographic Profile Data, DP-1, Profile of General Population and Housing Characteristics: 2000 (geographies as listed); <http://factfinder2.census.gov>.

b - US Census Bureau, American FactFinder, 2000 US Census, Summary File 1 (SF-3), 2000 Demographic Profile Data, DP-4, Profile of Selected Housing Characteristics: 2000 (geographies as listed); <http://factfinder2.census.gov>.

Location	2006-2010 Estimate										
	Total Housing Units	Vacant Housing Units		Occupied Housing Units		Owner Occupied Units		Renter Occupied Units		Mobile Home Units	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	16,833	1,877	11.2	14,956	88.8	9,753	65.2	5,203	34.8	2,470	15.0
<i>Regional Average</i>	9,242	1,786	17.5	7,456	82.5	5,467	75.3	1,989	24.7	1,972	22.9
Scotland County	15,193	1,579	10.4	13,614	89.6	8,679	63.7	4,936	36.3	4,157	28.7
<i>State of NC</i>	4,327,528	582,373	13.5	3,745,155	86.5	2,497,900	66.7	1,247,255	33.3	605,418	14.3

Source: US Census Bureau, American Fact Finder, 2010 ACS 5-Year Estimates, Table DP04: Selected Housing Characteristics (geographies as listed). <http://factfinder2.census.gov>.

Location	2010-2014 Estimate										
	Total Housing Units	Vacant Housing Units		Occupied Housing Units		Owner Occupied Units		Renter Occupied Units		Mobile Home Units	
	No.	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	16,867	2,259	13.4	14,608	86.6	9,243	63.3	5,365	36.7	2,210	13.1
<i>Regional Average</i>	9,285	1,996	19.7	7,289	80.3	5,317	75.3	1,972	24.7	1,773	20.5
Scotland County	15,184	2,253	14.8	12,931	85.2	8,315	64.3	4,616	35.7	4,062	26.8
<i>State of NC</i>	4,385,668	643,154	14.7	3,742,514	85.3	2,461,741	65.8	1,280,773	34.2	592,859	13.5

Source: US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimates, Table DP04: Selected Housing Characteristics (geographies as listed). <http://factfinder2.census.gov>.

The next table presents data on housing costs.

- In both time periods cited, the percentage of *renter-occupied* housing units costing more than 30% of household income was second-lowest among comparators in Pasquotank County, and the county's percentage increased by 4% from the first period to the second.
- In Pasquotank County the percentage of *mortgaged* housing units costing more than 30% of household income was the highest among comparators in both periods cited. The percentage of mortgaged units in Pasquotank County costing more than 30% of household income increased by 8% between intervals.

**Table 36. Estimated Housing Cost
(US Census Bureau 5-Year Estimates, 2005-2009 and 2010-2014)**

Location	Renter Occupied Units							
	2005-2009				2010-2014			
	Total Units	Units Spending >30% Household Income on Housing		Median Gross Rent	Total Units	Units Spending >30% Household Income on Housing		Median Gross Rent
		#	%			#	%	
Pasquotank County	4,483	2,396	51.6	\$697	4,843	2,602	53.7	\$837
<i>Regional Average</i>	1,562	856	54.3	\$671	1,693	969	58.3	\$825
Scotland County	3,747	2,100	56.0	\$564	3,753	2,217	59.0	\$607
State of NC	1,015,891	486,934	47.9	\$702	1,158,320	590,756	51.0	\$790
Source	1	1	1	1	2	2	2	2

Location	Mortgaged Housing Units							
	2005-2009				2010-2014			
	Total Units	Units Spending >30% Household Income on Housing		Median Mortgage Cost	Total Units	Units Spending >30% Household Income on Housing		Median Mortgage Cost
		#	%			#	%	
Pasquotank County	6,252	2,473	39.6	\$1,257	6,050	2,585	42.7	\$1,428
<i>Regional Average</i>	3,285	1,299	37.7	\$1,180	3,301	1,313	38.5	\$1,390
Scotland County	5,118	1,844	36.0	\$953	4,485	1,685	37.6	\$981
State of NC	1,626,652	713,340	31.5	\$1,216	1,617,586	503,743	31.2	\$1,272
Source	1	1	1	1	2	2	2	2

1 - US Census Bureau, American FactFinder. 2009 ACS 5-Year Estimates. Table DP04: Selected Housing Characteristics (geographies as listed). <http://factfinder2.census.gov>.

2 - US Census Bureau, American FactFinder. 2014 ACS 5-Year Estimates. Table DP04: Selected Housing Characteristics (geographies as listed). <http://factfinder2.census.gov>.

The numbers here reflect the housing units for which the GRAPI (gross rent as percentage of household income) or SMOCAP (selected monthly owner costs as a percentage of household income) can be computed. It does not necessarily include ALL rented or owned housing units.

Affordable Housing

According to information from the NC Rural Economic Development Center based on 2006-2010 US Census data estimates, 38% of housing in Pasquotank County was classified as “unaffordable”, compared to 36% in Scotland County, and averages of 35% region-wide and 32% statewide (21). This data is at least partially reflective of the population living in households that pay more than 30% of the household income for housing costs.

The US Department of Housing and Urban Development (HUD) maintains a system for tracking “affordable” housing for its low-income clients, to whom it provides housing subsidies. HUD services are delivered through Public and Indian Housing Authority (PHA) offices throughout NC.

There is a PHA office located in Pasquotank County (in Elizabeth City) to assist residents in accessing HUD services (22). In November, 2016 there were five HUD-subsidized single-family homes available in Pasquotank County, all in Elizabeth City (23) and five low-rent apartment facilities: an ARC facility in Elizabeth City for developmentally disabled persons, three family apartment facilities in Elizabeth City, and one apartment facility for the elderly, also in Elizabeth City (24).

The US Department of Agriculture (USDA) catalogues information about rental properties available in rural areas. The agency’s Multi-Family Housing (MFH) Rental website provides an online guide to Government assisted rental projects. In November, 2016 the MFH website listed four qualifying rental properties in Pasquotank County: Melbourne Apartments, and Woodstock I, II, and III, all in Elizabeth City (25).

Homelessness

The NC Coalition to End Homelessness coordinates a statewide *Point-in-Time Count*, an unduplicated count of homeless people, held on one night in the last week of January each year. In the Albemarle Region, counts are available only for Pasquotank County (26).

Table 37. Point-in-Time Count of Homeless Persons, Pasquotank County (2009-2015)

CATEGORY	2009	2010	2011	2012	2013	2014	2015
Homeless Families with Children							
<i>Total households</i>	9	15	10	7	6	3	4
<i>Number children</i>	17	16	19	12	11	5	11
<i>Total number persons</i>	26	33	29	19	17	8	15
Homeless Adults w/o Children							
<i>Total households</i>	12	17	14	17	18	31	11
<i>Total number persons</i>	12	18	14	17	30	31	10
Subpopulations							
<i>Chronically homeless</i>	n/a	9	0	0	4	2	0
<i>Veterans</i>	n/a	0	1	1	5	2	1
Total Homeless People	38	51	42	36	47	39	26

Source - 2009 [and other years as noted] *Point-in-time Count: North Carolina Balance of State - by County*. North Carolina Coalition to End Homelessness: <http://www.ncceh.org/pitdata/>.

The online Homeless Shelter Directory lists two homeless shelters in Elizabeth City: The Tabernacle of Faith Community Outreach Center, and The Garden of Hope House, Inc. (27).

Another local facility, Albemarle Hopeline, serves primarily victims of domestic violence, and will be discussed later in this report, along with Domestic Violence/Sexual Abuse.

HOUSEHOLDS

The table below describes some of the characteristics of households in the four comparator jurisdictions.

- The average number of persons per household in Pasquotank County—2.60—was higher than the state average, but lower than the regional average and the average for Scotland County.
- The percent of one-person households in Pasquotank County—24.8%—was the second-lowest proportion among the comparator jurisdictions.
- The percent of households where the resident lived alone *and* was age 65 or older was second-lowest among comparators in Pasquotank County.

**Table 38. Household Characteristics
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total No. Households ¹	Persons per Household	% Households One-person	% Households One-person and Age ≥65
Pasquotank County	14,608	2.60	24.8	10.1
<i>Regional Average</i>	<i>7,289</i>	<i>2.64</i>	<i>24.2</i>	<i>11.0</i>
Scotland County	12,931	2.62	29.9	12.2
State of NC	3,742,514	2.54	27.9	9.7

1 - A household includes all the persons who occupy a housing unit. A housing unit is a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied (or if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. (People not living in households are classified as living in group quarters.)

Source: US Census Bureau, American FactFinder, 2014 ACS 5-year estimates. Table S1101: Households and Families (geographies as noted); <http://factfinder2.census.gov>.

Family Households

The following table describes some characteristics of family households by type of head of household. Note that percentages were calculated from the counts in the table.

- In Pasquotank County in the period cited, 42% of all households (4,335 of 10,210) included children under the age of 18.
- Of the 4,335 households with minor children, 2,581 (60%) were headed by a married couple. Another 266 (6%) were headed by a male householder, and 1,488 (34%) were headed by a female householder.

**Table 39. Family Households, by Type of Head of Household
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Total Families	Total Households	Households w/ children <18	Housholds w/ children <6 only	Married-couple Households	Married-couple w/ children <18	Male Householder	Male Householder w/ children <18	Female Householder	Female Householder w/ children <18
	Number	Number	Number	Percent	Number	Number	Number	Number	Number	Number
Pasquotank County	14,608	10,210	4,335	19.9	7,136	2,581	600	266	2,474	1,488
<i>Regional Average</i>	7,289	5,158	1,970	21.8	3,741	1,251	334	147	1,083	571
Scotland County	12,931	8,599	3,437	20.1	5,073	1,469	604	384	2,922	1,684
<i>State of NC</i>	3,742,514	2,484,973	1,077,906	22.9	1,803,981	699,864	166,170	84,965	514,822	293,077

Source: US Census Bureau, American FactFinder, 2014 American Community Survey 5-Year Estimates. Table: S1101: Households and Families. <http://factfinder2.census.gov>

Grandparents Responsible for Minor Children

The table below presents data on grandparents with responsibility for minor children. Data on grandparents as primary caregivers were derived from US Census Bureau American Community Survey questions. Data were collected on whether a grandchild lives with a grandparent in the household, whether the grandparent has responsibility for the basic needs of the grandchild, and the duration of that responsibility. Responsibility of basic needs determines if the grandparent is financially responsible for food, shelter, clothing, day care, etc., for any or all grandchildren living in the household. Percent is derived with the number of grandparents responsible for grandchildren (under 18 years) as the numerator and number of grandparents living with own grandchildren (under 18 years) as the denominator.

- In Pasquotank County for the period cited, an estimated 50% of grandparents living with their minor grandchildren were also responsible for their care, the second-highest figure among comparators.
- In Pasquotank County, only 15% of grandparents financially responsible for minor grandchildren were over the age of 60, 14% were disabled, and 34% lived below the poverty level.

**Table 40. Grandparents with Responsibility for Minor Children
(US Census Bureau 5-Year Estimate, 2010-2014)**

Location	Grandparents Living with own grandchildren under 18	Grandparents Responsible for grandchildren under 18							
		Number	Percent	# Over 60	% Over 60	% White	% African American	% Disabled	% Below Poverty Level
Pasquotank County	956	481	50.3	72	15.0	66.3	33.7	13.9	33.9
<i>Regional Average</i>	561	293	49.1	114	37.6	67.0	33.0	21.8	29.0
Scotland County	1,542	1,016	65.9	437	43.0	33.2	54.4	29.3	31.8
<i>State of NC</i>	209,835	100,472	47.9	34,797	34.6	56.2	36.3	27.6	26.2

Source: US Census Bureau, American FactFinder, 2014 American Community Survey 5-Year Estimates. Table: S1002: Grandparents. <http://factfinder2.census.gov>

CHILD CARE

Child Care Facilities

The NC Division of Child Development is the state agency charged with overseeing the child care industry in the state, including the regulation of child day care programs. The Division licenses child care facilities that keep more than two unrelated children for more than four hours a day. In NC, regulated child day care facilities are divided into two categories—Child Care Centers and Family Child Care Homes—with the categories delineated on the basis of enrollment. A *child care center* is a larger program providing care for three or more children, but not in a residential setting. The number of children in care is based upon the size of individual classrooms and having sufficient staff, equipment and materials. A *family child care home* is a smaller program offered in the provider's residence where three to five preschool children are in care. A family child care home may also provide care for three school-age children (28).

In 1999, the NC Division of Child Development began issuing “star rated” licenses to all eligible Child Care Centers and Family Child Care Homes. NC’s Star Rated License System gave from one to five stars to child care programs based on how well they were doing in providing quality child care. A rating of one star meant that a child care program met the state’s minimum licensing standards for child care. Programs that chose to voluntarily meet higher standards could apply for a two to five star license. (Note: Religious-sponsored child care programs could opt to continue to operate with a notice of compliance and not receive a star rating.)

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

Then, in 2005, the way facilities were evaluated was changed in order to give parents better information about a program’s quality. The new rules made a 75% “compliance history” a minimum standard for any licensed facility. Because it is now a minimum requirement, all programs earn their star rating based only on the two components that give parents the best indication of quality: staff education and program standards. In addition, programs having a two component license can earn a “quality point” for enhanced standards in staff education and program standards.

According to data in the table that follows:

- Of the 30 licensed child care centers in Pasquotank County at the time of this report, eight (27%) were five-star facilities and six (20%) were four-star facilities.
- Of the 17 licensed family child care homes in Pasquotank County, none was a five-star facility, five (29%) were four-star facilities, and five (29%) were three-star facilities.

**Table 41. NC-Licensed Child Care Facilities in Pasquotank County
(February, 2016)**

Type of Facility	Number
Child Care Centers (30)	
Five-star	8
Four-star	6
Three-star	11
Two-star	0
One-star	0
GS 110-106 (Church-affiliated)	3
Temporary	2
Family Child Care Homes (17)	
Five-star	0
Four-star	5
Three-star	5
Two-star	4
One-star	3

Source: NC Department of Health and Human Services, Division of Child Development, Child Care Facility Search Site: <http://ncchildcaresearch.dhhs.state.nc.us/search.asp>.

The table below presents total enrollment summaries for child care facilities. This data is old, but had not been updated at the source by the time of this report.

**Table 42. Children Enrolled in NC-Regulated Child Care
(2008-2011)**

Location	No. Children (0-5) Enrolled in Child Care Centers				No. Children (0-12) Enrolled in Family Care Homes			
	2008	2009	2010	2011	2008	2009	2010	2011
Pasquotank County	1,014	1,025	1,104	1,351	127	105	114	93
<i>Regional Average</i>	<i>347</i>	<i>355</i>	<i>351</i>	<i>428</i>	<i>45</i>	<i>45</i>	<i>45</i>	<i>41</i>
Scotland County	797	744	806	745	108	101	93	88
<i>State of NC</i>	<i>172,717</i>	<i>168,953</i>	<i>169,852</i>	<i>194,632</i>	<i>15,354</i>	<i>14,936</i>	<i>14,384</i>	<i>13,321</i>

Source: Annie E. Casey Foundation, Kids Count Data Center, Community Level Data, North Carolina Indicators; <http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=NC>.

The WorkFirst Employment Program discussed previously includes child care subsidies for families that qualify. The following table also contains old data on the number of children in each jurisdiction that received WorkFirst Working Connections Child Care Subsidies.

- The number of children in Pasquotank County that received a WorkFirst child care subsidy decreased significantly over the period cited, as for the most part did the comparable figures for the region.
- In each jurisdiction, including the state of NC, the figures were their lowest of the entire period in 2010.

**Table 43. Number of Children Receiving WorkFirst Child Care Subsidy
(2007-2010)**

Location	2007	2008	2009	2010
Pasquotank County	265	336	219	186
<i>Regional Average</i>	110	118	91	77
Scotland County	594	583	524	477
State of NC	41,075	43,124	42,944	39,341

Note: the number of children is based on the number of children under 18 receiving Work First benefits for the month of December for a particular year.
 Source: Annie E. Casey Foundation, Kids Count Data Center, Community Level Data, North Carolina Indicators;
<http://datacenter.kidscount.org/data/bystate/chooseindicator.aspx?state=NC>.

EDUCATION

Higher Education

There is one four-year university physically located in the county, and several other institutions of higher learning in the county and elsewhere in the northeast NC region accessible to Pasquotank County residents. In addition, there are numerous colleges and universities relatively close at hand in the Tidewater region of southeast VA.

College of the Albemarle

The College of The Albemarle (COA) is a community college that serves northeastern NC with sites in several locations throughout the region, including a campus in Edenton, one in Elizabeth City, and a third in Manteo. A comprehensive community college, COA offers two-year degrees in college transfer and career programs, basic skills programs, continuing education classes for personal enrichment as well as credit, customized business and industry training, and cultural enrichment opportunities including an annual summer program called College for Kids. The COA is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees (29).

Roanoke-Chowan Community College

Roanoke-Chowan Community College (RCCC) is a regional community college located in Ahoskie, NC (Hertford County). The College currently has about 20 curricular programs in which students may seek degrees, diplomas and short term skills-based certificates. RCCC recently added an Associate of Fine Arts Degree in Visual Arts, in addition to diplomas in high demand occupational training in Building Construction, Plumbing and other construction-related technologies. The College offers a Lateral Entry Teacher Certificate tailored to meet the need of public schools within the region to fully credential educators who have entered the classroom without the advantage of full unrestricted licensure.

RCCC has established formal transfer agreements with the 16-member University of North Carolina System and several private colleges to provide transfer opportunities for students to pursue higher-level degrees. RCCC has expanded its distance learning studies to include Internet-based courses, and has increased efforts with area school systems to provide more opportunities for high school students to take college courses, either on the RCCC campus or at their respective high schools.

The RCCC Continuing Education and Workforce Development Division meets business needs by establishing basic or occupation-related classes within local industries and by developing Focused Industrial Training (FIT) opportunities. Its Small Business component works on a one-on-one basis with individuals and small companies wanting to start and or enhance a small business enterprise. The Hertford County JobLink Career Center is also located on the RCCC Campus (30).

Chowan University

Chowan University is a small (~1,300 students) four-year liberal arts university located in Murfreesboro, NC (Hertford County). Chowan University is affiliated with the Southern Baptist Association. The university offers over 63 academic programs and the recently-opened School

of Graduate Studies provides students the opportunity to earn Masters Degrees. Currently, Chowan offers the Master of Education (M.Ed.) degree with advanced teacher license.

Chowan University enrolls about 30 adult students in the Adult Degree Completion Program. Through this program, adult students take classes at Halifax Community College in Weldon, NC, at the main campus in Murfreesboro, NC, and online.

The Chowan University student/faculty ratio is 16:1, with an average class size of 15. The university has a campus-wide fiber-optic network and Blackboard communication system, computer labs, "smart" multimedia classrooms, hardware and software discounts, in-house technical support, and 24/7 high-speed Internet access (31).

Martin Community College

Martin Community College (MCC) is a regional community college located in Williamston, NC (Martin County) with a satellite campus located in Windsor. MCC provides adult basic education, adult high school education, extension classes, and selected curriculum courses in 20 vocational and technical areas. MCC also offers an Associate in Arts College Transfer Program and a Transfer Core Diploma. The college offers online curricular and continuing education classes via a system called *ed2go* (32).

Mid-Atlantic Christian University

Today's Mid Atlantic Christian University, located in Elizabeth City, was founded in 1948 as Roanoke Bible College by Churches of Christ in Eastern North Carolina in order to train ministers who had no Biblical college preparation.

Today's Mid-Atlantic Christian University is an undergraduate institution of Christian higher education organized academically into two schools: the School of Undergraduate Studies (offering BA and BS degrees in Biblical and theological studies and general studies) and the School of Professional Studies (offering degrees in Christian Ministries and Family Studies). MACU supports a strong service learning program (33).

Elizabeth City State University

Elizabeth City State University (ECSU) is a four-year state university located in Elizabeth City, NC (Pasquotank County). Originally an institution for African-American students, the university now has an increasingly multicultural student body. In the fall of 2012, ECSU had a total enrollment of 2878. A constituent institution of The University of North Carolina System, ECSU offers 37 baccalaureate degrees and four master's degrees in four academic schools: Arts and Humanities; Business and Economics; Education and Psychology; and Mathematics, Science and Technology. The university has academic programs that appeal to various interests and fields of study, including the honors program, military science, study abroad, Viking Fellows for education majors, and "signature" programs in aviation and pharmacy (34).

East Carolina University

East Carolina University (ECU) is a large, four-year state university located in Greenville, NC (Pitt County). ECU is a constituent member of the UNC System founded in 1907 to alleviate the desperate shortage of teachers in the eastern part of NC. Since then, the ECU College of Education has been joined by programs of high distinction in health care and the fine and performing arts. Today the university offers over 100 bachelor's degree programs, more than 70 master's degree programs, four specialist degree programs, an MD program, and 16 doctoral programs. The university is the largest educator of nurses in NC, and its Brody School of Medicine is consistently ranked among the top medical schools in the nation that emphasize primary care. The school was recently ranked second in the nation by the American Academy of Family Physicians for productivity of family physicians.

ECU is the state's leader in distance education, offering more than 60 degrees and certificate programs in subjects such as business, education, health care, and technology. Two of the top distance-education programs in the nation are run by ECU's colleges of nursing and education (35).

Primary and Secondary Education

Schools and Enrollment

The following several tables focus on data pertaining to primary and secondary (mostly public) schools in Pasquotank County (as well as its comparator jurisdictions where appropriate).

- There are 12 public schools in the Elizabeth City/Pasquotank County school district: seven elementary schools, two middle schools, two secondary schools, and one combined school in the district. There also are eight private schools in the county.

**Table 44. Number of Schools
(SY2012-13 or as Noted)**

Location	Public (SY2012-13)				Private (SY2014-15)			
	Elementary (PK-8)	Middle (4-8)	Secondary (9-12)	Combined	K-10/11/12	Middle School	K-5	Other
Elizabeth City-Pasquotank Public Schools	7	2	2	1	3	3	1	1
<i>Regional Total</i>	25	10	12	1	6	3	1	2
Source:	a	a	a	a	b	b	b	b

a - NC Department of Public Instruction, NC School Report Cards, Search by School District. <http://www.ncreportcards.org/src/>.

b - NC Division of Non-Public Education, Resources and Statistics, NC Directory of Non-Public Schools.

<http://www.ncdnpe.org/documents/14-15-CS-Directory.pdf>.

- Northeastern High School in Elizabeth City was the largest school in the district, with a SY2012-13 enrollment of 819. Pasquotank County High School, also in Elizabeth City, was the second largest school in the district, with a SY2012-13 enrollment of 730.

Table 45. Elizabeth City-Pasquotank County Public Schools (Not Including Charter Schools) (SY2012-13)

School	Location	School Type/Calendar	Grade Range	Enrollment SY2012-13
Central Elementary	Elizabeth City	Regular School, Traditional Calendar	K-5	349
Elizabeth City Middle	Elizabeth City	Regular School, Traditional Calendar	6-8	667
HL Trigg Community	Elizabeth City	Alternative Education, Traditional Calendar	6-12	70
JC Sawyer Elementary	Elizabeth City	Regular School, Traditional Calendar	K-5	417
Northeastern High	Elizabeth City	Regular School, Traditional Calendar	9-12	819
Northside Elementary	Elizabeth City	Regular School, Traditional Calendar	K-5	555
PW Moore Elementary	Elizabeth City	Regular School, Traditional Calendar	K-5	355
Pasquotank County High	Elizabeth City	Regular School, Traditional Calendar	9-12	730
Pasquotank Elementary	Elizabeth City	Regular School, Traditional Calendar	K-5	333
River Road Middle	Elizabeth City	Regular School, Traditional Calendar	6-8	658
Sheep-Harney Elementary	Elizabeth City	Regular School, Traditional Calendar	PK-5	392
Weeksville Elementary	Elizabeth City	Regular School, Traditional Calendar	K-5	346

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards, School Year 2009-10; <http://www.ncschoolreportcards.org/src>.

- In addition to 12 regular public schools, there is also one charter school on record in Pasquotank County in SY2014-15. However, it was new at the time the data was being gathered, and had not yet provided enrollment data.

Table 46. Pasquotank County Charter School (SY2014-15)

Location	Name	City	Year Established	Grades	Enrollment
Pasquotank	Northeast Academy of Aerospace and Adv Tech (70A)	Elizabeth City	2015	8th-9th	no data yet
Source	1	1	1	1	2

1 - NC Department of Public Instruction, Office of Charter Schools, Schools: Find by County.

<http://www.dpi.state.nc.us/charterschools/schools/by-county/>.

2 - NC Department of Public Instruction, Data and Statistics, Education Data: NC Statistical Profile. NC Statistical Profile Online: Charter Schools: Pupil Accounting. Charter/Regional Schools List and Table 34: Final Pupils by Grade.

<http://apps.schools.nc.gov/pls/apex/f?p=1:1:1478699300126501::NO>.

- K-12 public school enrollment in Pasquotank County has been relatively stable since SY2007-08.

Table 47. K-12 Public School Enrollment (SY2007-08 through SY2014-15)

Location	Number of Students							
	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14	SY2014-15
Elizabeth City-Pasquotank Public Schools	6,341	6,320	6,140	6,151	6,455	5,942	5,616	6,005
<i>Regional Average</i>	3,150	3,101	3,038	3,017	3,122	2,933	2,905	2,902
<i>State of NC</i>	1,458,156	1,456,558	1,446,650	1,450,435	1,458,572	1,467,297	1,493,980	1,498,654

Note: this data excludes charter school enrollment.

Source: NC Department of Public Instruction, Data and Statistics, Education Data: NC Statistical Profile. NC Statistical Profile Online: Local Education Agencies Information, Pupil Accounting. Table A1: Final Pupils by Year and Grade.

<http://apps.schools.nc.gov/pls/apex/f?p=1:1:497147721913602>.

Educational Attainment

The following table presents data on several measures of educational attainment.

Compared to the NC average, in 2014 or SY2014-15 Pasquotank County had:

- A 10% higher proportion of residents with *less than* a high school education;
- A 32% lower proportion of residents with a bachelor's degree or higher;
- Lower proficiency on both math and reading EOG tests among 3rd and 8th graders. Less than 50% of Pasquotank County 3rd and 8th grade students were grade-level proficient in reading or math in SY2014-15; only approximately 27% of eighth graders were grade-level proficient according to EOG results in SY2014-15.
- A higher rate of participation in the SAT but lower average scores.

**Table 48. Educational Attainment
(Years as Noted)**

Location	% Population High School Graduate or Higher	% Population Bachelor's Degree or Higher	% 3rd Graders Grade Level Proficient, EOG Reading Test	% 3rd Graders Grade Level Proficient, EOG Math Test	% 8th Graders Grade Level Proficient, EOG Reading Test	% 8th Graders Grade Level Proficient, EOG Math Test	SAT Participation Rate	Average Total SAT Scores
	2014	2014	SY2014-15	SY2014-15	SY2014-15	SY2014-15	SY2014-15	SY2014-15
Pasquotank County	84.0	18.9	46.3	46.3	44.7	26.7	64%	901
<i>Regional Average</i>	82.8	16.9	55.3	64.8	51.5	35.6	60%	918
Scotland County	77.8	15.0	53.5	66.5	53.4	32.1	63%	863
State of NC	85.4	27.8	59.0	61.7	53.4	43.2	54%	989

Source:

a - US Census Bureau, American Fact Finder, 2014 ACS 5-Year Estimate. Table S1501: Educational Attainment (Geographies as noted). <http://factfinder.census.gov>.

b - NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile. <http://www.ncpublicschools.org/src/>.

Educational Expenditures

The next table presents data on local, state and federal expenditures on public education.

- In SY2014-15 the total per pupil expenditure (the sum of Federal, state and local investments) in Elizabeth City-Pasquotank County schools (\$9,063) was 11% lower than the average for the ARHS region (\$10,208), but 4% higher than the average for the state as a whole (\$8,734).
- In all jurisdictions, the state contributed the highest proportion to the total per-pupil expenditure: 67% in Pasquotank County, an average of 69% region-wide, and an average of 64% statewide.

**Table 49. Educational Expenditures
(SY2014-15)**

Location	Per-Pupil Expenditure			
	Local	State	Federal	Total
Elizabeth City-Pasquotank Public Schools	\$1,922	\$6,051	\$1,090	\$9,063
<i>Regional Average</i>	\$2,064	\$7,020	\$1,124	\$10,208
State of NC	\$2,137	\$5,624	\$973	\$8,734

Source: NC Department of Public Instruction, Data and Statistics, Education Data, NC School Report Cards. District Profile. <http://www.ncpublicschools.org/src/>.

High School Drop-Out Rate

The following table presents data on the high school (grades 9-12) drop-out rate. According to the NC Department of Public Instruction, a "drop-out" is any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school. For reporting purposes, a drop-out is a student who was enrolled at some time during the previous school year, but who was not enrolled (and who does not meet reporting exclusions) on day 20 of the current school year. The data below is specific to high school students.

- The high school drop-out rate in Elizabeth City-Pasquotank County Schools decreased steadily over the period shown in the table.
- In the most recent period the drop-out rate in Pasquotank County was lower than either the regional or state averages, and was the lowest in the county in eight years.

**Table 50. High School Drop-Out Rate
(SY2006-07 through SY2013-14)**

Location	Drop-Out Rate							
	SY2006-07	SY2007-08	SY2008-09	SY2009-10	SY2010-11	SY2011-12	SY2012-13	SY2013-14
Elizabeth City-Pasquotank Public Schools	5.19	4.26	2.94	2.62	2.16	2.04	1.37	1.03
<i>Regional Average</i>	4.38	4.78	3.65	3.42	3.53	2.70	2.18	2.19
<i>State of NC</i>	5.27	4.97	4.27	3.75	3.43	3.01	2.45	2.28

Source: NC Department of Public Instruction, Research and Evaluation, Dropout Data and Collection Process, Annual Dropout Reports. Consolidated Report: Table D5: high School Dropout Counts and Rates; <http://www.ncpublicschools.org/research/dropout/reports/>.

Graduation Rate

The four-year cohort graduation rates for subpopulations of 9th graders entering high school in SY2011-12 and graduating in SY2014-15 are presented in the table below.

- Among comparators, the overall graduation rate, the graduation rate for males, and the graduation rate for females all were lowest in Pasquotank County Schools. The graduation rate among the economically disadvantaged was second-highest in Pasquotank County Schools.

**Table 51. Four Year Cohort Graduation Rate
(9th Graders Entering SY2011-12 and Graduating SY2014-15 or Earlier)**

Location	All Students			Male			Female			Economically Disadvantaged		
	Total Students	# Students Graduating	% Students Graduating	Total Students	# Students Graduating	% Students Graduating	Total Students	# Students Graduating	% Students Graduating	Total Students	# Students Graduating	% Students Graduating
Elizabeth City-Pasquotank Public Schools	397	333	83.9	199	159	79.9	198	174	87.9	222	183	82.4
<i>Regional Average</i>	218	188	86.7	110	90	83.1	109	98	90.3	91	75	83.9
<i>State of NC</i>	110,473	94,544	85.6	56,294	46,288	82.2	54,179	48,256	89.1	44,047	35,076	79.6

Note: subgroup information is based on data collected when a student is last seen in the cohort

Source: Public Schools of North Carolina, Cohort Graduation Rate. 4-Year Cohort Graduation Rate Report, 2011-12 Entering 9th Graders Graduating in 2014-15 or Earlier. <http://www.ncpublicschools.org/accountability/reporting/cohortgraduate>.

School Crime and Violence

Along with test scores and dropout rates, schools also track and report acts of crime and violence that occur on school property.

The NC State Board of Education has defined 17 criminal acts that are to be monitored and reported, ten of which are considered dangerous and violent:

- Homicide
- Assault resulting in serious bodily injury
- Assault involving the use of a weapon
- Rape
- Sexual offense
- Sexual assault
- Kidnapping
- Robbery with a dangerous weapon
- Robbery without a dangerous weapon
- Taking indecent liberties with a minor

The other seven criminal acts are:

- Assault on school personnel
- Bomb threat
- Burning of a school building
- Possession of alcoholic beverage
- Possession of controlled substance in violation of law
- Possession of a firearm or powerful explosive
- Possession of a weapon

The next table summarizes acts of school crime and violence catalogued by the NC Department of Public Instruction.

- The number and rate of acts of school crime and violence in Elizabeth City-Pasquotank County Schools and the other jurisdictions fluctuated dramatically over the period cited. Only the statewide average showed any stability, likely due to the large size of the sample.

**Table 52. School Crime and Violence Trend
(SY2006-07 through SY2013-14)**

Location	SY2006-07		SY2007-08		SY2008-09		SY2009-10		SY2010-11		SY2011-12		SY2012-13		SY2013-14	
	No. Acts	Rate														
Elizabeth City-Pasquotank Public Schools	44	7.2	15	2.5	26	4.3	16	2.7	29	4.9	19	3.3	43	7.6	23	4.1
<i>Regional Average</i>	17	5.5	21	7.6	19	6.0	14	5.0	16	4.6	16.7	6.3	15.3	4.9	15.9	5.8
Scotland County Schools	47	7.0	30	4.5	25	3.8	44	7.0	47	7.6	55	9.1	45	7.4	53	8.8
State of NC	11,013	7.8	11,276	7.9	11,116	7.6	11,608	8.0	11,657	8.0	11,161	7.6	10,630	7.2	10,132	6.8
Source	a	a	b	b	b	b	b	b	b	b	b	b	b	b	b	b

¹ For list of reportable acts see accompanying text

² Rate is number of acts per 1,000 students

a - NC Department of Public Instruction, Research and Evaluation, Discipline Data, Annual Reports, Annual Reports of School Crime and Violence (years as noted); <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

b - NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports. Crime & Violence Table C-5. <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

The following table displays locally-provided detail on the acts of crime and violence committed in Elizabeth City-Pasquotank County Schools in SY2011-12 through SY2013-14.

- According to this data, the most common offenses in Elizabeth City-Pasquotank County Schools were possession of a controlled substance, accounting for 37 reportable acts over the three years cited, and possession of a weapon, accounting for 27 reportable acts.

Table 53. School Crime and Violence in Pasquotank County Schools, by Type of Offense (SY2011-12 through SY2013-14)

Offense	Number of Acts		
	SY2011-12	SY2012-13	SY2013-14
Assault resulting in serious injury	1	0	0
Assault involving use of weapon	0	0	0
Assault of school personnel	0	2	1
Bomb threat	0	0	0
Burning of school building	0	1	0
Death by other natural causes	0	0	0
Kidnapping	0	0	0
Possession of alcoholic beverage	0	12	1
Possession of controlled substance	10	13	14
Possession of firearm	0	2	1
Possession of weapon	8	13	6
Rape	0	0	0
Robbery with a dangerous weapon	0	0	0
Sexual assault	0	0	0
Sexual offense	0	0	0
Taking liberties with a minor	0	0	0
Total Reportable Acts	19	43	23
Average Daily Membership	5,792	5,691	5,647
Acts per 1,000 Students	3.3	7.6	4.1

Source: NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports. Crime & Violence Table C-5, years as noted.
<http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

The final table in this section presents data summarizing disciplinary activity in the public schools. Since the data represent counts of activity of school systems of different sizes, direct comparisons are problematic.

- In all the school systems under comparison the most common disciplinary activity was the short-term suspension. Long-term suspensions were invoked more frequently in Pasquotank County than in Scotland County, and expulsions were rare.

**Table 54. School Disciplinary Activity
(SY2010-11 through SY2013-14)**

School System	SY2010-11			SY2011-12			SY2012-13			SY2013-14		
	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions	No. Short-Term Suspensions	No. Long-Term Suspensions	No. Expulsions
Elizabeth City-Pasquotank County Schools	1,807	25	0	2,167	9	1	1,855	18	1	1,548	9	0
<i>Regional Average</i>	570	6	0	615	2	0	590	4	0	450	2	0
Scotland County Schools	2,123	11	0	1,894	4	0	1,916	7	0	1,614	7	0
<i>State of NC</i>	<i>262,858</i>	<i>2,586</i>	<i>59</i>	<i>258,197</i>	<i>1,609</i>	<i>30</i>	<i>247,919</i>	<i>1,423</i>	<i>37</i>	<i>198,254</i>	<i>1,088</i>	<i>37</i>

¹ A short-term suspension is up to 10 days.

² A long term suspension is 11 or more days.

Source: NC Department of Public Instruction, Research and Evaluation, Discipline Data, Consolidated Data Reports (years as noted); <http://www.ncpublicschools.org/research/discipline/reports/#consolidated>.

CRIME AND SAFETY

Crime Rates

All crime statistics reported below were obtained from the NC Department of Justice, State Bureau of Investigation unless otherwise noted.

Index crime is composed of *violent crime* and *property crime*. Violent crime includes murder, forcible rape, robbery, and aggravated assault; property crime includes burglary, larceny, arson, and motor vehicle theft.

The table below presents the rates for index crime, violent crime, and property crime for the period from 2010 through 2014.

- The largest component of index crime in all four jurisdictions was property crime.

Table 55. Crime Rates, Crimes per 100,000 Population (2010-2014)

Location	Crimes per 100,000 Population														
	2010			2011			2012			2013			2014		
	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
Pasquotank County	3,134.0	467.8	2,666.1	3,269.4	403.4	2,865.9	3,423.7	439.7	2,984.0	3,182.3	365.5	2,816.8	3,465.6	351.9	3,113.7
Regional Average	2,191.1	211.0	1,980.1	2,512.8	196.6	2,316.2	2,326.2	229.9	2,096.4	2,108.7	197.8	1,909.5	2,006.2	214.5	1,808.4
Scotland County	4,981.5	505.9	4,475.6	5,498.7	479.1	5,019.5	5,570.5	534.2	5,036.3	5,127.7	791.9	4,335.8	4,662.9	642.2	4,020.7
State of NC	3,955.7	374.4	3,581.4	3,919.8	354.6	3,565.2	3,770.6	358.9	3,411.7	3,518.7	340.4	3,178.3	3,287.2	333.0	2,954.1

Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year). County Rates Ten Year Trend and Statewide Offenses and Rates, Ten Year Trend; <http://crimereporting.ncsbi.gov/Reports.aspx>.

The following three figures present long-term (2006-2014) trend data for index, violent and property crime.

- The index crime rate in Pasquotank County was higher than the comparable regional rate but lower than the comparable rates in Scotland County and the NC average in every year cited. In 2014 the Pasquotank County index crime rate was 3,465.6 crimes committed per 100,000 population, compared to 3,287.2 in NC and 2,006.2 in the ARHS region.
- The violent crime rate in Pasquotank County has been variable, but was higher than the comparable rates region-wide and statewide for almost all of the period cited. In 2014 the Pasquotank County violent crime rate was 351.9 compared to a state rate of 333.0 and a Regional rate of 214.5.
- The property crime rate in Pasquotank County was lower than the comparable rates in Scotland County and statewide over almost the entire period cited, but was higher than the Regional rate throughout. In 2014 the property crime rate in Pasquotank County was 3,113.7, compared to 2,954.1 statewide and 1,808.4 Region wide.

Figure 12. Index Crime Rate Trend

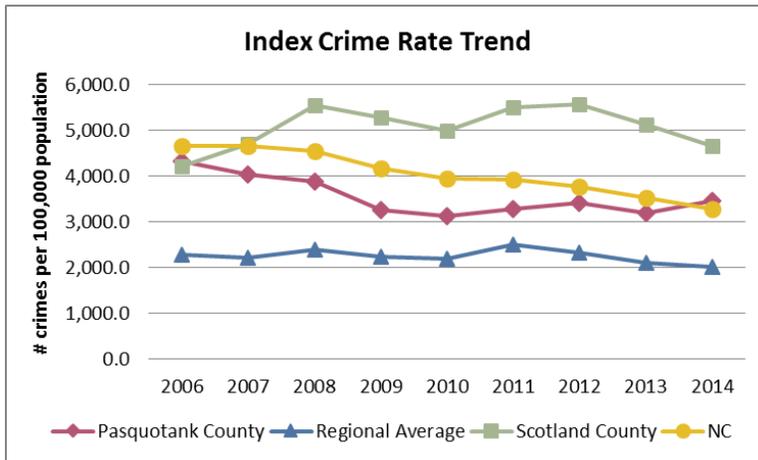


Figure 13. Violent Crime Rate Trend

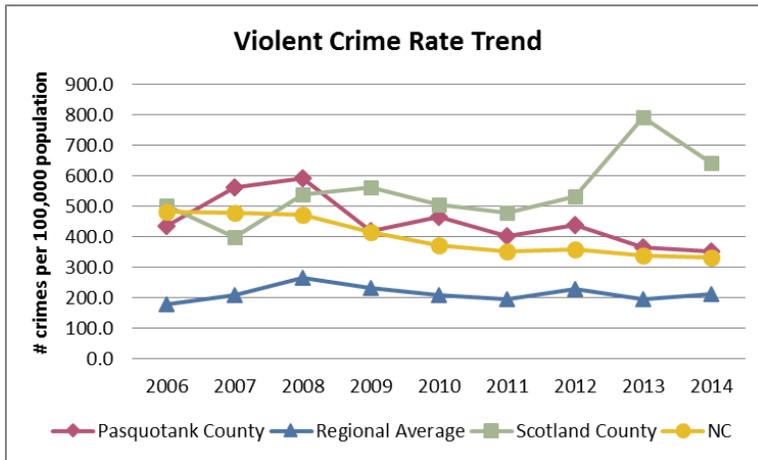
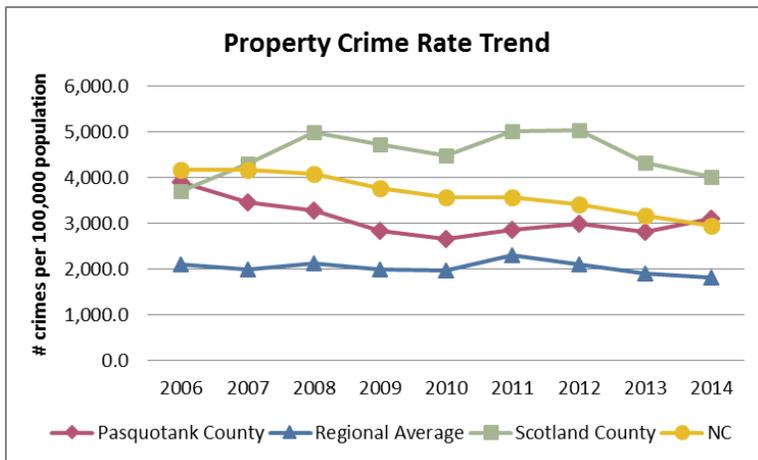


Figure 14. Property Crime Rate Trend



Source: NC Department of Justice, State Bureau of Investigation, Crime, View Crime Statistics, Crime Statistics (by Year). County Rates Ten Year Trend and Statewide Offenses and Rates, Ten Year Trend; <http://crimereporting.ncsbi.gov/Reports.aspx>.

The next table presents detail on index crime committed in Pasquotank County from 2006 through 2014. Note the following definitions:

Robbery: larceny by the threat of violence;

Aggravated assault: a physical attack on another person which results in serious bodily harm and/or is made with a deadly or dangerous weapon such as a gun, knife, sword, ax or blunt instrument;

Burglary: unlawful breaking and entering into the premises of another with the intent to commit a felony;

Larceny: the theft of property without use of force; and

Motor vehicle theft: the theft or attempted theft of a motor vehicle

- The predominant violent crime reported in Pasquotank County every year cited was aggravated assault.
- Larceny was the predominant property crime reported in every year.

Table 56. Types of Crimes Reported in Pasquotank County (2006-2014)

Type of Crime	Number of Crimes								
	2006	2007	2008	2009	2010	2011	2012	2013	2014
Violent Crime									
<i>Murder</i>	8	2	1	0	6	4	2	3	1
<i>Rape</i>	12	12	13	15	8	6	4	6	7
<i>Robbery</i>	57	52	74	41	39	26	47	32	29
<i>Aggravated Assault</i>	93	159	155	117	143	128	125	106	102
Property Crime									
<i>Burglary</i>	502	413	379	339	332	340	383	380	417
<i>Larceny</i>	939	903	919	799	755	792	791	716	788
<i>Motor Vehicle Theft</i>	75	67	43	37	30	33	34	37	25
Total Index Crimes	1,686	1,608	1,584	1,348	1,313	1,329	1,386	1,280	1,369

Source: NC State Bureau of Investigation, Crime in North Carolina, North Carolina Crime Statistics, Crime Statistics in Detailed Reports (By Year), Annual Reports, County Offenses Ten Year Trend, <http://crimereporting.ncsbi.gov/Reports.aspx>.

Other Criminal Activities

The following table summarizes data on other types of criminal activities.

- As of February 4, 2016 there were 68 registered sex offenders in Pasquotank County, compared to 103 in Scotland County. The average for counties in the region was 38.
- According to the NC Governor's Crime Commission, in 2013 there were nine gangs in Pasquotank County. The same year, the Crime Commission sited a total of 982 gangs statewide.
- According to the NC State Bureau of Investigation, there were two methamphetamine drug lab busts in Pasquotank County during the period from 2005 through 2013. Over the same period, 2,685 meth lab busts were recorded statewide.

Table 57. Other Criminal Activity

Location	No. Registered Sex Offenders (2/4/16)	No. Gangs	No. Methamphetamine Lab Busts								
			2013	2005	2006	2007	2008	2009	2010	2011	2012
Pasquotank County	68	9	0	1	0	1	0	0	0	0	0
<i>Regional Average</i>	38	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
Scotland County	103	0	0	0	0	0	0	0	1	0	1
State of NC	n/a	982	328	197	157	197	206	235	344	460	561
Source:	a	b	c	c	c	c	c	c	c	c	c

a - NC Department of Justice, Sex Offender Statistics, Offender Statistics; <http://sexoffender.ncsbi.gov/>.

b - NC Department of Crime Control and Public Safety, Governor's Crime Commission, Publications, Gangs in North Carolina 2013 (March 2013). Appendix 2. <https://www.ncdps.gov/div/GCC/PDFs/Pubs/Gangs2013.pdf>.

c - NC Department of Justice, State Bureau of Investigation, Crime, Enforce Drug Laws, Meth Focus, Meth Lab Busts; <http://www.ncdoj.gov/getdoc/b1f6f30e-df89-4679-9889-53a3f185c849/Meth-Lab-Busts.aspx>.

Juvenile Crime

The following definitions will be useful in understanding the subsequent data and discussion.

Complaint: A 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 will be heard in juvenile court.

Undisciplined: Describes a juvenile between the ages of six 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. It also includes 16-17 year olds who have done any of the above except being absent from school.

Delinquent: Describes a juvenile between the ages of six and not yet 16 who commits an offense that would be a crime under state or local law if committed by an adult.

Diversions: If a complaint is not approved, it may be diverted to a community resource or placed on a diversion contract or plan that lays out stipulations for the juvenile (like community service) to keep the juvenile out of court.

Non-divertible: Non-divertible offenses include offenses like: murder, rape, sexual offense, arson, first degree burglary, crime against nature, willful infliction of serious bodily harm, assault with deadly weapon, etc.

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

Rate: The number per 1,000 persons that are aged 6 to 17 in the county.

The following table presents a summary of juvenile justice complaints and rates:

- Between 2010 and 2014 the *number* of complaints of *undisciplined* youth in Pasquotank County decreased from 36 to 14 (61%), and the *rate* of *undisciplined* youth decreased from 6.07 to 2.36 (61%).
- Over the same period the *number* of complaints of *delinquent* youth in Pasquotank County decreased minimally from 260 to 196 (25%), and the *rate* of *delinquent* youth increased from 53.27 to 38.93 (27%).

**Table 58. Complaints and Rates of Undisciplined and Delinquent Youth
(2010 through 2014)**

Location	Complaints									
	No. Undisciplined					Rate Undisciplined (Complaints per 1,000 Ages 6 to 17)				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Pasquotank County	36	24	21	17	14	6.07	4.03	3.53	2.86	2.36
<i>Regional Average</i>	10	9	8	6	5	2.92	2.89	2.73	1.95	1.78
Scotland County	40	37	21	12	5	6.11	6.22	3.53	2.00	0.84
State of NC	4,285	3,603	3,194	2,556	2,277	2.94	2.34	2.50	1.66	1.47

Location	Complaints									
	No. Delinquent					Rate Delinquent (Complaints per 1,000 Age 6 to 15)				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Pasquotank County	260	153	106	161	196	53.27	30.65	21.38	32.20	38.93
<i>Regional Average</i>	83	66	52	58	77	29.06	24.99	19.54	20.69	27.05
Scotland County	252	242	243	180	188	47.45	49.71	49.84	36.66	38.52
State of NC	33,299	33,556	31,575	29,535	29,288	27.55	26.08	24.70	22.91	22.52

Source: NC Department of Public Safety. Juvenile Justice, Data/Statistics/Reports, County Databooks (Search by Year); <https://www.ncdps.gov/Index2.cfm?a=000003.002476.002487>.

The next table summarizes the outcomes of complaints of undisciplined and delinquent youth.

- In every year cited, a higher number of Pasquotank County juveniles were sent to secure detention than the comparable regional average.
- Two Pasquotank County juveniles were sent to youth development centers over the period cited; one was transferred to Superior Court.

**Table 59. Juvenile Justice Outcomes
(2010 through 2014)**

Location	Outcomes														
	No. Sent to Secure Detention					No. Sent to Youth Development Center					No. Transferred to Superior Court				
	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014
Pasquotank County	20	23	15	12	18	0	0	0	0	2	0	1	0	0	0
<i>Regional Average</i>	9	10	6	6	7	0	0	0	0	0	0	0	0	0	
Scotland County	41	22	22	19	7	0	2	1	3	1	1	0	2	0	0
State of NC	4,297	3,558	2,767	2,352	2,244	357	307	216	219	202	30	28	36	28	14

Source: NC Department of Public Safety. Juvenile Justice, Data/Statistics/Reports, County Databooks (Search by Year); <https://www.ncdps.gov/Index2.cfm?a=000003.002476.002487>

Sexual Assault

The following table summarizes data from the Domestic Violence Commission of the NC Council for Women on the number of individuals who filed complaints of sexual assault. (See Pasquotank County Sociodemographic Data Workbook for an explanation of the NC Council for Women's data collection methodology.)

- Since the figures are counts and not rates, they cannot be definitively compared from one jurisdiction to another.
- The annual number of complaints varied without a clear pattern in all four jurisdictions over the period covered, although in Pasquotank County the numbers of complaints in FY2009-10 and later were greater each year than in FY2008-09 and earlier.

**Table 60. Sexual Assault Complaint Trend
(FY2004-05 through FY2014-15)**

Location	No. of Individuals Filing Complaints ("Clients")										
	FY2004-05	FY2005-06	FY2006-07	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Pasquotank County	77	38	73	26	72	158	121	114	172	211	187
<i>Regional Average</i>	77	38	39	17	58	66	51	64	54	71	60
Scotland County	28	23	7	8	25	43	115	9	9	4	10
State of NC	8,564	8,721	7,444	6,527	8,494	13,392	13,881	13,214	12,971	13,736	13,655

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics (years as noted); <http://www.doa.state.nc.us/cfw/stats.htm>.

The next table presents details on the types of sexual assaults reported in FY2014-15.

- In Pasquotank County, the majority—58.8%--of the sexual assaults catalogued in FY2014-15 involved complaints from adult survivors of child sexual assault.
- Region-wide the largest proportion of sexual assault complaints (38.6%) was by adult survivors of child sexual assault, and the second highest proportion (26.9%) was for adult rape.
- Statewide the largest proportion of sexual assault complaints (27.3%) involved child sexual offense; the second largest proportion (21.5%) involved adult rape.

**Table 61. Types of Sexual Assaults
(FY2014-15)**

Location	Total Assault Clients	Type of Assault													
		Adult Rape		Date Rape		Adult Survivor of Child Sexual Assault		Marital Rape		Child Sexual Offense		Incest		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	187	25	13.4	6	3.2	110	58.8	16	8.6	1	0.5	1	0.5	28	15.0
<i>Regional Average</i>	60	11	26.9	1	1.3	26	38.6	8	13.6	4	4.8	0	0.3	9	14.3
Scotland County	10	3	30.0	0	0.0	2	20.0	5	50.0	0	0.0	0	0.0	0	0.0
State of NC	13,655	2,940	21.5	892	6.5	2,194	16.1	824	6.0	3,721	27.3	782	5.7	2,302	16.9

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2014-2015 County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>.

The following table details the types of offenders involved in sexual assaults in FY2014-15.

- In Pasquotank County the most common offender in sexual assault complaints was a relative (62.6%), followed by an acquaintance (19.8%).
- Region-wide, the most common offender was a relative (52.7%), followed by an acquaintance (20.4%).
- Statewide the most common offender was a relative (32.6%), followed by an acquaintance (27.9%).

Table 62. Types of Offenders in Sexual Assaults (FY2014-15)

Location	Total Offenders	Type of Offender											
		Relative		Acquaintance		Boy/Girl Friend		Stranger		Unknown		Other	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Pasquotank County	187	117	62.6	37	19.8	14	7.5	7	3.7	12	6.4	0	0.0
<i>Regional Average</i>	60	34	52.7	13	20.4	5	5.4	3	11.8	5	9.7	0	0.0
Scotland County	10	1	10.0	2	20.0	1	10.0	3	30.0	3	30.0	0	0.0
State of NC	13,720	4,474	32.6	3,823	27.9	1,604	11.7	655	4.8	3,119	22.7	45	0.3

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2014-2015 County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>.

Domestic Violence

The table below summarizes data from the Domestic Violence Commission of the NC Council for Women on the number of individuals who filed complaints of domestic violence. (See Pasquotank County Sociodemographic Data Workbook for an explanation of the NC Council for Women's data collection methodology.)

- Since the figures are counts and not rates, they are difficult to compare from one jurisdiction to another.
- In Pasquotank County the annual numbers of complaints were higher in FY2013-14 and FY2014-15 than in any previous period cited.

Table 63. Domestic Violence Complaint Trend (FY2007-08 through FY2014-15)

Location	No. of Individuals Filing Complaints ("Clients")							
	FY2007-08	FY2008-09	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Pasquotank County	366	323	723	590	475	697	886	974
<i>Regional Average</i>	134	163	252	216	209	279	372	328
Scotland County	134	214	266	203	185	126	66	156
State of NC	41,787	51,873	66,320	61,283	51,563	57,345	55,274	53,875

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, County Statistics (years as noted); <http://www.doa.state.nc.us/cfw/stats.htm>.

The table below provides details on the services received by domestic violence complainants.

- The 974 clients complaining of domestic violence in Pasquotank County in FY2014-15 were provided a total of 9,779 services.
- The largest numbers of services received by domestic violence complainants in Pasquotank County were for advocacy (2,930) followed by information (2,635) and counseling (2,005).
- Albemarle Hopeline, maintains the domestic violence shelter in Pasquotank County, in Elizabeth City (see below).

Table 64. Services Received by Domestic Violence Complainants (FY2014-15)

Location	Total Domestic Violence Clients	Services Received									Days Local Shelter was Full
		Total	Information	Advocacy	Referral	Transport	Counseling	Hospital	Court	Other	
Pasquotank County	974	9,779	2,635	2,930	1,617	190	2,005	0	363	39	32
<i>Regional Average</i>	328	2,929	814	890	400	62	528	1	228	6	27
Scotland County	156	701	198	270	38	42	0	11	136	6	0
State of NC	53,875	480,730	148,363	86,475	73,979	34,413	47,942	844	37,247	51,467	8,281

Source: NC Department of Administration, Council for Women, Domestic Violence Commission, Statistics, 2014-15 County Statistics; <http://www.doa.state.nc.us/cfw/stats.htm>.

Albemarle Hopeline

This agency serves victims of family violence, sexual assault and teen dating violence in Camden, Chowan, Currituck, Gates, Perquimans and Pasquotank counties. Hopeline offers free individual and group counseling and emergency shelter, a 24-hour crisis counseling telephone line, and educational programs, courtroom advocacy and volunteer training. All services are provided free of charge (36).

Main telephone: (252) 338-5335

24-Hour Crisis Line: (252) 338-3011

Address: PO Box 2064, Elizabeth City, NC 27906

Albemarle Hopeline provided the following service utilization statistics for the period July 1, 2014 through June 30, 2015. These data are specific to services provided to Pasquotank County clients (37).

- Victims served – 1,161
- Shelter nights – 2,368
- Counseling sessions – 2,534
- Advocacy services – 3,200
- Court services – 372
- Crisis calls – 2,069
- Prevention education and outreach programs conducted - 396

Child Maltreatment

The responsibility for identifying and reporting cases of child abuse, neglect and exploitation falls to the child protective services program within a county's department of social services. Generally speaking, such a unit will have sufficient staff to handle intake of all reports. However, an agency's ability to investigate and monitor reported cases may vary from year to year, depending on the number of properly trained staff available to it; hence, follow-up on reports may vary independently of the number of reports.

The table below presents child protective services data from the state's Child Welfare website for the period from FY2007-08 through FY2014-15.

- The total number of findings of child abuse, neglect or dependency in Pasquotank County fluctuated annually without a clear pattern, although total findings in 2012-13 and later were fewer than in any previous fiscal years. For the period cited, the highest number of findings was 364 in FY2007-08, and the lowest was 247 in FY2012-13. The average number of findings of child abuse, neglect or dependency per year throughout the period cited was 311.
- Neglect-only cases composed the most common type of child maltreatment in Pasquotank County in most years. In 2014-15 43 of the 47 substantiated cases involved neglect only.

Table 65. Reports of Child Abuse and Neglect, Pasquotank County (FY2007-08 through FY2014-15)

Category	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total No. of Findings of Abuse, Neglect, Dependency	364	338	358	350	323	247	250	258
No. Substantiated ¹ Findings of Abuse and Neglect	5	1	2	8	0	3	4	4
No. Substantiated Findings of Abuse	3	4	1	1	0	2	0	0
No. Substantiated Findings of Neglect	28	29	24	42	46	20	33	43
Services Recommended	130	82	36	34	40	21	25	32
No. Unsubstantiated Findings	119	148	232	241	203	177	170	156
Services Not Recommended	69	69	17	18	28	20	14	20

¹ A "substantiated" report of child abuse, neglect or exploitation indicates that the investigation supports a conclusion that the subject child(ren) was/were abused, neglected, or exploited.

Source: Child Welfare, Reports of Abuse and Neglect section, Reports of Abuse and Neglect Type of Finding/Decision (Not Exclusive) (Longitudinal Data); http://sasweb.unc.edu/cgi-bin/broker?_service=default&_program=cwweb.tbReport.sas&county=Pasquotank&label=County&format=html&entry=10&type=CHILD&fn=FRST&vtype=xfind.

The next table presents demographic detail from the same source as above on the cases in Pasquotank County described for FY2014-15.

- African American children were the victims in 22 of the 47 substantiated cases of neglect or abuse and neglect; 19 cases involved white children, and six involved children of other races. Three of the victims were Hispanic.
- Twenty-four of the 47 substantiated cases of maltreatment involved male children; 23 involved females.
- Thirty of the 47 involved substantiated cases involved children age 5 and younger; 15 involved children ages 6-12, and two cases involved teenagers.

Table 66. Demographic Detail of Child Abuse Cases, Pasquotank County (FY2014-15)

Finding	Total	White	African-American	American Indian/Alaskan	Other Races	Hispanic	Non-Hispanic	Male	Female	Ages 0-5	Ages 6-12	Ages 13-17	Missing Age Information
Abuse and Neglect	4	2	2	0	0	0	4	1	3	0	3	1	0
Neglect	43	17	20	0	6	3	40	23	20	30	12	1	0
Services Needed	3	0	3	0	0	0	3	1	2	1	1	1	0
Services Recommended	32	12	14	0	6	0	32	11	21	15	10	7	0
Unsubstantiated	156	68	58	0	30	16	140	76	80	66	63	26	1
Services Not Recommended	20	8	12	0	0	0	20	9	11	13	6	1	0

Source: Child Welfare, Reports of Abuse and Neglect section, Table of Summary Data: Type of Finding by Category (Longitudinal). http://sasweb.unc.edu/cgi-bin/broker?_service=default&_program=cwweb.icans.sas&county=North%20Carolina&label=&entry=10.

Adult Maltreatment

Adults who are elderly, frail, or mentally challenged are also subject to abuse, neglect and exploitation. County DSS Adult Protective Services units screen, investigate and evaluate reports of what may broadly be referred to as adult maltreatment. The table below presents state-cataloged adult protective service survey data for 2009 and 2011. Note that no update to this old data is available at the source.

- Note that reports “screened out” do not meet the legal definition of potential maltreatment and are not investigated further.
- In Pasquotank County the proportion of reports screened in for further investigation and services was 75% in 2009 and 81% in 2011.
- Services most frequently provided to Pasquotank County adult maltreatment victims were outreach, information and referral, and services of law enforcement and the district attorney.

Table 67. NC Adult Protective Services Survey Results (2009 and 2011)

Location	2009										
	Reports Received	Reports Screened In	Reports Screened Out	Information and Referral	Outreach	Law Enforcement	DHSR or Home Specialist	District Attorney	Veterans Admin	Division of Medical Assistance	Social Security
Pasquotank County	63	47	16	4	9	2	2	1	0	0	0
<i>Regional Average</i>	31	16	14	4	6	1	1	1	0	0	0
Scotland County	32	21	11	8	2	0	0	0	0	0	0
State of NC	17,073	9,835	7,239	2,443	2,640	471	568	488	34	42	134

Location	2011										
	Reports Received	Reports Screened In	Reports Screened Out	Information and Referral	Outreach	Law Enforcement	DHSR or Home Specialist	District Attorney	Veterans Admin	Division of Medical Assistance	Social Security
Pasquotank County	58	47	11	2	6	4	2	4	0	0	0
<i>Regional Average</i>	35	21	14	3	7	1	1	1	0	0	0
Scotland County	46	39	7	5	3	3	2	0	0	0	0
State of NC	19,635	10,929	8,706	2,665	2,736	725	475	651	33	30	152

Source: NC DHHS. Division of Aging and Adult Services. Adult Protective Services. APS Survey Data, 2009 and 2011; http://www.ncdhhs.gov/aging/adultsvcs/afs_aps.htm

CHAPTER THREE: HEALTH RESOURCES

Access to and utilization of healthcare is affected by a range of variables including the availability of medical insurance coverage, availability of medical professionals, transportation, cultural expectations and other factors.

MEDICAL INSURANCE

Medically Indigent Population

In most communities, citizens' utilization of health care services is related to their ability to pay for those services, either directly or through private or government health insurance plans/programs. People without these supports are called “medically indigent”, and theirs is often the segment of the population least likely to seek and/or to be able to access necessary health care.

The next table presents data on the proportion of the population (by age group) without health insurance of any kind. (Note that the age distribution presented stops at age 65, when persons become eligible for Medicare.) Prior to the adoption of the Affordable Care Act (ACA) the health insurance system in the US was built largely upon employer-based insurance coverage, so an increase in the number of unemployed people usually resulted in an increase in the number of uninsured. This may change due to activity in the ACA Insurance Marketplace; time will tell.

- The percent of the total Pasquotank County population (age 0-64) without health insurance decreased in every period cited except 2012, and was 7% lower in 2013 than in 2009.
- Children (age <19) tend to have a lower percentage of uninsured than the adult population age (18-64) due primarily to coverage of children through NC Health Choice. In Pasquotank County the average percent uninsured among children during the five-year period cited was 7.3%; the comparable average for adults age 18-64 was 22.2%.
- The percent of uninsured children in Pasquotank County decreased from 8.7% in 2009 to 6.0% in 2013, a 31% improvement.

Table 68. Percent of Population without Health Insurance, by Age Group (2009-2013)

Location	2009			2010			2011			2012			2013		
	<19	18-64	<65	<19	18-64	<65	<19	18-64	<65	<19	18-64	<65	<19	18-64	<65
Pasquotank County	8.7	22.5	18.3	7.5	22.2	18.0	7.2	21.7	17.6	7.0	23.0	18.5	6.0	21.4	17.1
Regional Avg.	9.2	21.5	17.9	8.1	21.5	17.7	8.2	21.0	17.4	8.0	21.2	17.6	7.4	20.7	17.1
Scotland County	9.0	21.9	17.8	7.0	23.9	17.7	7.0	25.6	20.0	7.8	25.5	20.2	6.2	23.5	18.3
State of NC	8.7	21.9	18.0	8.3	23.5	19.1	7.9	23.0	18.7	7.9	23.4	19.0	6.9	22.5	18.1

Source: *Small Area Health Insurance Estimates, 2009 [and other years as noted]* U.S. Census Bureau, Small Area Health Insurance Estimate (SAHIE) Interactive Data Tool. Geographies and age groups as noted. www.census.gov/did/www/sahie/data/interactive.

Note on Source: The Small Area Health Insurance Estimates (SAHIE) program was created to develop model-based estimates of health insurance coverage for counties and states. The SAHIE program models health insurance coverage by combining survey data from several sources, including the American Community Survey (ACS), demographic population estimates, aggregated federal tax returns, participation in SNAP, County Business Patterns, Medicaid, CHIP and Census 2010 (<http://www.census.gov/did/www/sahie/about/index.html>).

The table below presents different US Census Bureau data on health insurance coverage for the single aggregate period 2010-2014 only. This data reflects the civilian, non-institutionalized population only.

- According to this data, 16.9% of the total defined population in Pasquotank County lacked health insurance over the five-year period cited.
- Of the approximately 83% of the Pasquotank County population that was insured, 62% had private insurance, and 35% had public coverage.

**Table 69. Health Insurance Coverage
(US Census Bureau 5 Year Estimate, 2010-2014)**

Location	With Health Insurance						With No Health Insurance			
	Total		With Private Insurance		With Public Coverage		Total		Under 18	
	#	%	#	%	#	%	#	%	#	%
Pasquotank County	32,093	83.1	23,854	61.8	13,604	35.2	6,515	16.9	731	8.2
<i>Regional Average</i>	<i>15,891</i>	<i>85</i>	<i>11,667</i>	<i>63</i>	<i>6,871</i>	<i>37</i>	<i>2,905</i>	<i>15</i>	<i>289</i>	<i>6</i>
Scotland County	28,995	84.3	16,109	46.8	17,061	49.6	5,408	15.7	454	5.2
State of NC ¹	8,072,475	84.5	6,131,516	64.2	3,039,062	31.8	1,479,285	15.5	155,453	6.8
United States	265,204,127	85.8	203,328,517	65.8	96,075,708	31.1	43,878,131	14.2	5,217,055	7.1

Source: US Census Bureau, American Fact Finder. 2014 American Community Survey 5-Year Estimate. Table DP03: Selected Economic Characteristics; <http://factfinder2.census.gov>

North Carolina Health Choice

In 1997, the Federal government created the *State Children's Health Insurance Program* (SCHI)—later known more simply as the *Children's Health Insurance Program* (CHIP)—that provides matching funds to states for health insurance for families with children. The program covers uninsured children in low-income families who earn too much to qualify for Medicaid (38).

States are given flexibility in designing their CHIP eligibility requirements and policies within broad Federal guidelines. The NC CHIP program is called NC Health Choice for Children (NCHC). 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, hearing aids, and more (39).

The following table presents enrollment figures for NCHC for 2010 through 2013. It should be noted that enrollment is directly related to the funding available, which may change at either the Federal or state level.

- In Pasquotank County the *number* of children eligible for the program changed little over the period cited, varying from 537-600 and averaging 575 annually. The percent of eligible children actually enrolled remained near 94% throughout the period cited. Note however that the percent of eligible children enrolled decreased slightly in 2013.
- Statewide, the percent of eligible children enrolled in the program increased 16% over the same period, and surpassed the enrollment achieved in Pasquotank County.

**Table 70. NC Health Choice Enrollment
(As of January, 2010 through 2013)**

Location	January, 2010			January, 2011			January, 2012			January, 2013		
	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled	# Children Eligible	# Eligibles Enrolled	% Eligibles Enrolled
Pasquotank County	571	538	94.0	537	505	94.0	600	569	94.8	590	545	92.4
<i>Regional Average</i>	261	216	77.0	255	258	79.8	267	236	85.3	266	237	86.4
Scotland County	642	622	97.0	568	553	97.4	555	548	98.7	611	605	99.0
State of NC	131,499	108,533	83.0	137,825	122,536	88.9	1,455,992	135,076	92.5	151,262	145,363	96.1

Source: NC Division of Medical Assistance, Statistics and Reports, N.C. Health Choice Monthly Enrollment/Exemption Reports, 2010-2013; <http://www.ncdhhs.gov/dmA/ca/nchcenroll/index.htm>.

Medicaid

Medicaid is a health insurance program for low-income individuals and families who cannot afford health care costs. It serves low-income parents, children, seniors, and people with disabilities. Both coverage and eligibility requirements are different for people with different kinds of needs. Chief among these requirements is low income, which depending on service can range from 51% to 200% of the Federal Poverty Guideline.

The following table summarizes the number of Pasquotank County residents eligible for Medicaid, by program area, for the period 2008 through October 2015.

- Using the estimated population figure for the county of 39,787, it appears that 21% of Pasquotank County residents were eligible for Medicaid in 2014.
- The total number of people in Pasquotank County eligible for Medicaid increased by 1,755 between 2008 and 2014.
- The Medicaid programs for which the largest numbers of Pasquotank County residents were eligible were (1) Infants and Children, (2) AFDC, and (3) Disabled.

**Table 71. Pasquotank County Medicaid Eligibles, by Program Area
(2008 through October 2015)**

Year	Number of Eligibles, as of December 31 each year													
	Aged	Blind	Disabled	AFDC	Foster Care	Pregnant Women	Family Planning Waiver	Infants & Children	Medicaid CHIP	Medicare Catastrophic	Comprehensive Medicare-Aid (MQBQ-B-E)	Refugees Aliens	BCC	Total Eligibles
2008	711	13	1,235	1,728	7	104	n/a	2,407	176	261	n/a	0	1	6,642
2009	707	11	1,300	1,735	9	109	n/a	2,568	149	261	n/a	2	3	6,854
2010	697	13	1,313	1,799	7	90	n/a	2,665	147	279	n/a	2	2	7,014
2011	683	14	1,319	1,713	9	87	n/a	2,935	174	271	n/a	4	2	7,211
2012	649	12	1,315	1,700	4	91	n/a	3,097	188	302	n/a	8	3	7,369
2013	635	11	1,363	1,844	10	109	n/a	2,869	161	297	n/a	8	2	7,309
2014	616	11	1,400	1,933	6	100	506	2,969	529	n/a	313	14	0	8,397
Oct-15	605	10	1,450	2,682	10	92	613	2,082	503	n/a	345	10	1	8,403

Sources: NC Division of Medical Assistance, Statistics and Reports, Medicaid Data: Authorized Eligibles by County and Program Aid Category. Title XIX Authorized Medicaid Eligibles (years as noted) and NC Division of Medical Assistance, Statistics and Reports, Medicaid Data: Authorized Eligibles by County and Program Aid Category. State Fiscal Year Reports: SFY 2015 Monthly Medicaid/Health Choice Enrollees -- County Totals. <http://www2.ncdhhs.gov/dma/elig/index.htm>.

AFDC - Medicaid Aid to Families with Dependent Children

BCC - Breast and Cervical Cancer Program

HealthCheck Early Periodic Screening, Diagnosis and Treatment

Federal law requires that Medicaid-eligible children under the age of 21 receive any medically necessary health care service covered by the federal Medicaid law, even if the service is not normally included in the NC State Medicaid Plan. This requirement is called Early Periodic Screening, Diagnosis and Treatment (EPSDT). In NC, HealthCheck EPSDT covers complete medical and dental check-ups, provides vision and hearing screenings, and referrals for treatment (40).

The following table presents a four-year summary of the participation of eligible children in the NC HealthCheck program.

- The HealthCheck *participation ratio* for Pasquotank County children in FY2011-12 was 27% lower than the participation ratio in FY2008-09. During this same time interval the *number* of eligible Pasquotank County children increased 0.7%.
- The HealthCheck participation ratio in Pasquotank County was the highest among comparators in FY2009-10 and FY2011-12.

**Table 72. Participation in HealthCheck (EPSDT)
(FY2008-09 through FY2011-12)**

Location	FY2008-09			FY2009-10			FY2010-11			FY2011-12		
	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio	No. Eligible	No. Eligibles Due Initial or Periodic Service	Participation Ratio
Pasquotank County	5,010	2,805	79.9	5,018	4,314	56.2	5,110	4,229	54.4	5,044	4,318	58.6
<i>Regional Average</i>	2,235	1,211	71.8	2,282	1,955	47.2	2,296	1,896	46.1	2,264	1,922	52.1
Scotland County	7,246	3,769	73.9	7,224	6,352	44.5	7,221	6,272	49.7	7,144	6,313	52.9
State of NC	n/a	594,043	80.0	1,185,510	963,619	53.8	1,146,716	961,381	54.7	1,161,170	999,141	57.1

Note: the participation ratio is calculated by dividing the number of eligibles receiving at least one initial screening service by the number of eligibles who should receive at least 1 initial or period screenings (not shown in the table).

Source: NC Division of Medical Assistance, Statistics and Reports, Health Check Participation Data;

<http://www.ncdhhs.gov/dma/healthcheck/participationdata.htm>.

Medicaid Managed Care

The goal of Medicaid managed care is to create community health networks to achieve long-term quality, cost, access, and utilization objectives.

Overview

As of July 2011, over 80 percent of Medicaid beneficiaries were enrolled in some form of managed care. North Carolina operated a small risk-based, capitated managed care program called Health Care Connection, which began in 1986 in one county, but that program was terminated in 2006. The state currently operates managed care only through a primary care case management (PCCM) model. The state's PCCM program, called Carolina ACCESS (CA), began in 1991 in five counties and provided beneficiaries with a designated medical home and primary care provider to coordinate care. Children, non-elderly individuals with disabilities and low-income caretaker adults are enrolled on a mandatory basis, while older adults, American Indian/Alaska Natives, Foster Care Children, dual eligibles, pregnant women, and special needs children have the option to enroll. By 1997, the program expanded statewide. In 1998, the state developed an enhanced case management program to support Carolina ACCESS primary care practices. It was originally called Access II and III but now referred to as Community Care of North Carolina (CCNC), which pays 14 community health networks a monthly fee to provide case management, data analysis, and quality improvement and training activities for primary

care practices participating in CCNC/Carolina Access. In 2008, CCNC’s care management model was expanded to Medicare-Medicaid dual enrollees and to Medicaid-only individuals with long-term care needs.

Since 2005, North Carolina has operated a limited benefit, pre-paid program under its 1915(b)/(c) Waiver for Mental Health (MH), Developmental Disability (DD), and Substance Abuse (SA) Services. The program began as a five-county pilot in the Piedmont region but was scheduled to be adopted statewide in 2013. The 1915(b)/(c) waiver uses public Local Management Entities (LMEs) to manage behavioral health and developmental disabilities services for most Medicaid beneficiaries with behavioral health needs on a mandatory basis. North Carolina also offers a Program for All-Inclusive Care for the Elderly (PACE), which provides all Medicare and Medicaid services to individuals over age 55 that require a nursing home level of care.

Participating Plans, Plan Selection, and Rate Setting

Under the CCNC program, North Carolina contracts with 14 community networks, which are each paid a per-member per-month fee to coordinate patient care. Networks are paid a higher fee to coordinate the needs of aged, blind, and disabled beneficiaries. All medical services delivered to beneficiaries are still reimbursed on a fee-for-service basis. For the 1915(b)/(c) waiver program, North Carolina contracts with three local, non-profit LMEs (Piedmont Behavioral Health, Highlands, and East Carolina Behavioral Health) to provide behavioral health services on a capitated basis.

Quality and Performance Incentives

CCNC/CA uses an elaborate Quality Measurement and Feedback (QMAF) program that collects a variety of chart review measures and claims-based measures, including HEDIS. Quality measures are reported to the primary care practices in order to encourage improvement relative to CCNC and NCQA, HEDIS and IPIP benchmarks. CCNC also conducts a CAHPS survey every three years for both adults and children. The MH/DD/SAS waiver does not collect quality measures but instead uses a variety performance measures to oversee the program (41).

The following table summarizes CCNC/CA enrollment data for the period from 2010-2013.

- The percent of Medicaid eligible persons in Pasquotank County enrolled in CCNC/CA increased 6% over the period cited, from 85.72% in 2010 to 91.00% in 2013.
- Statewide, the percent of Medicaid eligible persons enrolled in CCNC/CA increased 11% over the same period, from 82.3% in 2010 to 92.0% in 2013.

Table 73. Community Care of NC/Carolina ACCESS Enrollment (2010-2013)

Location	December, 2010			December, 2011			December, 2012			December, 2013		
	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled	Managed Care Eligibles	Managed Care Enrollment	% of Eligibles Enrolled
Pasquotank County	6,449	5,528	85.72	6,660	5,790	86.94	6,818	6,134	89.97	6,756	6,150	91.00
<i>Regional Average</i>	<i>3,013</i>	<i>2,495</i>	<i>80.10</i>	<i>3,057</i>	<i>2,605</i>	<i>82.96</i>	<i>3,078</i>	<i>2,755</i>	<i>87.57</i>	<i>3,030</i>	<i>2,742</i>	<i>88.64</i>
Scotland County	9,483	8,059	84.98	9,714	8,525	87.76	9,931	9,033	90.96	9,865	9,049	91.70
State of NC	1,362,207	1,130,474	82.99	1,427,273	1,236,638	86.64	1,475,108	1,335,393	90.53	1,473,219	1,355,483	92.00

Source: NC Division of Medical Assistance, Statistics and Reports, CCNA/CA: Medicaid Monthly Enrollment Reports. Years as Noted. <https://www2.ncdhs.gov/dma/ca/enroll/index.htm>

HEALTH CARE PROVIDERS

Practitioners

One way to judge the supply of health professionals in a jurisdiction is to calculate the ratio of the number of health care providers to the number of persons in the population of that jurisdiction. In NC, there is data on the ratio of active health professionals per 10,000 population calculated at the county level. The table below presents those data (which for simplicity's sake will be referred to simply as the "ratio") for Pasquotank County, Scotland County, the Albemarle Region, the state of NC and the US for five key categories of health care professionals: physicians, primary care physicians, registered nurses, dentists and pharmacists.

- 2012 ratios of active health professionals per 10,000 population were *higher* in Pasquotank County than in all the other jurisdictions for all categories of providers cited in the table except for the NC average for dentists.
- The 2012 Pasquotank County ratio for dentists (2.8) was lower than the state and national average, and had actually decreased over the period cited.

Table 74. Active Health Professionals per 10,000 Population (2010-2012)

Location	2010					2011					2012				
	MDs	Primary Care MDs	DDSs	RNs	Pharms	MDs	Primary Care MDs	DDS	RNs	Pharms	MDs	Primary Care MDs	DDS	RNs	Pharms
Pasquotank County	26.6	9.8	3.2	112.1	8.9	25.7	8.4	2.7	108.6	8.9	26.0	9.0	2.8	109.7	10.5
<i>Regional Average</i>	8.6	4.6	1.6	49.7	4.2	8.6	3.9	1.7	49.4	4.0	8.3	3.7	1.6	50.3	4.3
Scotland County	17.2	8.6	2.5	92.0	7.5	18.1	8.1	2.2	92.7	8.1	18.4	8.3	1.9	91.0	8.0
State of NC	21.7	9.4	4.4	97.3	9.2	22.1	7.8	4.4	98.6	9.5	22.3	7.6	4.5	99.6	10.1
United States	22.7 ²	8.2 ²	5.7 ³	92.0 ³	8.3 ³	22.7 ²	8.2 ²	5.7 ³	92.0 ³	8.3 ³	22.7	8.2	5.7	92.0	8.3

Abbreviations used: MDs (Physicians), RNs (Registered Nurses), DDSs (Dentists), Pharms (Pharmacists)

¹ Primary Care Physicians are those who report their primary specialty as family practice, general practice, internal medicine, pediatrics, or obstetrics/gynecology

² US ratio from US Census Bureau estimates. Comparison data is for date two years previous.

³ US ratio from Bureau of Labor Statistics. Comparison data matches.

Source for NC Data: Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System, North Carolina Health Professions Data Books, Table 14 (2010, 2011, 2012); <http://www.shepscenter.unc.edu/hp/publications.htm>.

Since the health professional ratio for dentists in Pasquotank County is relatively low to begin with, accessing dental care may be a tremendous problem for Medicaid enrollees. According to local information, there was one private dentist and one dental school (both in Elizabeth City) that accepted NC Medicaid or NC Health Choice (42).

The following table lists the number of active health professionals in Pasquotank County and the ARHS region, by specialty, for 2012:

- There were no general practitioners and only one podiatrist (the only one in the ARHS region) practicing in Pasquotank County at the time of the count.

Table 75. Number of Active Health Professionals, by Specialty (2012)

Category of Professionals	Pasquotank County	Regional Total
Physicians		
Primary Care Physicians	36	63
<i>Family Practice</i>	8	23
<i>General Practice</i>	0	0
<i>Internal Medicine</i>	11	19
<i>Obstetrics/Gynecology</i>	6	8
<i>Pediatrics</i>	11	13
Other Specialities	68	94
Dentists and Dental Hygienists		
Dentists	11	25
Dental Hygienists	11	32
Nurses		
Registered Nurses	438	835
<i>Nurse Practitioners</i>	13	29
<i>Certified Nurse Midwives</i>	3	3
Licensed Practical Nurses	148	299
Other Health Professionals		
Chiropractors	4	11
Occupational Therapists	6	20
Occupational Therapy Assistants	5	14
Optometrists	5	6
Pharmacists	42	72
Physical Therapists	23	37
Physical Therapy Assistants	22	40
Physician Assistants	20	36
Podiatrists	1	1
Practicing Psychologists	10	12
Psychological Assistants	2	8
Respiratory Therapists	23	32

¹ Numbers reported include those active within the profession and those newly licensed in 2009 with unknown activity status; inactives are excluded.

Source: Cecil G. Sheps Center for Health Services Research, North Carolina Health Professions Data System. Publications. 2012 North Carolina Health Professions Databook;

http://www.shepscenter.unc.edu/hp/publications/2012_HPDS_DataBook.pdf.

Hospitals

The next table lists the number of general hospital beds in the four jurisdictions being included in this report. There is only one hospital in Pasquotank County: Sentara Albemarle Medical Center, in Elizabeth City.

**Table 76. Number of General Hospital Beds¹
(2010-2015)**

Location	2010	2011	2012	2013	2014	2015
Pasquotank County	182	182	182	182	182	182
<i>Regional Average</i>	34	34	34	34	34	34
Scotland County	97	97	97	97	97	97
State of NC	20,699	20,649	20,757	20,799	20,919	21,370

¹ Defined as "general acute care beds" in hospitals; that is, beds which are designated for short-stay use. Excluded are beds in service for dedicated clinical research, substance abuse, psychiatry, rehabilitation, hospice, and long-term care. Also excluded are beds in all federal hospitals and state hospitals.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 524); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Sentara Albemarle Medical Center

Located in Elizabeth City, Sentara Albemarle Medical Center is a 182 licensed bed, full service facility offering a wide range of services, including: inpatient and critical care, a full array of surgical services, sophisticated diagnostic imaging technology, comprehensive women's care, cardiology, cancer treatment, rehabilitation services and more. Sentara Albemarle Medical Center has assembled a medical staff of more than 100 physicians, representing nearly 30 specialties, and a staff of almost 1,000 employees (43). The Medical Center's comprehensive list of services includes:

- **Emergency:** Sentara offers several options for emergency care, including hospital emergency departments and trauma centers along with free-standing emergency departments. Sentara also provides rapid transport of the critically ill or injured via our air ambulance, Nightingale Regional Air Ambulance, the first in the region.
- **Heart and Vascular:** The cardiac team provides the full spectrum of cardiac care including cardiac catheterization, cardiac imaging and diagnostic tests, and cardiac rehabilitation. Advanced heart services and heart surgery are offered nearby at Sentara Heart Hospital in Hampton Roads, which is nationally-ranked in heart care. In addition, Sentara Albemarle offers comprehensive diagnostic and treatment services for patients with diseases of the circulatory (vascular) system.
- **Imaging:** Sentara Albemarle Medical Center offers advanced diagnostic and imaging equipment and board certified radiologists who perform angiography, bone densitometry, breast imaging, CT scan, lung CT, magnetic resonance imaging (MRI), nuclear medicine, PET-CT scan, ultrasound, vascular imaging, and x-ray.
- **Maternity Services:** Sentara Albemarle offers board-certified physicians, comprehensive breastfeeding education and support with a certified lactation specialist, and pre-natal support groups
- **Orthopedics:** Orthopedic surgical services include: arthroscopy, foot and ankle surgery, hand and wrist surgery, shoulder surgery, knee surgery, elbow surgery, hip

surgery, fracture fixation, ligament reconstruction and knee, shoulder and hip joint replacement.

- **Surgery:** Surgical services include: ear, nose and throat surgery, general surgery, gynecological surgery, hand surgery, one-day or outpatient surgery, ophthalmology surgery, orthopedic surgery, plastic and cosmetic surgery, urology surgery, and vascular surgery.
- **Therapy:** Sentara offers comprehensive physical rehabilitation programs with physical, speech and occupational therapy and specialized services on an inpatient or outpatient basis. Services are delivered following a referral from a physician, and include a complete evaluation by the appropriate licensed professional. A treatment program will then be designed to meet individual needs.
- **Cancer Services:** Across the Sentara Cancer Network, highly-skilled physicians and specialists use advanced technology and treatment to better understand cancer, detect it earlier and treat the disease more effectively. And they do this in a collaborative environment, where specialists across different areas of expertise can come together to challenge each other and drive to ensure the delivery of quality, personalized care. Nurse navigators are available to guide patients, answer questions and provide support.
- **Mammography:** Sentara Albemarle Medical Center is recognized as a Breast Imaging Center of Excellence by the American College of Radiology (ACR). The hospital earned the ACR Gold Standard of Accreditation in digital mammography, and all breast imaging staff and equipment are certified under the ACR accreditation.

Other Hospitals

The next two tables list other hospitals from which Pasquotank County residents may seek services. The first of the following tables lists the eight hospitals in northeastern NC that may be accessed by Pasquotank County residents. Of these, only Vidant Medical Center in Greenville offers a Trauma Center (rated for Level I care).

Residents of Pasquotank County also may seek medical services in southeastern VA, primarily in the area referred to as the *Tidewater Region*. The second of the following tables lists hospitals in the cities in that region.

**Table 77. Licensed Hospitals in Northeastern NC
(February, 2016)**

Facility Name	Location	No. Beds	Operating Rooms
Bertie County			
Vidant Bertie Hospital	Windsor	General - 6	Shared inpatient/ambulatory surgery - 2
Chowan County			
Vidant Chowan Hospital	Edenton	General - 49	Shared inpatient/ambulatory surgery - 3
		Nursing Home - 40	Endoscopy - 1
Dare County			
The Outer Banks Hospital, Inc.	Nags Head	General - 21	C-section - 1
			Shared inpatient/ambulatory surgery - 2
			Endoscopy - 2
Hertford County			
Vidant Roanoke-Chowan Hospital	Ahoskie	General - 86	C-section - 1
		Psychiatric - 28	Shared inpatient/ambulatory surgery - 5
			Endoscopy - 1
Martin County			
Martin General Hospital	Williamston	General - 49	Shared inpatient/ambulatory surgery - 2
			Endoscopy - 1
Pasquotank County			
Albemarle Hospital	Elizabeth City	General - 182	C-section - 2
			Shared inpatient/ambulatory surgery - 8
			Endoscopy - 3
Pitt County			
Vidant Medical Center	Greenville	General - 782	C-section - 4
		Rehabilitation - 75	Shared inpatient/ambulatory surgery - 26
		Psychiatric - 52	Endoscopy - 2
			Other inpatient - 3
Washington County			
Washington County Hospital	Plymouth	General - 49	Shared inpatient/ambulatory surgery - 2

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Hospitals (by County); <http://www.ncdhhs.gov/dhsr/reports.htm>.

**Table 78. Hospitals in Southeastern Virginia
(February, 2013)**

Hospital	Location
Chesapeake General Hospital	Chesapeake
Hampton VA Medical Center	Hampton
Riverside Behavioral Health Center	Hampton
Sentara Careplex Hospital	Hampton
Mary Immaculate Hospital	Newport News
Riverside Memorial Medical Center	Newport News
Riverside Rehabilitation Institute	Newport News
Children's Hospital of the Kings Daughters	Norfolk
DePaul Medical Center	Norfolk
Lake Taylor Hospital	Norfolk
Sentara Heart Hospital	Norfolk
Sentara Leigh Hospital	Norfolk
Sentara Norfolk General Hospital	Norfolk
Tidewater Psychiatric Institute	Norfolk
Maryview Medical Center	Portsmouth
Naval Medical Center	Portsmouth
Sentara Obici Hospital	Suffolk
Sentara Bayside Hospital	Virginia Beach
Sentara Princess Anne Hospital	Virginia Beach
Sentara Virginia Beach General Hospital	Virginia Beach
Virginia Beach Psychiatric Center	Virginia Beach

Source: The Agape Center, Virginia Hospitals;
<http://www.theagapecenter.com/Hospitals/Virginia.htm>.

Hospital Utilization

The five hospitals partnering in the development of this CHA—Vidant Bertie Hospital (VBER), Vidant Chowan Hospital (VCHO), Vidant Roanoke-Chowan Hospital (VROA), The Outer Banks Hospital (TOBH) and Sentara Albemarle Medical Center (SAMC)—have made available extensive utilization data, some of which will be examined in conjunction with health statistics in a later section of this report. Detailed hospital utilization data is available in a county-specific Excel workbook available as a companion to this report.

Presented below are hospital utilization summaries for the population of Pasquotank County residents who (1) were patients in the emergency department, and (2) were hospitalized as inpatients at any of the five hospitals in 2013 and 2014. The data are stratified demographically by gender, age group and race/ethnicity; in addition, data also is categorized according to the primary payor groups associated with the utilization records.

By convention, the analyst included patient counts from a hospital only in cases where the total number of patients at that hospital over the two-year period cited exceeded a threshold of 20. For that reason, data from fewer than five hospitals are included in some tables.

Notes relevant for the discussion of each table appear *after* the table.

Emergency Department (ED) Utilization

The emergency departments (EDs) of hospitals have become providers of convenience, urgency, or last resort for many healthcare consumers, and an examination of ED utilization patterns can reveal much about the healthcare resource status of a community.

Table 79. ED Discharges by Gender and Age Group

Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Female	Male	< 18	18-64	≥ 65	
2013	16,053	10,532	5,420	17,871	3,294	26,585
2014	16,068	10,526	5,583	17,844	3,168	26,595
Total	32,121	21,058	11,003	35,715	6,462	53,180

- The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Bertie, Chowan, and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Females accounted for 60% of all ED discharges over the two-year period cited. Females compose 51% of the total Pasquotank County population
- Males accounted for 40% of all ED discharges over the same period. Males compose 49% of the total Pasquotank County population.
- Minors under the age of 18 (“pediatric” patients) accounted for 21% of all ED discharges over the two-year period cited. This age group composes a total of 22% of the total Pasquotank County population.
- Persons between the ages of 18 and 64 (“adult” patients) accounted for 67% of all ED discharges over the same period. This age group composes a total of 64% of the total Pasquotank County population.
- Persons age 65 and older (“geriatric” patients) accounted for 12% of all ED discharges over the same three-year period. This age group composes a total of 14% of the total Pasquotank County population.

Table 80. ED Discharges by Racial/Ethnic Group

Fiscal Year	Am Ind/ Alaskan	Asian	Black	Hispanic	Other	Unknown	White	Total No. Discharges
2013	13	60	13,630	529	127	45	12,181	26,585
2014	28	53	13,954	533	111	73	11,843	26,595
Total	41	113	27,584	1,062	238	118	24,024	53,180

- The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Bertie, Chowan, and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Blacks accounted for 52% of all ED discharges over the two-year period cited. Blacks compose 37% of the total Pasquotank County population
- Whites accounted for 45% of all ED discharges over the same period. Whites compose 58% of the total Pasquotank County population.
- Hispanics accounted for 2.0% of all ED discharges over the same period. Hispanics compose 4.4% of the total Pasquotank County population. (Keep in mind that in US Census terms, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals tend to consider Hispanic ethnicity to be a separate racial category.)

Table 81. ED Discharges by Payor Group

Fiscal Year	Comm	M-aid	M-aid Mgd Care	M-care	M-care Mgd Care	Self-Pay	Military	Other	Total No. Discharges
2013	3,955	1,114	6,660	4,475	1	7,417	1,767	1,196	26,585
2014	4,568	1,566	6,381	4,337	63	6,955	1,685	1,040	26,595
Total	8,523	2,680	13,041	8,812	64	14,372	3,452	2,236	53,180
Group as % of Total	16.0	5.0	24.5	16.6	0.1	27.0	6.5	4.2	100%

- The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Bertie, Chowan, and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Note that Sentara Albemarle Medical Center categorizes payor groups differently than do the Vidant Hospitals. For that reason, in order to allow direct comparisons payor groups have been compressed to Commercial, Medicaid, Medicaid Managed Care, Medicare, Medicare Managed Care, Self-Pay, Military, and the broad category “Other”. The category “Other” includes (but is not limited to) Medcost, other managed care payors, Workers Compensation, and other less frequent payors.
- The most common ED payor groups, in descending order, were:
 - Self-Pay (27.0%)
 - Medicaid Managed Care (24.5%)
 - Medicare (16.6%)
 - Commercial (16.0%)

Inpatient (IP) Hospital Utilization

Inpatient hospitalizations may be the result of illness, injury, or sometimes elective procedure.

Table 82. IP Discharges by Gender and Age Group

Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Female	Male	< 18	18-64	≥ 65	
2013	1,930	1,331	443	1,357	1,461	3,261
2014	2,007	1,334	438	1,508	1,395	3,341
Total	3,937	2,665	881	2,865	2,856	6,602

- The hospitals qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Females accounted for 60% of all IP discharges over the two-year period cited. Females compose 51% of the total Pasquotank County population
- Males accounted for 40% of all IP discharges over the same period. Males compose 49% of the total Pasquotank County population.
- Minors under the age of 18 (“pediatric” patients) accounted for 13% of all IP discharges over the two-year period cited. This age group composes a total of 22% of the total Pasquotank County population.
- Persons between the ages of 18 and 64 (“adult” patients) accounted for 43% of all IP discharges over the same period. This age group composes a total of 64% of the total Pasquotank County population.
- Persons age 65 and older (“geriatric” patients) accounted for 43% of all IP discharges over the same three-year period. This age group composes a total of 14% of the total Pasquotank County population. Note that the proportion of geriatric (≥65) IP discharges is a little over 3 times the proportion of persons ≥ 65 in the Pasquotank County population.

Table 83. IP Discharges by Racial/Ethnic Group

Fiscal Year	Am Ind/ Alaskan	Asian	Black	Hispanic	Other	Unknown	White	Total No. Discharges
2013	1	9	1,323	76	16	26	1,810	3,261
2014	1	8	1,417	44	19	20	1,832	3,341
Total	2	17	2,740	120	35	46	3,642	6,602

- The hospitals qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Blacks accounted for 42% of all IP discharges over the two-year period cited. Blacks compose 37% of the total Pasquotank County population
- Whites accounted for 55% of all IP discharges over the same period. Whites compose 58% of the total Pasquotank County population.
- Hispanics accounted for 1.8% of all IP discharges over the same period. Hispanics compose 4.4% of the total Pasquotank County population. (Keep in mind that in US Census terms, persons of Hispanic/Latino ethnicity may also be of any race. The hospitals tend to consider Hispanic ethnicity to be a separate racial category.)

Table 84. IP Discharges by Payor Group

Fiscal Year	Comm	M-aid	M-aid Mgd Care	M-care	M-care Mgd Care	Self-Pay	Military	Other	Total No. Discharges
2013	427	358	266	1,594	1	323	155	137	3,261
2014	459	447	244	1,557	33	290	184	127	3,341
Total	886	805	510	3,151	34	613	339	264	6,602
Group as % of Total	13.4	12.2	7.7	47.7	0.5	9.3	5.1	4.0	100%

- The hospitals qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.
- Note that Sentara Albemarle Medical Center categorizes payor groups differently than do the Vidant Hospitals. For that reason, in order to allow direct comparisons payor groups have been compressed to Commercial, Medicaid, Medicaid Managed Care, Medicare, Medicare Managed Care, Self-Pay, Military, and the broad category “Other”. The category “Other” includes (but is not limited to) Medcost, other managed care payors, Workers Compensation, and other less frequent payors.
- The most common IP payor groups, in descending order, were:
 - Medicare (47.7%)
 - Commercial (13.4%)
 - Medicaid (12.2%)
 - Self-Pay (9.3%)
 - Medicaid Managed Care (7.7%)

County Emergency Medical Services

Camden County partners with Pasquotank County to deliver EMS services, so the EMS data from the two counties is co-mingled. Below is a summary report of the reasons for Pasquotank-Camden EMS dispatches over the three fiscal year period from July 1, 2012 (beginning of FY2013) through June 30, 2015 (end of FY2015).

- Convalescent transport generated the largest percentage of all EMS dispatches in the period cited: almost 35%

Of the specified, medical reasons for EMS dispatch, the largest proportions were generated by:

- Sick persons (2,505 dispatches, or approximately 8% of the total dispatches)
- Falls (2,100 dispatches, or almost 7% of the total)
- Breathing problems (1,922 dispatches, or approximately 6% of the total)
- Motor vehicle accidents (1,630 dispatches, or approximately 5% of the total)
- Chest pain/discomfort (1,249 dispatches, or approximately 4% of the total)

**Table 85. Reasons for EMS Dispatch, Pasquotank-Camden EMS
FY2013 through FY2015**

Description	Count	Percent	Description	Count	Percent
No entry	239	0.76	Gunshot wound/Stabbing	45	0.14
Behavioral/Psychiatric	3	0.01	Headache	123	0.39
Cardiac rhythm disturbance	2	0.01	Heart problems	81	0.26
Pregnancy/OB delivery	78	0.25	Hemorrhage/Laceration	102	0.32
Head injury unspecified	3	0.01	Hemorrhage/Bleeding	316	1.01
Stings/venomous bites	1	0.00	Hemorrhage unspecified	1	0.00
Electrocution	3	0.01	Heat exhaustion	1	0.00
Abdominal pain/problems	681	2.17	Hypoglycemia	6	0.02
Alcohol abuse unspecified	3	0.01	Hypotension	7	0.02
Allergic reaction	133	0.42	Hypertension	7	0.02
Altered level of consciousness	21	0.07	Interfacility transport	1140	3.63
Altered mental status	9	0.03	Irregular heart rate	1	0.00
Anxiety	2	0.01	Laceration	2	0.01
Asthma	3	0.01	Lethargic	2	0.01
Assault	290	0.92	Mass causality incident	6	0.02
Animal bite	28	0.09	Motor vehicle accident	1630	5.19
Breathing problems	1922	6.12	Motor vehicle accident w. pedestrian	3	0.01
Burn unspecified	24	0.08	Nausea with vomiting	14	0.04
Cancer	1	0.00	Nosebleed	1	0.00
Cardiac arrest	214	0.68	Numbness/Tingling sensation	3	0.01
Carbon monoxide poisoning	1	0.00	Overdose	10	0.03
Care unspecified	27	0.09	Pain - back	328	1.04
Chest pain (other)	2	0.01	Pain - generalized	29	0.09
Choking	70	0.22	Panic attack	2	0.01
Chest pain/Discomfort	1249	3.98	Pain - neck	2	0.01
CH Resp Altered LOC	1	0.00	Pneumonia	1	0.00
Cold/Heat Exposure	18	0.06	Psychiatric problem	174	0.55
Complication unpecific device	2	0.01	Rash/Itching	3	0.01
Confusion	1	0.00	Respiratory distress	4	0.01
Constipation	1	0.00	Sickle-cell crisis	6	0.02
Doctor consultation	1	0.00	Seizure	689	2.19
Convalescence unspecified	3	0.01	Sick person	2505	7.98
Cough with hemorrhage	1	0.00	Smoke inhalation	1	0.00
CVA/Stroke	384	1.22	Shortness of breath	3	0.01
Death	3	0.01	Standby	879	2.80
Dehydration	1	0.00	Suicide unspecified	5	0.02
Delirium tremens	1	0.00	Suicidal ideation	4	0.01
Diabetic Problem/Symptoms	543	1.73	Syncope/Fainting	15	0.05
Diarrhea	2	0.01	Tachycardia	1	0.00
Difficulty breathing	12	0.04	Transport - convalescent	10879	34.65
Difficulty walking	1	0.00	Transport only	7	0.02
Dizziness	15	0.05	Trapped/Inaccessible incident	8	0.03
Drainage/Discharge	1	0.00	Trauma injury	390	1.24
Drowning Submersion	9	0.03	Trauma - blunt	1	0.00
Drug ingestion/Poisoning	177	0.56	Unconscious/Fainting	1005	3.20
Edema/Swelling	2	0.01	Unknown problem	1395	4.44
Emergency transport	1191	3.79	Unresponsive patient	11	0.04
Eye problem	30	0.10	Unspecified evaluation	3	0.01
Fall	2100	6.69	Vomiting blood	4	0.01
Fever	13	0.04	Vomiting alone	6	0.02
Fractured bone closed	2	0.01	Weakness - generalized	11	0.04
G-Tube problems	2	0.01	TOTAL	31398	100.00

Source: Personal communication Jerry Newell, EMT-P, Director, Pasquotank-Camden EMS to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, November 10, 2015

Public Health Department: Albemarle Regional Health Services

Albemarle Regional Health Services (ARHS) is a regional Public Health agency in rural, northeastern NC serving the seven counties of Bertie, Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans.

ARHS programs include children's developmental services, home care and hospice, adult day health, clinical services, immunizations, women, infants, and children, diabetes management, health promotion and health education, disaster planning and response, transportation, environmental health, and waste management. Specific services may vary from county-to-county within the service region.

Regionally, ARHS administers the Children's Developmental Service Agency (CDSA), the Albemarle Regional Solid Waste Management Authority, the Inter-County Public Transportation Authority (ICPTA), and the Perquimans-Chowan-Gates (PCG) Landfill and Convenience Sites (44).

Pasquotank County Health Department

The Pasquotank County Health Department is physically located in Elizabeth City. ARHS programs offered in Pasquotank County include:

AgriSafe of the Albemarle

AgriSafe is a program designed to make life on the farm safer and healthier by making healthcare more accessible for farmers, their families and workers. The program strives to provide health and safety resources to increase access to preventive services for farm families and the agricultural community. Services are provided on the farm, at agricultural events, and other locations convenient to farm families. Health screenings and farm health/safety information are currently provided at no cost. Screenings include respirator fit testing, blood pressure checks, blood sugar monitoring, pulmonary function testing (spirometry), and hearing and vision screenings.

Clinical Services

- **Child Health Services** - Primary child health services are provided in an effort to detect problems so that appropriate interventions can begin as early as possible. The focus of child health is the total well-being of the child; emotional, social, health, and environmental. Local agencies work as a team to ensure that an optimal level of care for the child is achieved. An additional program goal is to guarantee that Medicaid-eligible children receive all recommended child health services.
- **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. The goal is to have all children fully immunized by two years of age and then to receive recommended booster doses. Adult immunizations include the annual influenza and pneumonia campaign, in addition to all recommended adult immunizations.
- **WIC/Nutrition.** Women, Infants, and Children (WIC) is a nutrition education and food supplement program for children birth to five and women who are pregnant or breastfeeding. All clients must meet medical and financial eligibility requirements.

- **General Communicable Disease Control.** Surveillance of various communicable diseases including educational counseling for individuals is accomplished. Bioterrorism educational materials are available to communities related to preparedness. Presentations and overviews of potential biological, chemical, and nuclear agents can be given by the ARHS Team.
- **Sexually Transmitted Diseases.** STD and HIV diagnosis, treatment, and counseling is available. An appointment may be required. There are no fees associated with STD services.
- **Women's Preventive Health.** 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.** Primary Prenatal Health Care services are provided in an effort to reduce infant mortality and ensure that all pregnant women receive the highest level of health care. The health department maintains a close working relationship with the area's private physicians and local hospitals for the provision of deliveries, emergency and specialized care. High Risk Perinatal Clinic was established to improve the pregnancy outcomes of women with pregnancy complications. In addition to comprehensive health care, patients receive nutrition education, medical social work intervention, and childbirth preparation and parenting education. Case management services are also offered and are an integral component of the maternal patient's health care services to ensure that all health, social, mental, and environmental needs are met.
- **Adult Health.** 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. The Breast and Cervical Cancer Control Program (BCCCP) provides access to screening services for financially and medically eligible women.
- **Diabetes Care Program.** Due to the prevalence of diabetes within the region, ARHS provides a comprehensive Diabetes Care Center for individuals living with diabetes and their families. Individualized counseling, follow-up, nutrition education, and disease management are integral components.

Women, Infants, and Children (WIC)

WIC is a federal program designed to provide food to low-income pregnant, postpartum and breastfeeding women, infants and children until the age of five. The program provides a combination of nutrition education, supplemental foods, breastfeeding promotion and support, and referrals for health care. WIC has proven effective in preventing and improving nutrition related health problems within its population.

Albemarle Regional Diabetes Care

Dedicated to providing education and support to individuals living with diabetes, the Albemarle Regional Diabetes Care Program works to counsel patients on blood sugar monitoring, physical activity, and proper nutrition. This program incorporates a team approach to diabetes care, working collaboratively with regional referring physicians and medical providers and focusing on medical care, education, and health promotion. The Albemarle Regional Diabetes Care Program is recognized by the American Diabetes Association for Quality Self-Management Education.

Health Education and Promotion

- **Health Education.** The Health Education Team begins with the assessment and identification of community health issues and problems. While identifying diseases as significant health problems that cause disability, mortality, premature death, and morbidity. Health Education Specialists utilize tools and expertise to analyze demographics and socioeconomic status data of the individual client within the community.
- **Healthy Communities.** Health promotion programming increases opportunities for healthy eating and physical activity opportunities in the schools, worksites, and communities. The environmental and policy changes promote a healthy lifestyle for all community members in the region and works to make it easier for people to eat healthy food and be physically active.

Environmental Health

ARHS Environmental Health ensures the health and safety of residents while reducing the threat of the spread of communicable diseases through evaluation and education of environmental health policies and regulations. EH activities include:

- Private Drinking Well Inspections
- Swimming Pool Inspections
- Communicable Disease Investigations
- Food & Lodging Inspections
- Management Entity
- Lead Investigations
- On-Site Wastewater

Preparedness and Response

The ARHS Public Health Preparedness and Response (PHP&R) program works with the communities in the region and local emergency management partners and response agencies to keep everyone safe and prepared for any disaster, but especially the hurricanes that frequent the region.

Inter-County Public Transportation Authority

The intent of ICPTA is 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. ICPTA services are intended to transport 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.

Children's Developmental Service Agency

The catchment area for this program includes 10 counties in the northeastern corner of the state. Program personnel are physically housed in the counties of Dare, Hertford, Washington and Pasquotank. The CDSA serves children age birth to three years of age suspected of having developmental delays, and their families. Evaluations for the purpose of determining eligibility and planning, assurance of quality service provision and case management services are provided in partnerships with parents and community providers.

Health Department Utilization Data

ARHS has provided data on the utilization of agency services at the county level. The following table summarizes the number of unduplicated patients and total visits at the Pasquotank County Health Department, by program area.

- The programs seeing the largest number of patients at the Pasquotank County Health Department in Elizabeth City over the three years cited were, in descending order, adult health, child health, and family planning.

Table 86. Pasquotank County Health Department Service Utilization, by Program (FY2013-FY2015)

Program	Unduplicated Patient Count							
	FY2013		FY2014		FY2015		Total	
	Patients	Visits	Patients	Visits	Patients	Visits	Patients	Visits
Adult Health	2,159	3,274	1,732	2,379	1,237	2,178	5,128	7,831
Child Health	866	2,054	851	1,846	1,041	2,223	2,758	6,123
Communicable Disease	0	0	0	0	2	2	2	2
Dental Health	0	0	0	0	0	0	0	0
Family Planning	939	2,044	941	1,893	957	2,001	2,837	5,938
Health Check Child Health Physicals	797	1,012	693	945	858	1,240	2,348	3,197
High Risk	0	0	0	0	144	398	144	398
Immunization	842	986	595	664	1,899	2,130	3,336	3,780
Maternal Health	289	1,756	294	1,666	321	1,788	904	5,210
Other Services	564	904	516	846	260	273	1,340	2,023
STD	663	1,039	379	497	393	555	1,435	2,091
Tuberculosis	64	113	33	41	68	214	165	368
TOTAL	7,183	13,182	6,034	10,777	7,180	13,002	20,397	36,961

Source: Albemarle Regional Health Services

Federally-Qualified Health Centers

The Federally-Qualified Health Center (FQHC) benefit under Medicare was added effective October 1, 1991, when the Social Security Act was amended to qualify “safety net” providers such as community health centers, public housing centers, outpatient health programs funded by the Indian Health Service, and programs serving migrants and the homeless to receive enhanced reimbursement from Medicare and Medicaid, as well as other benefits.

The main purpose of the FQHC Program is to enhance the provision of primary care services in underserved urban and rural communities. FQHCs must serve an underserved area or population, offer a sliding fee scale, provide comprehensive services, have an ongoing quality assurance program, and have a governing board of directors. Certain tribal organizations and FQHC Look-Alikes (an organization that meets PHS Section 330 eligibility requirements, but does not receive grant funding) also may receive special Medicare and Medicaid reimbursement (45).

As of November 28, 2016 the US Health Resources and Services Administration (HRSA) lists two FQHC facilities within 25 miles of Elizabeth City (46):

- Gateway Community Health Centers, Inc. (located in Elizabeth City, Pasquotank County; and Tyner, Chowan County)

School Health

School nurses facilitate health services such as immunizations, follow-up, communicable disease control, vision and hearing screening and follow-up, health assessments and referrals, health counseling and information for students and families. School nurses actively collaborate with school personnel, students and parents to create health plans and to administer medication. In addition, they provide prevention, crisis, and conflict resolution.

Student-to-School Nurse Ratio

The table below presents student to school nurse ratios for the four jurisdictions being compared.

- The average student-to-school nurse ratio in Pasquotank County for the most recent-period cited was 949:1, significantly above the recommended maximum of 750:1. At the time of this report, the Elizabeth City-Pasquotank County Public Schools employed seven full-time school nurses.

**Table 87. Student to School Nurse Ratio
(SY2009-10 through SY2012-13)**

Location	Student to School Nurse Ratio			
	SY2009-2010	SY2010-2011	SY2011-2012	SY2012-2013
Pasquotank County	987	981	981	949
<i>Regional Average</i>	713	712	712	652
Scotland County	484	473	473	550
<i>State of NC</i>	1,185	1,201	1,179	1,177

Source - NC DHHS, DPH, Women's and Children's Health, Facts & Figures, Data Reports & Publications. Annual School Health Services Reports, End-of-Year-Reports, years as listed.
<http://www.ncdhhs.gov/dph/wch/stats/>.

School Nurse Reports

The table on the following page offers excerpts from the SY2014-2015 End-of-Year School Health Nursing Survey and Program Summary for Elizabeth City-Pasquotank County Schools.

- The health conditions identified most frequently among Pasquotank County students included asthma, ADD/ADHD, and allergies.

Table 88. School Nurse Activities, Elizabeth City-Pasquotank County Schools (SY2014-2015)

Nature of Activity	Services Provided/ Students Served	Nature of Activity	Services Provided/ Students Served
Health Counseling - Individual Session		Identified Health Conditions among Students	
ADD/ADHD	19	ADD/ADHD	336
Asthma	113	Allergies (severe)	213
Child abuse/neglect	8	Asthma	2,170
Chronic illness not otherwise listed	18	Autistic disorders, including Asperger's Syndrome	72
Depression (situational or chronic)	5	Blood disorders not listed elsewhere	2
Diabetes	19	Cancer	1
Hygiene	38	Cardiac condition	18
Illness/Injury Recovery	41	Cerebral palsy	12
Mental health issues not otherwise listed	0	Chromosomal/genetic conditions not otherwise listed	26
Nutrition	12	Chronic encopresis	3
Pregnancy	2	Concussion	6
Puberty, reproductive health	8	Chronic infectious diseases(including Toxoplasmosis, etc.)	1
Seizure disorders	5	Cystic fibrosis	3
Severe allergies	23	Diabetes Type I	9
Substance abuse (including tobacco, prescription drugs, etc.)	0	Diabetes Type II	7
Suicidal ideation	1	Eating disorders (including anorexia, bulimia)	1
Violence/bullying	27	Emotional/behavioral/psychiatric disorder not otherwise listed	31
Student Medications		Fetal alcohol syndrome	2
Students on long-term medications	98	Gastrointestinal disorders (Crohn's, celiac disease, IBS, etc.)	28
Students on short-term medications	19	Hearing loss	7
Students on PRN (non-emergency) medications	107	Hydrocephalus	1
Students on emergency medications	1,001	Hypo/hyperthyroidism	3
Health Care Procedures Administered		Migraine headache	49
Blood glucose monitoring	12	Obesity >95%ile BMI	23
Clean intermittent catheterization	3	Orthopedic disability (permanent)	3
Dressing/Wound care	2	Other neuromuscular condition not otherwise listed	3
Insulin injection	8	Renal/adrenal/kidney conditions including Addison's disease	14
Insulin pump	2	Rheumatological conditions (including Lupus, JRA)	5
Nebulizer treatment	27	Seizure disorder/epilepsy	30
Tube feeding	3	Sickle cell anemia	8
Reinsertion of feeding tube	3	Sickle cell trait (only)	16
		Spina bifida	2
		Traumatic brain injury	2
		Visually impaired (uncorrectable)	7

Source: 2014-15 End of Year School Health Report, Section 2; personal communication from Tammy W. Sawyer, Community Schools Director, Elizabeth City-Pasquotank Public Schools. Personal communication to Dana Hamill, Public Health Educator, Albemarle Regional Health Services, October 30, 2015.

Long-Term Care Facilities

The NC Division of Aging and Adult Services is the state agency responsible for planning, monitoring and regulating services, benefits and protections to support older adults, persons with disabilities, and their families. Among the facilities under the agency's regulatory jurisdiction are nursing homes, family care homes, and adult care homes. Each category of long-term care is discussed subsequently, but the following table lists all the county facilities by name.

- There was a total of 544 long-term beds in Pasquotank County as of February, 2016. Using the 2014 US Census estimate of the population age 65 and older (6,157) the ratio of long term care beds to the population age 65 and older was 1:11.

**Table 89. NC-Licensed Long-Term Care Facilities in Pasquotank County
(February, 2016)**

Facility Type/Name	Location	# Beds SNF (ACH) ¹	Star Rating (If applicable)
Adult Care Homes/Homes for the Aged			
Brookdale Elizabeth City	Elizabeth City	76	4
Heritage Care of Elizabeth City	Elizabeth City	60	4
Waterbrooke of Elizabeth City	Elizabeth City	130	3
Family Care Homes			
House of Love	Elizabeth City	6	3
Lily's Blessings Family Care Home	Elizabeth City	6	3
Nursing Homes/Homes for the Aged			
Elizabeth City Heath and Rehabilitation	Elizabeth City	146 (0)	n/a
Kindred Transitional Care and Rehab - Elizabeth City	Elizabeth City	120 (0)	n/a

¹ – SNF (ACH) = Maximum number of nursing or adult care home beds for which the facility is licensed.

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Adult Care Homes, Family Care Homes, Nursing Facilities (by County); <http://www.ncdhhs.gov/dhsr/reports.htm>.

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 state law by the NC Division of Health Service Regulation Licensure Section (47).

The table below presents the number of nursing facility beds in the jurisdictions being compared. Note that the local figures have not changed significantly in eleven years.

- At the time this report was prepared, there were two nursing homes in Pasquotank County offering a total of 266 beds: Elizabeth City Health and Rehabilitation (146 beds) and Kindred Transitional Care and Rehab (120 beds), both in Elizabeth City.

**Table 90. Number of Nursing Facility Beds
(2005-2015)**

Location	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Pasquotank County	266	266	266	266	266	266	266	266	266	266	254
<i>Regional Average</i>	118	118	118	118	118	118	118	112	112	112	111
Scotland County	207	207	207	207	207	207	207	157	157	157	207
State of NC	43,987	44,248	44,210	44,234	44,315	45,143	45,382	43,470	43,606	43,955	43,857

Note: This count includes beds licensed as nursing facility beds, meaning those offering a level of care less than that offered in an acute care hospital, but providing licensed nursing coverage 24 hours a day, seven days a week.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 513);

http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

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. Medication may be given by designated, trained staff. These homes vary in size from *family care homes* of two to six residents to *adult care homes* of more than 100 residents. These homes were previously called "domiciliary homes," or "rest homes." The smaller homes, with two to six residents, are still referred to as family care homes. In addition, there are Group Homes for Developmentally Disabled Adults, which are licensed to house two to nine developmentally disabled adult residents (48).

Adult care homes are different from nursing homes in the level of care and qualifications of staff. They are licensed by the state Division of Health Service Regulation (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.

- As cited previously, at the time this report was prepared there were three state-licensed adult care homes in Pasquotank County, all of them located in Elizabeth City: Brookdale Elizabeth City (76 beds), Heritage Care of Elizabeth City (60 beds), and Waterbrooke of Elizabeth City (130 beds).
- In addition, there were two state-licensed family care homes in Pasquotank County, offering a total of 12 beds.

In January, 2009, NC Division of Health Services Regulation introduced a "Star Rated Certificate" program to provide consumers with more information about the quality of care offered by the state's adult care homes and family care homes. The Star Rated Certificate program is based on an inspections-related point scale, and ratings range from zero to four stars (49).

- As cited previously, of the three adult care homes in Pasquotank County, two were rated four stars and the other was rated 3 stars.
- Both of the family care homes in Pasquotank County were rated three stars.

Alternatives to Institutional Care

An alternative to institutional care preferred by many disabled and senior citizens is to remain at home and use community in-home health and/or home aide services. The table below lists the home care, home health, and hospice providers in the ARHS region, including Pasquotank County. Note that there may be additional providers that refer to themselves as "home health service (or care) providers"; the table below lists only those licensed by the state.

Table 91. NC-Licensed Home Care, Home Health and Hospice Service Providers in the ARHS Region (As of December, 2016)

Facility Name	County	City	Licensed for	Accredited
Albemarle Home Care and Hospice	Bertie	Windsor	Home Care, Home Health	yes
Definitive Touch Home Care	Bertie	Aulander	Home Care	no
Home Life Care Inc	Bertie	Windsor	Home Care	no
Positive Step Home Care Agency	Bertie	Windsor	Home Care	no
Quality Home Staffing, Inc	Bertie	Windsor	Home Care	no
Sure Care Health Services	Bertie	Kelford	Home Care	no
Vidant Home Health and Hospice	Bertie	Windsor	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Camden	Camden	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Chowan	Edenton	Home Care, Home Health	yes
Continuum Home Care of Edenton	Chowan	Edenton	Home Care	no
Continuum Home Care and Hospice of Edenton	Chowan	Edenton	Hospice facilities	no
Health Care Options	Chowan	Edenton	Home Care	no
Home Life Care Inc	Chowan	Edenton	Home Care	no
Albemarle Home Care and Hospice	Currituck	Poplar Branch	Home Care, Home Health	yes
Outer Banks Home Care	Currituck	Harbinger	Home Care	no
Hertford-Gates Home Health Agency	Gates	Gatesville	Home Care, Home Health	no
Albemarle Home Care and Hospice	Pasquotank	Elizabeth City	Home Care, Home Health, Hospice facilities	yes
Carolina East Home Care Agency	Pasquotank	Elizabeth City	Home Care	no
Coastal Rehabilitation, Inc	Pasquotank	Elizabeth City	Home Care	no
Community Home Care and Hospice	Pasquotank	Elizabeth City	Hospice facilities	yes
East Carolina Home Care Inc	Pasquotank	Elizabeth City	Home Care	no
Home Life Care Inc	Pasquotank	Elizabeth City	Home Care	no
Lincare, Inc	Pasquotank	Elizabeth City	Home Care	no
Quality Home Staffing, Inc	Pasquotank	Elizabeth City	Home Care	no
ResCare HomeCare	Pasquotank	Elizabeth City	Home Care	no
Sentara Home Care Services	Pasquotank	Elizabeth City	Home Care, Home Health	yes
Albemarle Home Care and Hospice	Perquimans	Hertford	Home Care, Home Health	yes

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Home Care, Home Health and Hospice listings (by County); <http://www.ncdhhs.gov/dhsr/reports.htm>.

Adult Day Care/Adult Day Health Centers

Adult day care provides an organized program of services during the day in a community group setting for the purpose of supporting the personal independence of older adults and promoting their social, physical and emotional well-being. Also included in the service, when supported by funding from the Division of Aging and Adult Services (NCDAAS), are no-cost medical examinations required for admission to the program. Nutritional meals and snacks, as appropriate, are also expected. Providers of adult day care must meet State Standards for Certification, which are administrative rules set by the state Social Services Commission. These standards are enforced by the office of the Adult Day Care Consultant within the NCDAAS. Routine monitoring of compliance is performed by Adult Day Care Coordinators located at county departments of social services. Costs to consumers vary, and there is limited funding for adult day care from state and federal sources (50).

Adult day health services are similar programs to adult day care programs in that they provide an organized program of services during the day in a community group setting to support the personal independence of older adults and promote their social, physical, and emotional well-being. In addition, providers of adult day health services, as the name implies, offer health care services to meet the needs of individual participants. Programs must also offer referral to and assistance in using other community resources, and transportation to and from the program may be provided or arranged when needed and not otherwise available. Also included in the service, when supported by funding from the NCDAAS, are medical examinations required for

individual participants for admission to day health care services and thereafter when not otherwise available without cost. Food and services to provide a nutritional meal and snacks as appropriate are expected as well (51).

The NCDAAS listed only one adult day care/adult day health centers for Pasquotank County at the time this report was developed: *DayBreak Adult Day Health Center*. This facility, a program of Albemarle Home Care, provides care and support for adults who, due to frailty or physical disability, require assistance during the day. Daybreak provides a range of activities designed to promote social, physical, and emotional well-being. The agency's facility is located in Elizabeth City (52).

Mental Health Services and Facilities

Local LME/MCO

The unit of NC government responsible for overseeing mental health services is the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS). In NC, the mental health system is built on a system of governmental Local Management Entities/Managed Care Organizations (LME/MCOs). LME/MCOs are responsible for managing, coordinating, facilitating and monitoring the provision of mental health, developmental disabilities and substance abuse services in the catchment area served. LME/MCO responsibilities also include offering consumers 24/7/365 access to services, developing and overseeing providers, and handling consumer complaints and grievances.

At the time this report was prepared, the LME/MCO for Pasquotank County was Trillium Health Resources (THR). THR serves a total of 24 counties in eastern NC, including all seven counties served by ARHS (53). THR's responsibility is to connect individuals and families to the help they need when they need it. It also is responsible for managing state and federally funded services for people who receive Medicaid, are uninsured or cannot afford services.

Trillium does not provide direct care. Instead, partnering with agencies and licensed therapists in its Provider Network to offer services and supports to people in need in or near their own communities. It also works collaboratively with local non-profits, other governmental agencies, medical providers, and hospitals to create a holistic system of total patient care that recognizes all needs of an individual (54).

Services offered include: diagnostic assessment, outpatient therapy, multi-systemic therapy, psychosocial rehabilitation, developmental therapy, intensive in-home services, medication management, substance abuse residential care, day treatment, community respite, group living, supportive living, supportive employment, substance abuse treatment (outpatient and residential), day activity and vocational program for the developmentally disabled, personal assistance, and targeted case management.

THR provides an on-line "Find a Provider" tool on its website (<http://www.trilliumhealthresources.org/en/For-Providers/Provider-Directory/>) that consumers can use to find agencies and group practices, hospitals or licensed independent practitioners who contract with this LME/MCO. The THR Network Provider Directory is updated on a regular basis. THR can also assist clients with services and supports through direct contact with the Trillium Health Resources Call Center at 1-877-685-2415. Since it is subject to change, the list of Pasquotank County mental health providers in the THR network is not presented in this document.

In-County Mental Health Facilities

There is a list of NC-licensed mental health facilities (not providers) physically located in Pasquotank County, as shown in the following table. Services provided by these facilities include mainly:

- Supervised living for day activities for developmentally disabled adults
- Substance abuse day treatment
- Residential or day-only mental health treatment

Table 92. NC-Licensed Mental Health Facilities (G.S. 122C) in Pasquotank County (February, 2016)

Operator/Name of Facility	Location	Category	Capacity
ABHS, Inc 1331 Four Forks Road	Elizabeth City	Supervised living, developmentally disabled adult	3
Benjamin House	Elizabeth City	Supervised living, developmentally disabled adult	12
Church Street	Elizabeth City	Residential Treatment Level III	5
Emerald Lake Solid Foundations Facilities Inc.	Elizabeth City	Supervised living, developmentally disabled adult	3
Fort Bragg (Monarch)	Elizabeth City	Supervised living, developmentally disabled adult	3
One Care Behavioral Treatment Center (North Road Street facility)	Elizabeth City	Day Treatment	n/a
		Substance Abuse Intensive Outpatient Program	n/a
One Care Behavioral Treatment Center (Hastings Lane facility)	Elizabeth City	Psychosocial rehabilitation; Day Treatment	n/a
		Substance Abuse Intensive Outpatient Program	n/a
		Substance Abuse Comprehensive Outpatient Treatment	n/a
One Care Behavioral Treatment Center (East Main Street facility)	Elizabeth City	Day Treatment	n/a
PORT Human Services	Elizabeth City	Substance Abuse Intensive Outpatient Program; SA Comprehensive Outpatient Treatment	n/a
River City Advancement Center - Pasquotank (Monarch)	Elizabeth City	Day Activity	n/a
Rosewood Court	Elizabeth City	Supervised living, developmentally disabled adult	3
The Scott House	Elizabeth City	Supervised living, developmentally disabled adult	5

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Mental Health Facilities (G.S. 122C) (by County); <http://www.ncdhhs.gov/dhsr/reports.htm>.

Accessing mental health services is sometimes a significant problem for patients whose medical insurance is provided by Medicaid or NC Health Choice. To help them, the NC Division of Medical Assistance maintains a list of mental health *providers* who accept patients with Medicaid or NC Health Choice. A recent listing for Pasquotank County is presented in the table below.

- At the time this list was assembled, there were 51 such providers in Pasquotank County, practicing in Elizabeth City.

**Table 93. Mental Health Providers Accepting Medicaid or NC Health Choice Patients,
Pasquotank County
(September 2015)**

Provider Name	Provider Type	Specialty	Location
Kathleen Addison	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Albemarle Behavioral Medicine	Physician Group	Psychiatry	Elizabeth City
Albemarle Mental Health Center	Mental Health Center	Area Mental Health Program	Elizabeth City
Albemarle Psych Innovations	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Albemarle Psychosocial Services	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Roger D. Allen	Individual Provider	Licensed Psychologist	Elizabeth City
Audacity of Hope, Inc.	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Baxter Street	Residential Child Care Facility	Psychiatric Facility	Elizabeth City
William C. Bowens	Individual Physician	Psychiatry	Elizabeth City
Athena Chasteen	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Christian Medical Center	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Church Street	Residential Child Care Facility	Psychiatric Facility	Elizabeth City
CNC Access Inc	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
CNC Access Inc. Rescare	Physician Group	Psychiatry	Elizabeth City
Anna L. Coker	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Lisa B. Creef	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Carol A. Davis	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
James A. Drury	Individual Physician	Psychiatry	Elizabeth City
Family Advantage LLC	Community Support Intervention Service Agencies	Psychosocial Rehabilitation	Elizabeth City
Lindsey W. Harfst	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Desra M. Hohlbein	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Hilary K. Hunsberger	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Integrated Family Services	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Kids First Inc Child Advocacy	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
David W. Kleinschuster	Individual Provider	Licensed Psychologist	Elizabeth City
James E. Kronlage	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Anna G. Labarbera	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Learning Palace	Residential Child Care Facility	Psychiatric Facility	Elizabeth City
Ida Leary Rodgers	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Suzanne MacMorris	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
William O. Mann	Individual Physician	Psychiatry	Elizabeth City
Richard A. McClintock	Individual Provider	Licensed Psychologist	Elizabeth City
Catherine A. McGrogan	Individual Provider	Licensed Psychologist	Elizabeth City
Loretta W. Meads	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Angela S. Osmon	Individual Provider	Certified Clinical Supervisor (CCS)/Addiction	Elizabeth City
Pathways Counseling Center	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
David J. Perdue	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Port Human Services	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Port Human Services	Community Support Intervention Service Agencies	Psychosocial Rehabilitation	Elizabeth City
Positive Future LLC	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Pride in North Carolina Inc	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Patricia Reading	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Dorothy J. Rosenke	Individual Provider	Licensed Psychologist	Elizabeth City
Barbara Sawyer	Individual Physician	Psychiatry	Elizabeth City
Jean D. Scott	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Starz	Group Provider	Mental Health Multi-Speciality Group	Elizabeth City
Cheryl L. Tate	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Elizabeth M. Thomas	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Alfred H. Thompson	Individual Physician	Psychiatry	Elizabeth City
Susan Wickett	Individual Provider	Licensed Clinical Social Worker	Elizabeth City
Holly Wilson	Individual Provider	Licensed Clinical Social Worker	Elizabeth City

Source: NC Division of Medical Assistance, Medicaid, Find a Doctor, NC Mental Health Providers;
<http://dma.ncdhhs.gov/find-a-doctor/mental-health-providers>.

Other Healthcare Resources

The following table lists other healthcare facilities in the Albemarle Region that are licensed by the state of NC.

- As of February, 2016 there were no NC-licensed ambulatory surgical facilities or nursing pools in the Albemarle Region.
- There were two NC-licensed cardiac rehabilitation facilities in the region: the Cardiopulmonary Rehabilitation Program at Sentara Albemarle Medical Center in Elizabeth City, and HealthSteps in Edenton.

Table 94. Other NC Licensed Healthcare Facilities in the Albemarle Region (As of February, 2016)

Type and Name of Facility	County	Location
Licensed Ambulatory Surgical Facilities		
None		
Licensed Cardiac Rehabilitation Facilities		
Sentara Albemarle Medical Center	Pasquotank	Elizabeth City
HealthSteps (East Carolina Health - Chowan Inc)	Chowan	Edenton
Licensed Nursing Pools		
None		

Source - NC Department of Health and Human Services, Division of Health Services Regulation (DHSR), Licensed Facilities, Hospitals (by County); <http://www.ncdhhs.gov/dhsr/reports.htm>.

Dialysis Centers

The table below lists dialysis centers in the Albemarle Region, one of which was physically located in Pasquotank County, in Elizabeth City.

Table 95. Dialysis Centers in the Albemarle Region (2012)

Name of Facility	County	Location	Features
BMA of Windsor	Bertie	Windsor	20 hemodialysis stations, no evening hours
Edenton Dialysis	Chowan	Edenton	17 hemodialysis stations; no evening hours
Elizabeth City Dialysis	Pasquotank	Elizabeth City	24 hemodialysis stations; no evening hours

Source: Dialysis Facility Compare, <http://www.Medicare.gov/Dialysis/Include/DataSection/Questions>.

Urgent Care Centers

Internet searches identify two urgent care centers in Elizabeth City, NC: NextCare Urgent Care Center and PlushCare Urgent Care (55). Pasquotank County residents with urgent (and evening, weekend and holiday) health issues might also report to Sentara Albemarle Medical Center or another nearby hospital.

Recreational Facilities

The table below lists some of the public parks and recreational centers in Pasquotank County.

Table 96. Public Parks and Recreational Facilities in Pasquotank County

Category/Name	Location	Facilities/Programs
Knobbs Creek Recreation Center	Elizabeth City	Indoor facility; basketball, volleyball, bridge, group fitness classes, art classes, table tennis; meeting spaces for rent; location of the Pasquotank-Camden Senior Center
Causeway Park	Elizabeth City	Boardwalk through wetlands along Pasquotank River; landings, piers
Chalk Street Tot Lot	Elizabeth City	Designed for small children; playground equipment, benches
Charles Creek Park	Elizabeth City	Along waterfront; fishing, outdoor games, boating, volleyball, picnicking
College of the Albemarle Canoe Launch	Elizabeth City	Canoe launch
Coast Guard Park	Elizabeth City	Will be developed into a waterside park with boat rentals, gazebo, boardwalk, fishing pier, boat docks
Dog Corner Park	Elizabeth City	Open space park; boat ramp, beach volleyball courts; available for rent
Edgewood Play Lot	Elizabeth City	Designed for small children; playground equipment, benches; picnic tables
Elizabeth Street Triangle Park	Elizabeth City	Playground equipment; open area for games
Elizabeth Street Tennis Courts	Elizabeth City	Four lighted, asphalt courts; open play area adjacent; open all year
Enfield Recreation Area	Elizabeth City	Two lighted tennis courts, lighted basketball courts, 5 lighted ball fields (3 lighted); ball fields may be rented
Fun Junction	Elizabeth City	ponds with catch-and-release fishing, boat access, playground, disc golf course, skatepark, basketball court, volleyball net, driving range, covered pavilions
George Wood Park	Elizabeth City	Three boardwalks; pier; 2 gazebos
Goat Island Camping Platforms	Elizabeth City	Two camping platforms
Gosnold Park	Elizabeth City	Playground equipment, softball field, basketball court; wooded
Holmes Field	Elizabeth City	Irrigated and lighted baseball field
Jenette Property	Elizabeth City	will be developed into a boat launch for Knobbs Creek/Pasquotank River
Knobbs Creek Park	Elizabeth City	Nine-hole par-three golf course; picnic and fitness areas; horseshoe pits; children's play area
Mariner's Wharf	Elizabeth City	Public boat slips; brick walks; picnic tables
Moth Boat Park	Elizabeth City	Along Pasquotank River; park benches
Northeastern Park	Elizabeth City	Six lighted tennis courts, two lighted regulation soccer fields, one unlighted youth soccer field, one lighted baseball field, one lighted softball field, two sand volleyball courts; fitness track with exercise stations; playground; regulation track for running or walking; concession stand; bathroom facilities
Northside Road Camping Platforms	Elizabeth City	Two camping platforms
Pasquotank-Perquimans County Line Boat Ramp	Elizabeth City	Canoe ramp
Police Athletic League football field	Elizabeth City	formerly Memorial Field, youth sized football field with lighting
Pool Street Park	Elizabeth City	Fountain, benches; trees and flowers
River Road Athletic Complex	Elizabeth City	Five lighted soccer fields, two of which are suitable for youth football; playground, picnic shelter, walking trail
Sawmill Park	Elizabeth City	Public boat ramp and boardwalk
Southern and Dawson Play Lot	Elizabeth City	Lighted asphalt basketball court, playground equipment, fishing pier, picnic area
South Park Sports Complex	Elizabeth City	Five lighted softball/baseball fields; playground, pavilion, batting cages, golf driving range; concession stand, restrooms, conference room
Veteran's Park	Elizabeth City	small park to be developed into a memorial honoring veterans
Walnut Park	Elizabeth City	neighborhood park with equipment for younger children
Walking Trails	County-wide	There are over 130 neighborhood walking trails throughout the county; the county Parks and Recreation lists the length of each trail on its website.
Waterfront Park	Elizabeth City	Along the Pasquotank River; two boat ramps, picnic tables, park benches, pavilion, boardwalk, pier

Source: The City of Elizabeth City, NC; Site Index, The Parks and Recreation Department;

http://www.cityofec.com/index.asp?SEC=9A0A06B6-91C1-43C8-B01C-C0494E945138&Type=B_BASIC.

Source: Pasquotank County, NC, Departments, Parks and Recreation, Neighborhood Walking Mileage;

<http://www.co.pasquotank.nc.us/Departments/park/walkingtrails.cfm>.

For a broader listing of community resources, including health resources, please consult the Appendix to this report.

CHAPTER FOUR: HEALTH STATISTICS

METHODOLOGY

Routinely collected mortality and morbidity surveillance data and behavior survey data can be used to describe—and compare—the health status of communities. Briefly speaking, mortality refers to death; morbidity refers to illness or disability among the living. 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 designed to track morbidity, 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 number of cases, and mortality statistics are dependent on the primary cause of death listed on death certificates without consideration of co-occurring conditions.

Understanding Health Statistics

Mortality

Mortality, or the rate of death, is calculated by dividing the number of deaths due to a specific disease in a given period of time by the population size in the same period. Mortality typically is described as a rate, usually presented as a number of deaths per 100,000 residents. Mortality rates are readily available since the underlying (or primary) cause of death is routinely reported on death certificates, the submission of which is more or less universal. However, some error can be associated with cause-of-death classification, since it is sometimes difficult to choose a single underlying cause of death from potentially many co-occurring conditions.

Mortality rate by cause is calculated according to the following formula:

$$\text{(number of deaths due to a cause/population)} \times 100,000 = \text{deaths per 100,000 people.}$$

Age-adjustment

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; that is, as a population ages, its collective risk of death increases. Therefore, an older population will automatically have a higher overall death rate just because of its age distribution. At any one time some communities have higher proportions of “younger” people, and others have a higher proportion of “older” 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 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 (NCSCHS). 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 or community 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*, which combines annual data gathered over a multi-year period, usually three or five years. The practice of presenting data that are aggregated avoids the instability typically associated with using highly variable year-by-year data consisting of relatively few cases or deaths. The calculation is performed by dividing the number of cases or deaths due to a particular disease over a period of years by the sum of the population size for each of the years in the same period.

Morbidity

Morbidity as used in this report refers generally to the presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) in the population. Morbidity data usually is presented as a percentage, or a count, but not a rate.

Prevalence

Prevalence, which describes the extent of morbidity, 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 period. Prevalence expresses a proportion, not a rate. Prevalence is often estimated by consulting hospital records; for instance, hospital discharge records available from NCSCHS show the number of residents within a county who use hospital in-patient services for given diseases during a specific period. Typically, these data underestimate the true prevalence of the given disease in the population, since individuals who do not seek medical care or who are diagnosed outside of the hospital in-patient setting are not captured by the measure. Note also that decreasing hospital discharge rates do not necessarily indicate decreasing prevalence; rather they may be a result of a lack of access to hospital care.

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 period by the population size during that period. Typically, the resultant value is multiplied by 100,000 and is expressed as cases per 100,000; sometimes the multiplier is a smaller number, such as 10,000.

Incidence rate is calculated according to the following formula:

$$\text{(number of new cases/population)} \times 100,000 = \text{new cases per 100,000 people}$$

The incidence rates for certain diseases, such as cancer, are simple to obtain, since data on newly discovered cases is routinely collected by the NC Central Cancer Registry. However, diagnoses of other conditions, such as diabetes or heart disease, are not normally reported to central data-collecting agencies, so accurate incidence data on these conditions is rare.

Trends

Data for multiple years is included in this report wherever possible. Since comparing data on a year-by-year basis can yield very unstable trends due to the often small number of cases, events or deaths per year (see below), the preferred method for reporting incidence and mortality data is long-term trends using the age-adjusted, multi-year aggregate format. Most trend data used in this report is of that type.

Small Numbers

Year-to-year variance in small numbers of events can make dramatic differences in rates that can be misleading. For instance, an increase from two events one year to four the next could be statistically insignificant in a population sense but result in a calculated rate increase of 100%. Aggregating annual counts over a five year period before calculating a rate is one method used to ameliorate the effect of small numbers. Sometimes even aggregating data is not sufficient, so the NCSCHS recommends that all rates based on fewer than 20 events—whether covering an aggregate period or not—be considered “unstable”, and interpreted only with caution. In recent years, NCSCHS has suppressed reporting data (e.g., mortality rates) based on fewer than 20 events in a five-year aggregate period. (Other state entities that report health statistics may use their own minimum reporting thresholds.) In an effort to assure that unstable health data do not become the basis for local decision-making, this author makes every effort to highlight and discuss primarily rates based on 20 or more events in a five-year aggregate period and on 10 or more events in a single year. However, in smaller jurisdictions it may be necessary to use unstable figures in order to have any data at all to report. Where these exceptions occur, the narrative will highlight the potential instability of the data being discussed.

Describing Difference and Change

In describing differences in data of the same type from two populations or locations, or changes over time in the same kind of data from one population or location—both of which appear frequently in this report—it is useful to apply the concept of percent difference or change. While it is always possible to describe difference or change by the simple subtraction of a smaller number from a larger number, the result often is inadequate for describing and understanding the scope or significance of the difference or change. Converting the amount of difference or change to a *percent* takes into account the relative size of the numbers that are changing in a way that simple subtraction does not, and makes it easier to grasp the meaning of the change.

For example, there may be a rate for a type of event (e.g., death) that is one number one year and another number five years later. Suppose the earlier figure is 12.0 and the latter figure is 18.0. The simple mathematical difference between these rates is 6.0. Suppose also there is another set of rates that are 212.0 in one year and 218.0 five years later. The simple mathematical difference between these rates also is 6.0. Although the same, these simple numerical differences are not of the same significance in both instances. In the first example, converting the 6 point difference to a percent yields a relative change factor of 50%; that is, the smaller number increased by half, a large fraction. In the second example, converting the 6-point difference to a percent yields a relative change factor of 2.8%; that is, the smaller number in the comparison increased by a relatively small fraction. In these examples the application of percent makes it very clear that the difference in the first example is of far greater degree than the difference in the second example. This document uses percentage almost exclusively to describe and highlight degrees of difference and change, both positive (e.g., increase, larger than, etc.) and negative (e.g., decrease, smaller than, etc.)

Behavioral Risk Factor Surveillance System (BRFSS)

Pasquotank County residents, as well as those living in the other six counties of the ARHS region, participate in the state’s annual Behavioral Risk Factor Surveillance System (BRFSS) Survey, as part of an aggregate 41-county sample that encompasses the entire eastern third of the state (“Eastern North Carolina”). It is not possible to isolate survey responses from any ARHS county’s BRFSS participants without oversampling the county, which rarely occurs.

Since the aggregate regional data covers such a diverse area, the results cannot responsibly be interpolated to describe health in any one of the ARHS counties. As a result, BRFSS data will not be used in this document *except* for local BRFSS data manipulated by the CDC to yield a county-level *estimate*.

Final Health Data Caveat

Some data that is used in this report may have inherent limitations, due to sample size, or a sampling date far in the past, for example, but is used nevertheless because there is no better alternative. Whenever this kind of data is used, it will be accompanied by a warning about its limitations.

HEALTH RANKINGS

America's Health Rankings

Each year for more than 20 years, America's Health Rankings™, a project of United Health Foundation, has tracked the health of the nation and provided a comprehensive perspective on how the nation—and each state—measures up. America's Health Rankings is the longest running state-by-state analysis of health in the US.

America's Health Rankings are based on several kinds of measures. Together the metrics for those measures help calculate an overall rank. The table below shows where North Carolina stood in the 2014 overall rankings relative to the “best” and “worst” states, where number one is “best”.

- North Carolina was ranked 37th overall in the US. Hawaii was ranked 1st and Mississippi was ranked 50th (last).

Table 97. Rank of North Carolina in America's Health Rankings (2014)

Location	National Rank (Out of 50) ¹		
	Overall	Determinants	Outcomes
Hawaii	1	3	1
North Carolina	37	36	40
Mississippi	50	50	50

Source: United Health Foundation. America's Health Rankings. Our Reports, 2014 Annual Report.

<http://cdnfiles.americashealthrankings.org/SiteFiles/Reports/Americas%20Health%20Rankings%202014%20Edition.pdf>.

County Health Rankings

Building on the work of *America's Health Rankings*, the Robert Wood Johnson Foundation, collaborating with the University of Wisconsin Population Health Institute, undertook a project to develop health rankings for the counties in all 50 states. In this project, each state's counties are ranked according to health outcomes and the multiple health factors that determine a county's health. Each county receives a summary rank for its health outcomes and health factors and also for the four different types of health factors: health behaviors, clinical care, social and economic factors, and the physical environment.

The following table presents the 2015 county rankings for Pasquotank County, the ARHS regional average and Scotland County in terms of health outcomes and health factors.

- Pasquotank County ranked 66th overall in NC, chiefly due to low rankings for health behaviors (96th) and social and economic factors (66th).
- The best Pasquotank County rankings are in the health factors of clinical care (11th) and physical environment (23rd).

It should be noted that the County Health Rankings serve a limited purpose, since the data on which they are based in some cases is very old and different parameters are measured in different time periods.

**Table 98. County Health Rankings
(2015)**

Location	County Rank (Out of 100) ¹						Overall
	Health Outcomes		Health Factors				
	Length of Life	Quality of Life	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment	
Pasquotank County	40	51	96	11	66	23	66
<i>Regional Average</i>	<i>46</i>	<i>58</i>	<i>61</i>	<i>40</i>	<i>49</i>	<i>30</i>	<i>48</i>
Scotland County	95	97	91	77	100	84	98

County Health Rankings and Roadmaps, 2015. University of Wisconsin Population Health Institute;
<http://www.countyhealthrankings.org/app/north-carolina/2013/rankings/outcomes/overall/by-rank>.

The table below presents additional detail for these jurisdictions as well as the average for NC and national benchmarks.

**Table 99. County Health Rankings Details
(2015)**

Health Factor	Pasquotank County	ARHS Regional Average	Scotland County	NC County Average	National Median
Health Outcomes	43	51	98		
Length of Life	40	46	95		
Premature deaths	7,662	7,856	11,011	7,212	7,681
Quality of Life	51	58	97		
Poor or fair health	21%	22%	28%	18%	17%
Poor physical health days	3.2	4.2	3.7	3.6	3.7
Poor mental health days	3.3	2.9	4.3	3.4	3.5
Low birthweight	9.9%	9.9%	13.0%	9.1%	8.0%
Health Factors	68	49	99		
Health Behaviors	96	61	91		
Adult smoking	35%	25%	25%	20%	21%
Adult obesity	35%	33%	36%	29%	31%
Food environment index	6%	7%	4.6	6.6	7.3
Physical inactivity	28%	28%	28%	25%	27%
Access to exercise opportunities	69%	53%	66%	76%	65%
Excessive drinking	15%	21%	9%	13%	16%
Alcohol-impaired driving deaths	23%	27%	39%	33%	31%
Sexually transmitted infections	774	468	718	519	291
Teen birth rate	37	40	72	42	41
Clinical Care	11	40	7		
Uninsured	18%	18%	20%	19%	17%
Primary Care physicians (ratio:1)	1,400	5,510	1,444	1,448	2,015
Dentists (ratio:1)	2,449	7,616	4,003	1,970	2,670
Mental health providers (ratio:1)	519	3,094	680	472	1,128
Preventable hospital stays	44	56	87	57	65.3
Diabetic monitoring	83%	86%	83%	89%	85%
Mammography screening	77%	69%	70.7%	68.2%	61%
Social & Economic Factors	66	49	100		
High school graduation	84%	83%	76%	81%	85%
Some college	62%	55%	44%	64%	56%
Unemployment	10.1%	8.7%	14.6%	8.0%	7.0%
Children in poverty	34%	29%	44%	25%	24%
Income inequality	5.0	467%	5.7	4.8	4.4
Children in single-parent households	36%	36%	60%	36%	31%
Social associations	14.5	14.5	13.9%	11.7%	12.6%
Violent crime rate	372	198	488	355	199
Injury deaths	58	67	75	64	73.8
Physical Environment	23	30	84		
Air pollution - particulate matter	11.6	12	12.2	12.3	11.9
Drinking water violations	0%	0%	3%	4%	1%
Severe housing problems	22%	0	20%	16%	14
Driving alone to work	79%	82%	86%	81%	80%
Long commute - driving alone	29%	45%	24%	30%	29%
Source	1	1	1	2	2

1 - County Health Rankings and Roadmaps, 2015. University of Wisconsin Population Health Institute;
<http://www.countyhealthrankings.org/app/north-carolina/2015/rankings/outcomes/overall>.

2 - State Health Gap Reports, 2015. University of Wisconsin Population Health Institute;
http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2015_NC_0.pdf.

Note: Blank values ("n/a") reflect unreliable or missing data.

MATERNAL AND INFANT HEALTH

Pregnancy

The following definitions and statistical conventions will be helpful in understanding the data on pregnancy:

- Reproductive age = 15-44
- Total pregnancies = live births + induced abortions + fetal death at 20+ weeks gestation
- Pregnancy rate = number of pregnancies per 1,000 women of reproductive age
- Fertility rate = number of live births per 1,000 women of reproductive age
- Abortion rate = number of induced abortions per 1,000 women of reproductive age
- Birth rate = number of live births per 1,000 *population* (Note that in the birth rate calculation the denominator includes the entire population, both men and women, not just women of reproductive age.) Since the birth rate is a measure of population growth, it was presented among the demographic data in Chapter One of this report.

Pregnancy, Fertility and Abortion Rates, Women Age 15-44

The following table presents total annual pregnancy, fertility and abortion rates for women age 15-44 for the period from 2010-2014.

- The 2014 pregnancy rate was 79.1 in Pasquotank County, compared to 66.3 in the Region and 72.1 in NC.
- In 2014, the highest pregnancy rate in Pasquotank County women age 15-44 occurred among white non-Hispanics.
- The Pasquotank County abortion rate among women aged 15-44 fluctuates each year. In 2014, the Pasquotank County abortion rate was 10.4 compared to 10.7 in the Region and 10.7 in NC.
- Discussion of racially stratified pregnancy and abortion rate trends is complicated by numerous unstable and suppressed rates as well as changes over time in the way the SCHS has handled racial identity.

**Table 100. Total Pregnancy, Fertility and Abortion Rates, Ages 15-44
(Single Years, 2010-2014)**

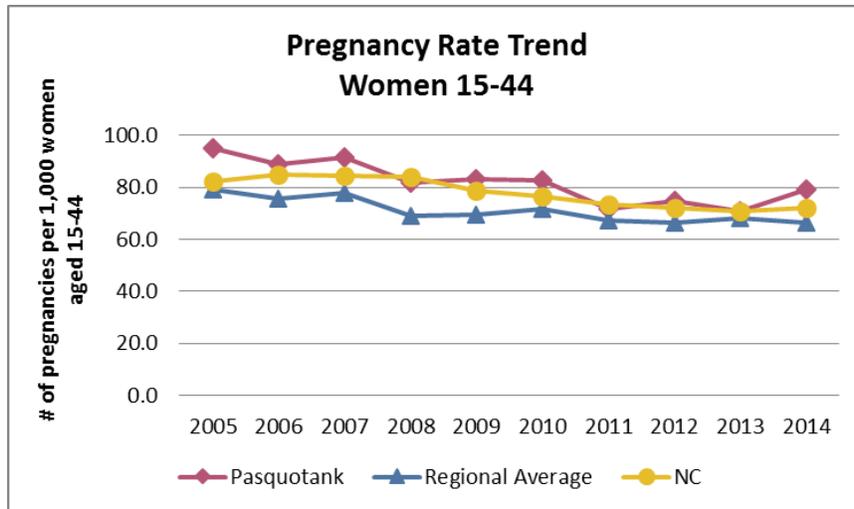
Location	Females Ages 15-44														
	2010			2011			2012			2013			2014		
	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Pasquotank County Total	82.6	64.5	17.6	71.8	58.6	12.5	75.0	59.2	15.3	70.8	60.5	9.8	79.1	68.5	10.4
White, Non-Hispanic	79.9	68.9	11.0	69.7	61.4	7.5	76.1	66.9	9.0	70.9	64.6	5.8	83.4	75.1	8.3
African American, Non-Hispanic	85.0	57.5	26.7	70.5	52.6	17.1	72.8	48.7	23.3	65.6	50.1	15.2	81.0	65.5	14.9
American Indian, Non-Hispanic										*	*	*	*	*	*
Other, Non-Hispanic	81.8	75.5	6.3	86.2	74.7	11.5	*	*	*	*	*	*	*	*	*
Hispanic	86.5	78.4	5.4	91.6	76.3	15.3	78.0	71.3	*	121.8	113.2	*	56.0	54.0	*
Regional Average Total	71.5	57.9	13.3	67.2	56.7	10.2	66.3	55.9	20.6	68.2	58.7	9.6	66.3	57.0	10.7
White, Non-Hispanic	67.1	58.0	8.5	61.3	54.5	6.6	62.5	55.9	9.5	67.4	59.3	7.2	63.6	57.3	7.6
African American, Non-Hispanic	79.8	58.1	21.5	70.8	54.7	15.7	74.4	57.2	18.4	68.3	61.4	14.3	69.9	55.0	15.8
American Indian, Non-Hispanic										*	*	*	*	*	*
Other, Non-Hispanic	61.3	60.4	0.9	73.2	63.8	9.4	*	*	*	*	*	*	*	*	*
Hispanic	65.6	52.1	13.1	82.1	76.2	5.9	78.0	71.3	*	121.8	113.2	*	56.0	54.0	*
Scotland County Total	85.4	72.9	12.4	79.1	67.7	10.7	80.2	67.3	12.3	78.3	66.9	10.9	78.2	66.8	10.8
White, Non-Hispanic	67.0	60.3	6.7	59.7	55.3	4.4	59.0	51.9	*	59.0	53.2	*	58.1	52.2	*
African American, Non-Hispanic	99.5	78.1	21.1	97.2	77.3	19.1	99.7	77.2	22.2	92.8	73.4	18.3	99.4	80.2	18.4
American Indian, Non-Hispanic										98.5	94.1	*	79.2	75.9	*
Other, Non-Hispanic	102.9	96.9	5.9	87.9	80.5	4.2	88.9	83.0	*	*	*	*	*	*	*
Hispanic	65.7	65.7	0.0	60.4	53.7	6.7	*	*	*	*	*	*	*	*	*
State of NC Total	76.4	62.7	13.2	73.3	61.5	11.4	72.1	61.0	10.7	70.8	60.3	10.1	72.1	61.0	10.7
White, Non-Hispanic	65.6	57.1	8.2	63.6	56.4	7.0	63.0	56.1	6.6	61.8	55.4	6.1	63.5	56.5	6.6
African American, Non-Hispanic	86.1	61.0	24.4	81.5	59.7	21.1	79.6	59.1	19.8	79.0	59.7	18.6	79.5	59.4	19.4
American Indian, Non-Hispanic										71.5	62.9	8.2	69.9	61.1	8.5
Other, Non-Hispanic	84.5	71.3	12.8	80.6	69.4	10.9	79.7	69.7	9.5	79.4	69.5	9.5	82.4	72.0	10.1
Hispanic	114.0	99.0	14.7	106.6	94.0	12.2	102.6	91.4	10.8	98.6	87.9	10.3	98.4	87.0	10.9

Note: Bold type indicates an unstable rate based on a small number (fewer than 10 cases). An asterisk signifies a suppressed rate. Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, and Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/data/vital/pregnancies/>.

The following figure plots the overall pregnancy rate for the comparators (minus Scotland County) for a period that spans 2005 through 2014.

- The total pregnancy rate in Pasquotank County fluctuates on a yearly basis but has demonstrated a general decline over the period cited. The county rate exceeded the NC and regional rates in much of the period cited.

**Figure 15. Overall Pregnancy Rate Trend, Age 15-44
(2005-2014)**



Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, and Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/data/vital/pregnancies/>.

Pregnancy, Fertility and Abortion Rates, Women Age 15-19

The table below presents total annual pregnancy, fertility and abortion rates for women age 15-19 (“teens”) for the period from 2010-2014.

- In 2014 the teen pregnancy rate was 26.2 in Pasquotank County, compared to 26.4 for the Region and 32.3 for the state.
- Among Pasquotank County teens, the pregnancy rates over time appear quite variable and have become unstable for most racially stratified groups.
- Among teenage women the abortion rate in Pasquotank County fluctuates widely, likely due to unstable rates based on very low numbers, but has decreased overall. In 2011 (the last year for which rates are available) the Pasquotank County teen abortion rate was 13.5, compared to 9.7 across the Region and 8.7 for NC.

Table 101. Total Pregnancy, Fertility and Abortion Rates, Ages 15-19 (Single Years, 2010-2014)

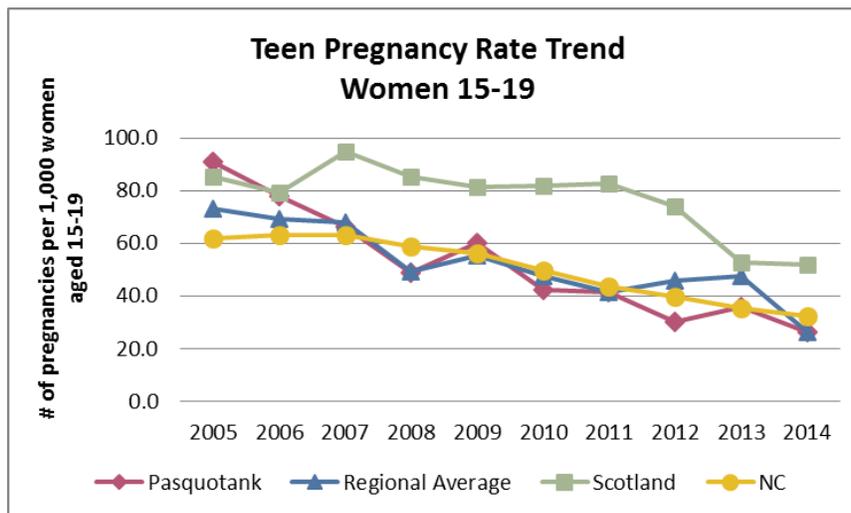
Location	Females Ages 15-19														
	2010			2011			2012			2013			2014		
	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate	Pregnancy Rate	Fertility Rate	Abortion Rate
Pasquotank County Total	42.3	29.7	12.6	41.3	22.7	13.5	30.0	20.9	*	35.9	30.3	*	26.2	21.7	*
White, Non-Hispanic	42.2	29.1	13.1	30.9	23.1	7.7	*	*	*	37.7	34.3	*	*	*	*
African American, Non-Hispanic	44.2	32.2	11.9	48.6	31.6	17.0	32.6	*	*	34.2	27.4	*	30.2	*	*
American Indian, Non-Hispanic												*	*	*	*
Other, Non-Hispanic	58.8	0.0	58.8	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Hispanic	0.0	0.0	0.0	75.5	37.7	37.7	*	*	*	*	*	*	*	*	*
Regional Average Total	47.7	37.9	11.4	41.5	30.7	9.7	45.9	35.6	*	47.6	40.6	*	26.4	21.7	*
White, Non-Hispanic	44.6	34.3	9.7	29.2	21.6	7.6	40.2	*	*	37.7	34.3	*	*	*	*
African American, Non-Hispanic	60.8	44.0	16.4	51.1	38.0	12.8	40.7	*	*	52.8	44.4	*	30.2	*	*
American Indian, Non-Hispanic												*	*	*	*
Other, Non-Hispanic	8.4	0.0	8.4	20.4	20.4	0.0	*	*	*	*	*	*	*	*	*
Hispanic	0.0	0.0	0.0	55.2	49.8	5.4	*	*	*	*	*	*	*	*	*
Scotland County Total	82.0	73.9	8.1	82.5	69.8	12.8	73.9	60.2	*	52.8	45.8	*	51.8	43.5	*
White, Non-Hispanic	57.9	56.0	1.9	53.3	47.3	5.9	51.8	43.8	*	*	*	*	42.1	19.0	4.0
African American, Non-Hispanic	92.0	77.2	14.8	110.4	87.7	22.7	97.4	74.8	*	69.7	60.6	*	65.2	49.4	*
American Indian, Non-Hispanic									*	*	*	*	*	*	*
Other, Non-Hispanic	115.6	110.6	5.0	81.5	81.5	0.0	*	*	*	*	*	*	*	*	*
Hispanic	71.4	71.4	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
State of NC Total	49.7	38.3	11.0	43.8	34.8	8.7	39.6	31.8	7.6	35.2	28.4	6.6	32.3	25.9	6.2
White, Non-Hispanic	34.4	27.2	7.0	30.8	25.2	5.5	28.3	23.1	5.1	24.7	20.3	4.2	23.1	19.0	4.0
African American, Non-Hispanic	70.2	50.9	18.7	61.6	45.5	15.6	55.0	41.4	13.1	49.2	37.3	11.5	44.0	33.1	10.5
American Indian, Non-Hispanic										52.6	46.4	6.0	44.9	40.3	*
Other, Non-Hispanic	48.9	38.8	9.5	39.4	32.9	6.4	36.4	29.8	6.3	19.9	14.3	5.4	19.0	14.3	4.7
Hispanic	82.7	70.6	11.7	71.1	62.7	8.2	62.0	55.7	6.2	57.9	51.2	6.2	52.8	45.9	6.5

Note: Bold type indicates an unstable rate based on a small number (fewer than 10 cases). An asterisk signifies a suppressed rate. Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, and Abortion Rates per 1,000 Population, by Race, by Age. <http://www.schs.state.nc.us/data/vital/pregnancies/>.

The figure below plots the overall teen pregnancy rate for the comparators for a period that spans 2005 through 2014.

- Teen pregnancy rates in Pasquotank County have decreased significantly since 2007.

Figure 16. Overall Pregnancy Rate Trend, Age 15-19 (2005-2014)



Source: NC Center for Health Statistics, Vital Statistics. Reported Pregnancies. Years as noted. Pregnancy, Fertility, & Abortion Rates per 1,000 Population, by Race, by Age; <http://www.schs.state.nc.us/data/vital/pregnancies/2014/>.

Pregnancies among Teens (age 15-19) and Adolescents (under age 15)

The table below presents trend data on the number of teen pregnancies in each jurisdiction from 2003-2013.

- The number of teen (women aged 15-19) pregnancies in Pasquotank County increased from 80 in 2003 to 135 in 2005 and then decreased to a low of 43 in 2012. In 2013 the number increased again, to 51.

Table 102. Number of Teen Pregnancies (Ages 15-19) (Single Years, 2003-2013)

Location	Number of Pregnancies, Ages 15-19										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pasquotank County	80	88	135	118	101	83	92	67	64	43	51
<i>Regional Average</i>	36	38	47	46	43	37	38	31	28	23	23
Scotland County	120	100	112	110	132	123	115	111	110	97	68
State of NC	17,390	18,143	18,259	19,192	19,615	19,398	18,142	15,957	13,909	12,535	11,178

Source: NC State Center for Health Statistics, North Carolina health Data Query System. Pregnancy Data. North Carolina Reported Pregnancy Data. Year: 2003-2013. (Counties and age groups as indicated); <http://www.schs.state.nc.us/SCHS/data/preg/preg.cfm>.

The following table presents trend data on the number of adolescent pregnancies in each jurisdiction from 2003-2013.

- Between 2003 and 2013 there were 17 pregnancies among Pasquotank County adolescent girls (age 14 and younger). There have been no pregnancies among adolescent girls in Pasquotank County in either 2011, 2012 or 2013.

**Table 103. Number of Adolescent Pregnancies (Under Age 15)
(Single Years, 2003-2013)**

Location	Number of Pregnancies, Age 14 and Younger										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pasquotank County	3	3	2	2	1	1	2	3	0	0	0
Scotland County	3	5	2	3	7	3	0	3	2	3	2
State of NC	443	472	468	405	404	376	324	282	255	214	182

Source: NC State Center for Health Statistics, North Carolina health Data Query System. Pregnancy Data. North Carolina Reported Pregnancy Data. Year: 2003-2013. (Counties and age groups as indicated); <http://www.schs.state.nc.us/SCHS/data/preg/preg.cfm>.

Pregnancy Risk Factors

High Parity and Short Interval Births

According to the 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. A *short-interval birth* involves a pregnancy occurring less than six months since the last birth. High-parity and short-interval pregnancies can be a physical strain on the mother and sometimes contribute to complicated pregnancies and/or poor birth outcomes.

The next table presents data on high-parity and short interval births for the aggregate period 2010-2014.

- The percentage of high-parity births among women under age 30 in Pasquotank County (14.9%) was similar to the rate for the region (14.8%) and slightly lower than that for the state (15.2%). Among women age 30 or older the county rate (21.9%) was slightly higher than the regional rate (21.0%) and the same as the state average (21.9%).
- The percentage of short-interval births in Pasquotank County (11.4%) was lower than the regional rate (13.3%) and the state rate (12.3%).

**Table 104. High Parity and Short Interval Births
(Single Five-Year Aggregate Period, 2010-2014)**

Location	High Parity Births				Short Interval Births	
	Mothers < 30		Mothers ≥ 30		Births	
	No. ¹	% ²	No. ¹	% ²	No. ³	% ⁴
Pasquotank County	258	14.9	172	21.9	192	11.4
<i>Regional Average</i>	<i>107</i>	<i>14.8</i>	<i>65</i>	<i>21.0</i>	<i>84</i>	<i>13.3</i>
Scotland County	402	21.9	109	23.0	190	12.1
State of NC	27,216	15.2	49,588	21.9	48,837	12.3
Source:	a	a	a	a	b	b

¹ Number at risk due to high parity

² Percent of all births with age of mother in category indicated

³ Number with interval from last delivery to conception of six months or less

⁴ Percent of all births excluding 1st pregnancies

a - NC State Center for Health Statistics, County-level Data, County Health Data Book (2016), Pregnancy and Births, 2010-2014 Number At Risk NC Live Births due to High Parity by County of Residence;

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

b - NC State Center for Health Statistics, County-level Data, County Health Data Book (2016), Pregnancy and Births, 2010-2014 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/>.

Smoking during Pregnancy

Smoking during pregnancy is an unhealthy behavior that may have negative effects on both the mother and the fetus. Smoking can lead to fetal and newborn death, and contribute to low birth weight and pre-term delivery. In pregnant women, smoking can increase the rate of placental problems, and contribute to premature rupture of membranes and heavy bleeding during delivery (56).

The table below presents trend data on smoking during pregnancy for 2011 through 2014.

- The percentage of Pasquotank County women who smoked during pregnancy decreased in 2012 and 2013 but increased again in 2014, when it exceeded the state average.

Table 105. Smoking during Pregnancy Trend (2011-2014)

Location	Number and Percent of Births to Mothers Who Smoked Prenatally							
	2011		2012		2013		2014	
	No.	%	No.	%	No.	%	No.	%
Pasquotank County	54	11.2	31	6.5	47	9.7	59	11.0
<i>Regional Average</i>	23	11.3	18	10.4	21	10.6	26	13.6
Scotland County	86	18.8	85	18.7	96	21.4	96	21.8
<i>State of NC</i>	13,159	10.9	12,727	10.6	12,242	10.3	11,896	9.8

Source: NC State Center for Health Statistics, Vital Statistics: North Carolina Vital Statistics, Volume 1 (years as noted). <http://www.schs.state.nc.us/data/vital/volume1/>

Early Prenatal Care

Good pre-conception health and early prenatal care can help assure women the healthiest pregnancies possible. The next table presents trend data on the percent of all women receiving prenatal care in the first trimester for the four jurisdictions included in this report.

- The percentage of women receiving early prenatal care was lower in Pasquotank County compared to the State for every year cited below.
- The percentage of Pasquotank County women receiving prenatal care in the first trimester increased from 51.8% in 2011 to 67.0% in 2014, a total of 29%.

Table 106. Early Prenatal Care Trend (2011-2014)

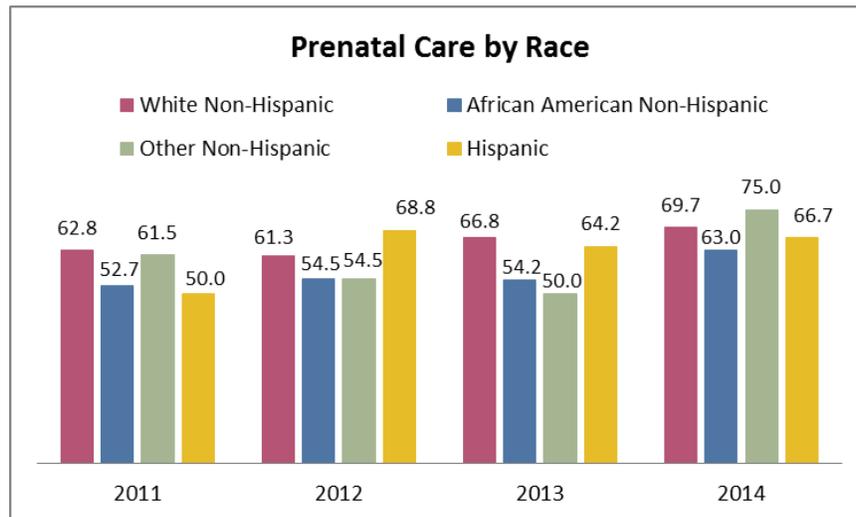
Location	Percent Women Receiving Prenatal care in the First Trimester			
	2011	2012	2013	2014
Pasquotank County	51.8	59.3	61.9	67.0
Regional Average	53.5	49.0	55.6	70.5
Scotland County	68.1	79.1	81.3	70.5
State of NC	71.2	71.3	70.3	68.2

Source: NC State Center for Health Statistics, Vital Statistics, Basic Automated Birth Yearbook (BABYBOOK) 2011-2014. Calculated from numbers in Table 6. <http://www.schs.state.nc.us/data/vital.cfm>.

The following figure plots the prenatal care trend, stratified by race, for Pasquotank County women for the same period covered in the table above.

- Among racial groups in Pasquotank County in 2014, women categorized racially as “Other non-Hispanic” received early prenatal care in higher proportion than other racial groups.

Figure 17. Percent of Pasquotank County Women Receiving Prenatal Care in the First Trimester, by Race (2011-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Basic Automated Birth Yearbook (BABYBOOK) 2011-2014. Calculated from numbers in Table 6. <http://www.schs.state.nc.us/data/vital.cfm>.

Pregnancy Outcomes

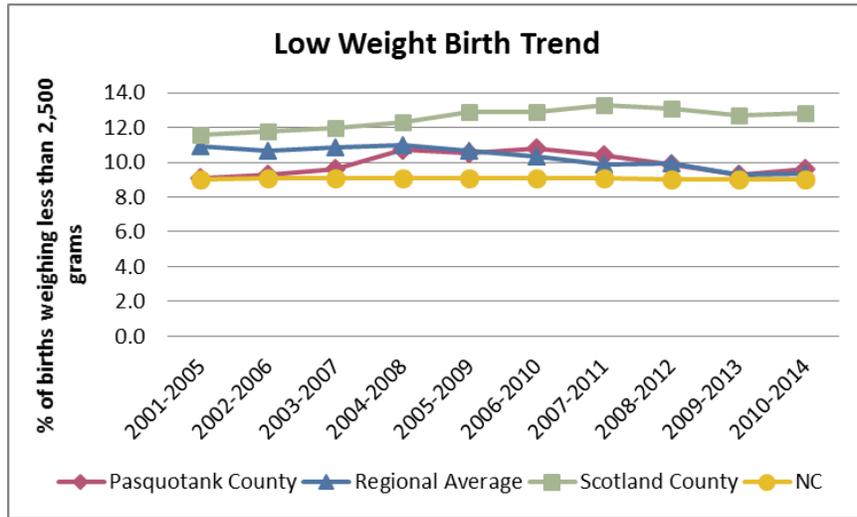
Low Birth Weight and Very Low Birth Weight

Low birth weight can result in serious health problems in newborns (e.g., respiratory distress, bleeding in the brain, and heart, intestinal and eye problems), and cause lasting disabilities (mental retardation, cerebral palsy, and vision and hearing loss) or even death (57).

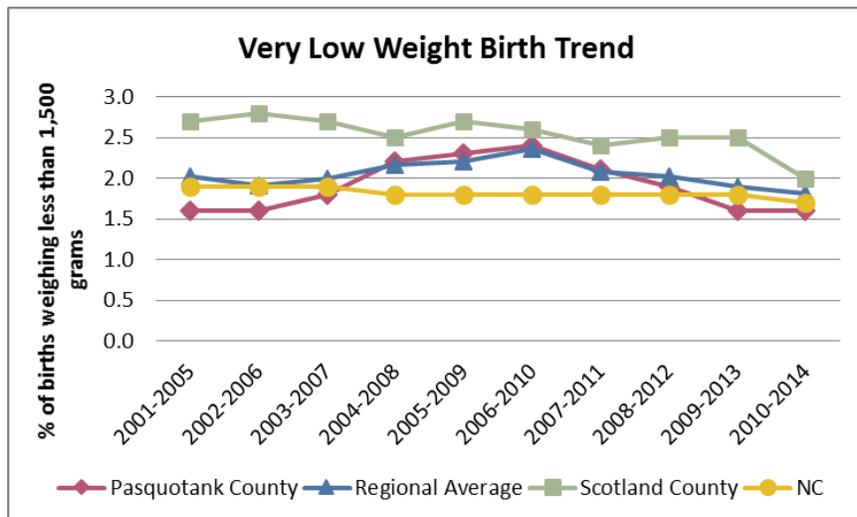
The two figures that follow plot data for low birth-weight births: infants weighing 2,500 grams (5.5 pounds) or less, and very low birth-weight births: infants weighing 1,500 grams (3.3 pounds) or less.

- The outcomes of low- and very-low birth weight births in Pasquotank County exceeded state averages throughout much of the period cited.
- The percentage of low birth-weight births in Pasquotank County increased slightly overall between 2001-2005 and 2006-2010 before decreasing again through 2010-2014.
- The percentage of very low birth-weight births in Pasquotank County increased from 2001-2005 to 2006-2010 before decreasing through 2010-2014.

**Figure 18. Low Birth-Weight Births
(2001-2005 through 2010-2014)**



**Figure 19. Very Low Birth-Weight Births
(2001-2005 through 2010-2014)**



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Pregnancy and Births, Low and Very Low Weight Births, Black Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The following two figures plot data on low- and very-low birth-weight births in Pasquotank County stratified by race.

- The highest stable percentages of low birth-weight births in Pasquotank County occurred among African American non-Hispanics throughout the period cited.
- The highest proportion of very-low birth-weight births in Pasquotank County also occurred among African American non-Hispanics. Note that the rates among all other racial groups were unstable.

Figure 20. Low Birth-Weight Births, Pasquotank County, by Race (2006-2010 through 2010-2014)

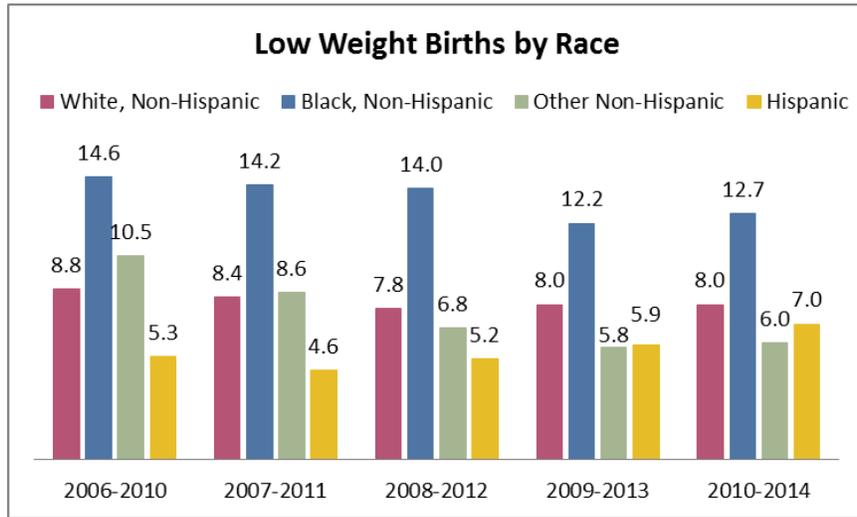
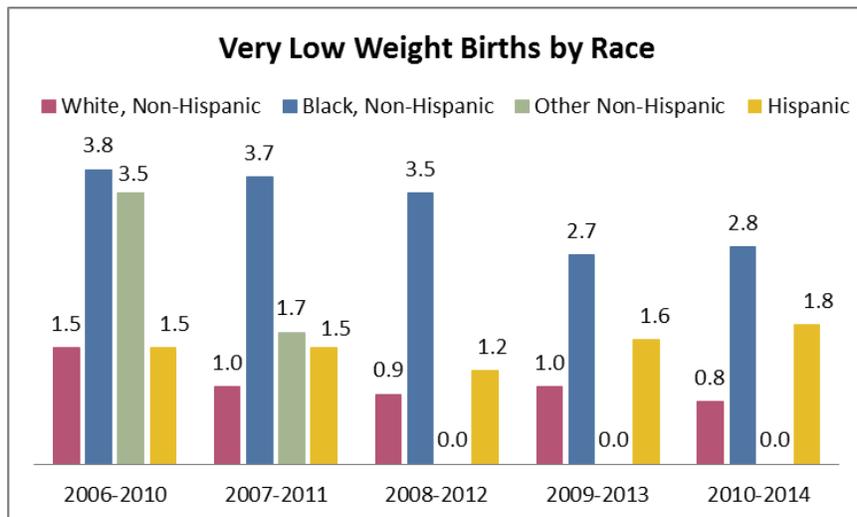


Figure 21. Very-Low Birth-Weight Births, Pasquotank County, by Race (2006-2010 through 2010-2014)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2012-2016), Pregnancy and Births, Low and Very Low Weight Births, Black Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Cesarean Section Delivery

The following table presents data on the percent of births delivered by Cesarean section.

- As elsewhere in the US, the percentage of Cesarean section delivery in all four jurisdictions has risen over time. From the beginning to the end of the period cited in the table, Cesarean deliveries rose by 6% in Pasquotank County, 16% in the ARHS region, 17% in Scotland County, and 10% statewide.

**Table 107. Cesarean Section Deliveries.
(Aggregate Periods 2001-2005 through 2010-2014)**

Location	Percent of Resident Births Delivered by Cesarean Section									
	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Pasquotank County	29.6	31.1	31.0	31.4	31.7	32.0	31.8	33.0	32.3	31.6
<i>Regional Average</i>	28.6	29.5	30.3	30.8	31.3	31.8	32.2	33.0	32.9	33.1
Scotland County	32.0	33.1	34.6	34.7	35.0	34.2	34.8	35.1	35.9	37.3
<i>State of NC</i>	27.7	28.7	29.6	30.3	30.9	31.2	31.2	31.1	30.9	30.5

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Pregnancy and Births, Births Delivered by Primary Caesarian Section; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Birth Complications

The Diagnosis Related Group (DRG) method of coding diagnoses associated with inpatient hospitalizations offers a series of codes describing newborns and neonates having certain conditions originating in the perinatal period. The table below summarizes inpatient discharges associated with these codes for Pasquotank County residents delivering infants at the hospitals participating in this CHA that saw over 20 inpatients in the two years cited. The hospitals qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

- Among Pasquotank County residents the number of discharges at the cited hospitals associated with newborns or neonates with prematurity or some kind of problem originating in the perinatal period totaled 26% of all newborns over the period cited.

**Table 108. Discharges of Newborn Infants, Pasquotank County Resident Mothers
(2013 and 2014)**

Year	Number of Hospital Discharges by DRG (Diagnosis Related Group) Diagnosis					
	Normal Newborns	Extreme Immaturity or Respiratory Distress	Prematurity with Major Problems	Prematurity without Major Problems	Full-Term Neonate with Major Problems	Neonate with Other Significant Problems
2013	314	1	0	28	6	61
2014	301	0	2	30	6	82
Total	615	1	2	58	12	143

Source: Vidant Chowan and Vidant Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Infant Mortality

Infant mortality is the number of infant (under one year of age) deaths per 1,000 live births. The following table presents infant mortality data for Pasquotank County, the ARHS region, Scotland County and the state of NC.

- Many of the racially-stratified Pasquotank County infant mortality rates are unstable, so the trend presented should be interpreted with caution.
- The total infant mortality rate in Pasquotank County has decreased from 10.8 in 2006-2010 to 6.0 in 2010-2014.
- Note that according to the CDC the 2013 infant mortality rate in NC was the 10th highest in the nation.

**Table 109. Total Infant Deaths
(2006-2010 through 2010-2014)**

Location	Infant Deaths										
	2006-2010		2007-2011		2008-2012		2009-2013		2010-2014		
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	
Pasquotank County	Total	30	10.8	30	11.1	27	10.4	20	8.0	15	6.0
	White, Non-Hispanic	11	7.7	10	7.1	9	6.5	6	n/a	5	n/a
	African American, Non-Hispanic	19	17.6	20	19.4	18	18.2	14	n/a	10	n/a
	Other, Non-Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
	Hispanic	0	0.0	0	0.0	0	0.0	0	n/a	0	n/a
<i>Regional Average</i>	<i>Total</i>	13	11.9	13	11.4	11	10.6	8	8.0	8	7.7
	<i>White, Non-Hispanic</i>	5	8.0	5	7.5	5	7.6	3	n/a	3	n/a
	<i>African American, Non-Hispanic</i>	7	18.3	7	18.1	6	11.1	5	n/a	4	n/a
	<i>Other, Non-Hispanic</i>	0	7.5	0	0.0	0	0.0	0	n/a	0	n/a
	<i>Hispanic</i>	1	33.9	1	20.6	1	21.1	0	n/a	1	n/a
Scotland County	Total	23	8.8	28	11.0	28	11.5	25	10.6	27	8.7
	White, Non-Hispanic	10	10.4	12	13.1	9	10.6	9	n/a	10	n/a
	African American, Non-Hispanic	12	10.0	15	12.9	18	16.2	14	n/a	14	n/a
	Other, Non-Hispanic	0	0.0	0	0.0	1	2.4	1	n/a	2	n/a
	Hispanic	1	31.3	1	27.8	0	0.0	1	n/a	1	n/a
State of NC	Total	5,066	7.9	4,899	7.8	4,675	7.5	4,441	7.3	4,295	7.1
	White, Non-Hispanic	2,074	5.9	2,001	5.7	1,918	5.6	1,850	5.4	1,811	5.4
	African American, Non-Hispanic	2,208	14.7	2,129	14.3	2,064	14.0	1,967	13.6	1,858	12.9
	Other, Non-Hispanic	187	6.3	188	6.2	181	5.9	178	5.7	185	5.8
	Hispanic	597	5.8	581	5.8	512	5.3	446	4.8	441	4.9

Source:

a a a a a a a b a b

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

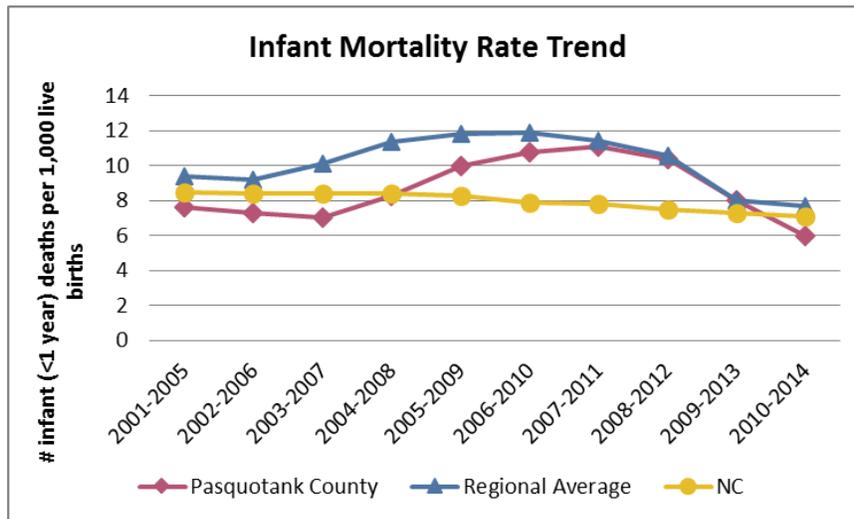
a - NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2014), Mortality, Infant Death Rates per 1,000 Live Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

b - NC Center for Health Statistics, Vital Statistics, Infant Mortality Statistics (2013 and 2014). Infant Death Rates by Perinatal Care Regions and County of Residence. <http://www.schs.state.nc.us/data/vital.cfm>.

The following figure plots the infant mortality trend for a longer period than shown in the table above.

- The Pasquotank County infant mortality rate was higher than the state average for much of the period shown, especially after an extended period of increase.
- The infant mortality rate in Pasquotank County has decreased in each of the three most recent aggregate periods.

Figure 22. Infant Mortality Rate (2001-2005 through 2010-2014)

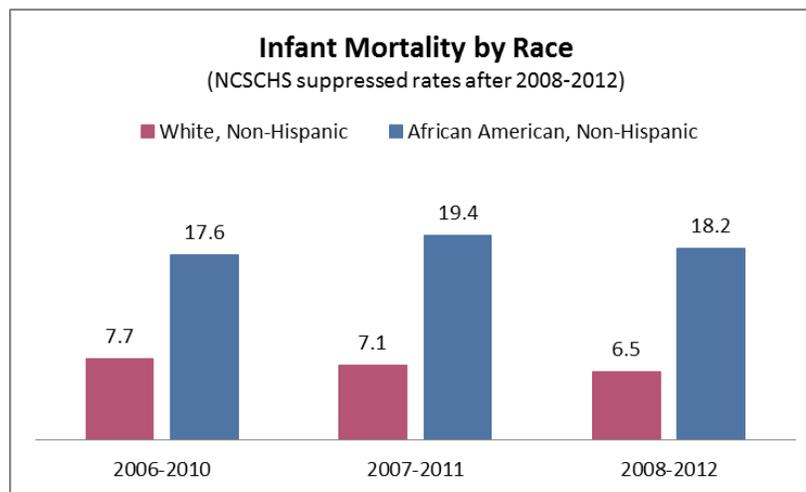


Sources: NC Center for Health Statistics, County-level Data, County Health Data Books (2007-2014), Mortality, Infant Death Rates per 1,000 Live Births; <http://www.schs.state.nc.us/SCHS/data/databook/>, and NC Center for Health Statistics, Vital Statistics, Infant Mortality Statistics (2013 and 2014). Infant Death Rates by Perinatal Care Regions and County of Residence. <http://www.schs.state.nc.us/data/vital.cfm>.

The figure below plots infant mortality rates in Pasquotank County, stratified by race.

- No stable minority infant mortality rates are available for any racial group in Pasquotank County.
- Of the 20 infant deaths that occurred in Pasquotank County in 2010-2014, 14 of them were among African American non-Hispanics.

Figure 23. Infant Mortality Rate, Pasquotank County, by Race (2006-2010 through 2008-2012)



Source: NC Center for Health Statistics, County-level Data, County Health Data Books (2012-2014), Mortality, Infant Death Rates per 1,000 Live Births; <http://www.schs.state.nc.us/SCHS/data/databook/>.

LIFE EXPECTANCY

Life expectancy is the average number of additional years that someone at a given age would be expected to live if he/she were to experience throughout life the age-specific death rates observed in a specified reference period. Life expectancies in terms of years of life remaining can be calculated for any age. Because life expectancy is an average, however, a particular person may well die many years before or many years after their "expected" survival, due to life experiences, environment, and personal genetic characteristics.

Life expectancy from birth is a frequently utilized and analyzed component of demographic data. It represents the average life span of a newborn and is considered an indicator of the overall health of a population or community.

Life expectancy rose rapidly in the twentieth century due to improvements in public health, nutrition and medicine, and continued progress in these areas can be expected to have further positive impact on life expectancy in the future. Decreases in life expectancy are also possible, influenced mostly by epidemic disease (e.g. plagues of history and AIDS in the modern era), and natural and man-made disasters. One of the most significant influences on life expectancy in populations is infant mortality, since life expectancy at birth is highly sensitive to the rate of death in the first few years of life.

The following table presents gender- and race-stratified life expectancy at birth data for comparator jurisdictions.

- Among comparators, life expectancy for males born in 2012-2014 is longest in Pasquotank County.
- Life expectancy has improved over time among all groups presented.

Table 110. Life Expectancy at Birth, by Gender and Race (1990-1992 and 2012-2014)

Location	Life Expectancy in Years									
	Person Born in 1990-1992					Person Born in 2012-2014				
	Overall	Male	Female	White	African-American	Overall	Male	Female	White	African-American
Pasquotank County	74.1	69.6	78.4	75.5	71.8	77.5	76.0	78.9	78.4	75.9
<i>Regional Average</i>	<i>73.7</i>	<i>69.8</i>	<i>77.7</i>	<i>75.1</i>	<i>70.3</i>	<i>78.3</i>	<i>75.8</i>	<i>81.0</i>	<i>79.0</i>	<i>76.5</i>
Scotland County	72.5	68.5	76.0	74.9	69.7	74.8	72.1	77.3	75.2	74.6
State of NC	74.9	71.0	78.7	76.4	69.8	78.3	75.8	80.7	79.1	75.9

Source: NC State Center for Health Statistics, County-level Data, Life Expectancy, State and County Estimates, Life Expectancy: North Carolina 1990-1992 and 2012-2014, State and County; <http://www.schs.state.nc.us/schs/data/lifexpectancy/>.

MORTALITY

Leading Causes of Death

This section describes mortality for the 15 leading causes of death, as well as mortality due to major site-specific cancers. The list of topics and the accompanying data was retrieved from the NC SCHS *County Health Databook*. Unless otherwise noted, the numerical data are age-adjusted and represent five-year aggregate periods.

The table on the following page compares mortality rates for the 15 leading causes of death in Pasquotank County, the ARHS region, Scotland County, NC and the US for the five-year aggregate period 2010-2014 (or as otherwise noted). The causes of death are listed in descending order of rank in Pasquotank County.

The table directly below highlights differences in mortality for the 15 leading causes of death (LCDs) between Pasquotank County and NC. LCDs for which the mortality rate in Pasquotank County is *higher* than the NC rate are highlighted in **red**; county rates *lower* than the NC rate are highlighted in **green**. Rates represented in **blue** are unstable.

Table 111. Comparison of Leading Causes of Death, Pasquotank County and NC (Aggregate Period 2010-2014)

Age-Adjusted Rates (2010-2014)	Pasquotank County No. of Deaths	Pasquotank County Mortality Rate	Pasquotank Rate Difference from NC
1. Diseases of the Heart	521	226.3	+36.4%
2. Total Cancer	464	201.2	+17.1%
3. Chronic Lower Respiratory Disease	109	47.8	+3.9%
4. Cerebrovascular Disease	101	44.6	+3.7%
5. Alzheimer's Disease	72	30.4	+4.1%
6. All Other Unintentional Injuries	51	23.2	-21.6%
7. Diabetes Mellitus	49	21.2	-4.1%
8. Pneumonia and Influenza	44	18.8	+6.8%
9. Septicemia	31	13.9	+6.9%
10. Nephritis, Nephrotic Syndrome, and Nephrosis	27	11.7	-31.2%
11. Chronic Liver Disease and Cirrhosis	26	11.5	+18.6%
12. Unintentional Motor Vehicle Injuries	22	10.6	-21.5%
13. Suicide	17	7.8	-37.1%
14. Homicide	13	6.2	+8.8%
15. Acquired Immune Deficiency Syndrome	6	2.5	-3.8%

Source: NC State Center for Health Statistics, County Health Data Book (see source detail at following table.)

Table 112. Overall Age-Adjusted Mortality Rates for the 15 Leading Causes of Death, Pasquotank County and Comparators (Aggregate Period 2010-2014 or as Noted)¹

Cause of Death	Pasquotank County			<i>Regional Average</i>			Scotland County			State of NC			United States (2013)	
	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Number	Rate	Rank	Rate	Rank
Diseases of the Heart	521	226.3	1	235	189.9	1	432	208.6	1	86,699	165.9	2	169.8	1
Total Cancer	464	201.2	2	225	175.1	2	396	184.1	2	92,542	171.8	1	163.2	2
Chronic Lower Respiratory Disease	109	47.8	3	52	43.2	3	108	51.3	3	24,042	46.0	3	42.1	3
Cerebrovascular Disease	101	44.6	4	50	40.0	4	101	49.2	4	22,116	43.0	4	36.2	5
Alzheimer's Disease	72	30.4	5	34	27.3	6	49	23.9	7	14,595	29.2	6	23.5	6
All Other Unintentional Injuries	51	23.2	6	29	25.3	8	58	30.4	6	14,791	29.6	5	39.4	4
Diabetes Mellitus	49	21.2	7	34	26.5	7	91	43.3	5	11,798	22.1	7	21.2	7
Pneumonia and Influenza	44	18.8	8	32	28.2	5	25	12.1	12	9,011	17.6	8	15.9	8
Septicemia	31	13.9	9	15	13.3	11	44	22.7	8	6,798	13.0	11	10.7	12
Nephritis, Nephrotic Syndrome, and Nephrosis	27	11.7	10	17	14.2	10	41	19.4	10	8,813	17.0	9	13.2	9
Chronic Liver Disease and Cirrhosis	26	11.5	11	10	7.2	13	22	9.8	13	5,378	9.7	13	10.2	13
Unintentional Motor Vehicle Injuries	22	10.6	12	14	16.1	9	35	20.9	9	6,679	13.5	10	10.9	11
Suicide	17	7.8	13	11	11.4	12	12	6.8	14	6,256	12.4	12	12.6	10
Homicide	13	6.2	14	4	4.0	14	27	15.6	11	2,728	5.7	14	5.2	14
Acquired Immune Deficiency Syndrome	6	2.5	15	3	2.8	15	5	2.9	15	1,331	2.6	15	2.1	15
Total Deaths All Causes (Some causes are not listed above)	2,010	877.8		987	803.7		1,898	924.3		408,611	785.2		731.9	
Source:	a	b	c	c	c	c	a	b	c	a	a	b	d	c

¹ Rate = Number of events per 100,000 population, where the Standard = Year 2000 US Population

a - NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race-Sex-Specific Age-Adjusted Death Rates by County;

<http://www.schs.state.nc.us/SCHS/data/databook/>.

b - NC State Center for Health Statistics, Vital Statistics, NC Vital Statistics, Volume 2: Leading Causes of Death, 2014. <http://www.schs.state.nc.us/data/vital.cfm>.

c - Calculated

d - National Center for Health Statistics, National Vital Statistics System, Mortality Data. Deaths: Final Data for 2013 Volume 64, Number 2, Tables 9 and 16.

http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf.

The overall mortality rate in Pasquotank County (877.8) was 12% higher than the overall NC mortality rate (785.2). Individual mortality rates were *higher* in Pasquotank County than statewide for 9 of the 15 leading causes of death (*note that some of the Pasquotank County mortality rates were unstable*):

- Heart disease
- Total cancer
- Chronic lower respiratory disease
- Cerebrovascular disease (stroke)
- Alzheimer's disease
- Pneumonia and influenza
- Septicemia
- Chronic liver disease and cirrhosis
- Homicide

The overall mortality rate in Pasquotank County was 9% higher than the regional average overall mortality rate (803.7). Individual mortality rates were higher in Pasquotank County than region-wide for 8 of the 15 LCDs (*note that some of the Pasquotank County mortality rates were unstable*):

- Heart disease
- Total cancer
- Chronic lower respiratory disease
- Stroke
- Alzheimer's disease
- Septicemia
- Chronic liver disease and cirrhosis
- Homicide

The overall mortality rate in Pasquotank County was 20% higher than the overall US mortality rate (731.9). Individual mortality rates in Pasquotank County were higher than US rates for 11 of the 15 LCDs (*note that some of the Pasquotank County mortality rates were unstable*):

- Heart disease
- Total cancer
- Chronic lower respiratory disease
- Stroke
- Alzheimer's disease
- Stroke
- Pneumonia and influenza
- Septicemia
- Chronic liver disease and cirrhosis
- Homicide
- AIDS

Hospital Discharges Associated with Leading Causes of Death

Below is data on *emergency department* (ED) discharges of Pasquotank County residents from the five hospitals in the study region seeing more than 20 Pasquotank County patients in the ED over the two years cited. The diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death (LCD).

- The largest number of ED discharges in the table below are associated with injuries and poisoning, followed by COPD and heart disease.

Table 113. Emergency Department Discharges for Leading Causes of Death

Year	Number of Emergency Department Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Alzheimer's Disease	Injury and Poisoning	Diabetes	Pneumonia/ Influenza
2013	157	27	733	38	2	5,152	138	113/152
2014	160	26	656	50	5	4,858	129	138/97
Total	317	53	1,389	88	7	10,010	267	251/249

The hospitals qualifying for inclusion in the table on the basis of more than 20 ED discharges over the period cited are: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Note that the ICD-9 category "Injury and Poisoning" is used here as a surrogate for the NC Leading Cause of Death category "All Other Unintentional Injuries". This LCD category does not include motor vehicle injury, but the ICD category does. Some leading causes of death (such as Nephritis, Nephrotic Syndrome, and Nephrosis) have been excluded from this table.

The ICD-9 Code Categories referenced are as follows: Heart disease [Rheumatic heart disease (390-398xx), Hypertensive heart disease (402xx), and All other heart disease (404-429xx)]; Total cancer [All neoplasms (140-239xx)]; COPD [Bronchitis and emphysema (490-492xx)]; Stroke [Cerebrovascular disease (430-438xx)]; Alzheimer's disease [Alzheimer's dementia (331.0)]; Injury and poisoning [All injuries and poisonings (800-999xx)]; Diabetes [Diabetes (250xx)]; Pneumonia and influenza [Pneumonia (480—486xx), Influenza (487-488xx)].

The next table presents data on *inpatient* (IP) hospitalization discharges of Pasquotank County residents from the four hospitals in the study region seeing more than 20 Pasquotank County inpatients over the two years cited. Again, the diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death.

- The largest number of IP discharges in the table below are associated with heart disease, followed by Injury and Poisoning and COPD.

Table 114. Inpatient Hospitalization Discharges for Leading Causes of Death

Year	Number of Inpatient Hospitalization Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Alzheimer's Disease	Injury and Poisoning	Diabetes	Pneumonia/ Influenza
2013	413	84	109	115	2	128	72	99/3
2014	439	99	107	78	1	156	78	87/2
Total	852	183	216	193	3	284	150	186/5

The hospitals qualifying for inclusion in the table on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Gender Disparities in Leading Causes of Death

In the past, NC CHAs have demonstrated some significant differences in mortality rates between men and women. The following table compares gender stratified rates for the 15 leading causes of death in Pasquotank County and its comparator jurisdictions. The usefulness of the table is hampered somewhat by numerous suppressed rates.

In Pasquotank County the overall mortality rate for males (976.1) was 21% higher than the overall mortality rate for females (796.1).

In Pasquotank County, mortality rates for males were *higher* than comparable rates for females for:

- Heart disease (by 34%)
- Cancer (by 337%)
- Chronic lower respiratory disease (by 47%)
- Stroke (by 9%)

In Pasquotank County, mortality rates for males were *lower* than comparable rates for females for:

- Alzheimer's disease (by 23%)

These local figures reiterate a long-term, statewide trend: males suffer mortality disproportionately. In NC as a whole, mortality rates for males traditionally have been higher than comparable rates for females for every leading cause of death except Alzheimer's disease. Statewide in the 2010-2014 period the overall mortality rate for males (931.0) was 39% higher than the overall mortality rate for females (669.6).

Table 115. Sex-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Pasquotank County and Comparators (Aggregate Period 2010-2014)

Cause of Death	Pasquotank County				Scotland County		Regional Average Rate		State of NC Rate	
	Males		Females		Rate		Rate		Rate	
	Number	Rate	Number	Rate	Males	Females	Males	Females	Males	Females
Diseases of the Heart	248	261.8	273	195.5	289.7	151.2	240.3	148.6	212.3	130.4
Total Cancer	235	239.4	229	174.6	233.7	154.4	218.0	143.4	214.4	142.1
Chronic Lower Respiratory Disease	55	58.2	54	39.7	64.0	42.4	67.3	36.7	26.4	18.7
Cerebrovascular Disease	43	47.0	58	43.2	54.9	44.8	47.1	43.0	43.6	41.7
Alzheimer's Disease	23	25.3	49	32.8	n/a	27.0	88.3	61.2	22.9	32.5
All Other Unintentional Injuries	32	31.7	19	n/a	48.9	n/a	31.4	35.1	39.1	21.4
Diabetes Mellitus	18	n/a	31	22.9	51.3	38.5	54.1	36.6	52.3	42.2
Pneumonia and Influenza	19	n/a	25	17.6	n/a	n/a	41.4	31.2	20.6	14.6
Septicemia	13	n/a	18	n/a	27.8	20.3	n/a	n/a	20.0	7.5
Nephritis, Nephrotic Syndrome, and Nephrosis	8	n/a	19	n/a	n/a	18.6	n/a	n/a	20.2	15.9
Chronic Liver Disease and Cirrhosis	16	n/a	10	n/a	n/a	n/a	n/a	n/a	13.4	6.5
Unintentional Motor Vehicle Injuries	14	n/a	8	n/a	31.8	n/a	30.7	n/a	14.5	12.0
Suicide	11	n/a	6	n/a	n/a	n/a	n/a	n/a	19.7	5.9
Homicide	9	n/a	4	n/a	26.3	n/a	n/a	n/a	3.7	1.5
Acquired Immune Deficiency Syndrome	4	n/a	2	n/a	n/a	n/a	n/a	n/a	9.0	2.4
Total Deaths All Causes	936	976.1	1,074	796.1	1,126.2	773.2	962.2	676.1	931.0	669.6

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Leading Causes of Death

Because of below-threshold numbers of deaths during the period, 2010-2014, age-adjusted racially-stratified mortality rates for Pasquotank County are available only for white and African American non-Hispanics, and for only some causes of death.

According to data in the table below:

- In Pasquotank County the overall mortality rate for African American non-Hispanics (942.0) was 9% higher than the overall mortality rate for white non-Hispanics (867.1).
- In Pasquotank County individual mortality rates were higher for African American non-Hispanics than for white non-Hispanics for heart disease (by 14%), stroke (by 52%), and diabetes (by 144%).

Racial differences in mortality will be described in detail as each cause of death is discussed separately in subsequent sections of this report.

Table 116. Race-Specific Age-Adjusted Death Rates for the 15 Leading Causes of Death, Pasquotank County (Aggregate Period 2010-2014)

Cause of Death	Pasquotank County											
	White, non-Hispanic		African-American, non-Hispanic		American Indian, non-Hispanic		Other Races, non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Diseases of the Heart	335	219.3	182	251.0	1	n/a	2	n/a	1	n/a	521	226.3
Total Cancer	322	212.9	139	186.8	0	n/a	1	n/a	2	n/a	464	201.2
Chronic Lower Respiratory Disease	92	60.5	17	n/a	0	n/a	0	n/a	0	n/a	109	47.8
Cerebrovascular Disease	60	39.0	41	59.4	0	n/a	0	n/a	0	n/a	101	44.6
Alzheimer's Disease	50	31.3	22	30.3	0	n/a	0	n/a	0	n/a	72	30.4
All Other Unintentional Injuries	36	26.8	14	n/a	0	n/a	0	n/a	1	n/a	51	23.2
Diabetes Mellitus	22	15.0	27	36.6	0	n/a	0	n/a	0	n/a	49	21.2
Pneumonia and Influenza	30	18.9	13	n/a	0	n/a	0	n/a	1	n/a	44	18.8
Septicemia	22	15.1	9	n/a	0	n/a	0	n/a	0	n/a	31	13.9
Nephritis, Nephrotic Syndrome, and Nephrosis	15	n/a	12	n/a	0	n/a	0	n/a	0	n/a	27	11.7
Chronic Liver Disease and Cirrhosis	18	n/a	8	n/a	0	n/a	0	n/a	0	n/a	26	11.5
Unintentional Motor Vehicle Injuries	8	n/a	12	n/a	0	n/a	1	n/a	1	n/a	22	10.6
Suicide	16	n/a	1	n/a	0	n/a	0	n/a	0	n/a	17	7.8
Homicide	4	n/a	9	n/a	0	n/a	0	n/a	0	n/a	13	6.2
Acquired Immune Deficiency Syndrome	1	n/a	5	n/a	0	n/a	0	n/a	0	n/a	6	2.5
Total Deaths All Causes	1,310	867.1	687	942.0	2	n/a	5	n/a	6	n/a	2010	877.8

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Age Disparities in Leading Causes of Death

Each age group tends to have its own leading causes of death. The following table lists the three leading causes of death by age group for the five-year aggregate period from 2010-2014. (Note that for this purpose it is important to use *non-age adjusted* death rates.)

The leading cause(s) of death in each of the age groups in Pasquotank County were:

- Age Group 00-19: Conditions originating in the perinatal period
- Age Group 20-39: Motor vehicle injuries
- Age Group 40-64: Cancer – all sites
- Age Group 65-84: Cancer – all sites
- Age Group 85+: Diseases of the heart

It is notable that in Pasquotank County cancer and homicide ranked among the leading causes of death in the 20-39 age group.

Table 117. Three Leading Causes of Death by Age Group, by Unadjusted Death Rates, Pasquotank County and Comparators (Aggregate Period 2010-2014)

Age Group	Rank	Cause of Death		
		Pasquotank County	Scotland County	State of NC
00-19	1	Conditions originating in the perinatal period	Conditions originating in the perinatal period	Conditions originating in the perinatal period
	2	Other unintentional injuries	Homicide	Congenital anomalies (birth defects)
	3	Motor vehicle injuries	Congenital anomalies	Motor vehicle injuries
20-39	1	Motor vehicle injuries	Motor vehicle injuries	Other unintentional injuries
	2	Cancer - all sites	Homicide	Motor vehicle injuries
	3	Diseases of the heart	Other unintentional injuries	Suicide
40-64	1	Cancer - all sites	Cancer - all sites	Cancer - all sites
	2	Diseases of the heart	Diseases of the heart	Diseases of the heart
	3	Other unintentional injuries	Diabetes mellitus	Other unintentional injuries
65-84	1	Cancer - all sites	Cancer - all sites	Cancer - all sites
	2	Diseases of the heart	Diseases of the heart	Diseases of the heart
	3	Chronic lower respiratory diseases	Chronic lower respiratory diseases	Chronic lower respiratory diseases
85+	1	Diseases of the heart	Diseases of the heart	Diseases of the heart
	2	Cancer - all sites	Cancer - all sites	Cancer - all sites
	3	Alzheimer's disease	Cerebrovascular disease	Alzheimer's disease

Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, Death Counts and Crude Death Rates per 100,000 for Leading Causes of Death, by Age Groups, NC, 2010-2014; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The next table summarizes changes in the leading causes of death between the last CHA (2007-2011 aggregate period) and the present CHNA (2010-2014 aggregate period), an interval of three years.

- Mortality rates for **6 of the 15** leading causes of death in Pasquotank County **decreased** between the last CHA and the present effort. The county mortality rate **increased for 8 of the 15 LCDs**; the mortality rate for unintentional motor vehicle injuries was unchanged. (Note that some of the rates and corresponding rate differences should be deemed unstable, as indicated by blue type.)

**Table 118. Short-Term Changes in Leading Causes of Death, Pasquotank County
(Between 2007-2011 and 2010-2014)**

Pasquotank County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rate in 2007-2011	Rate in 2010-2014	Percent Difference
1. Diseases of the Heart	204.3	226.3	+10.8%
2. Total Cancer	199.8	201.2	+0.7%
3. Chronic Lower Respiratory Disease	44.4	47.8	+7.7%
4. Cerebrovascular Disease	49.1	44.6	-9.2%
5. Alzheimer's Disease	27.4	30.4	+10.9%
6. All Other Unintentional Injuries	29.0	23.2	-20.0%
7. Diabetes Mellitus	18.9	21.2	+12.2%
8. Pneumonia and Influenza	23.0	18.8	-18.3%
9. Septicemia	9.7	13.9	+43.3%
10. Nephritis, Nephrotic Syndrome, and Nephrosis	16.6	11.7	-29.5%
11. Chronic Liver Disease and Cirrhosis	8.5	11.5	+35.3%
12. Unintentional Motor Vehicle Injuries	10.6	10.6	No change
13. Suicide	8.1	7.8	-3.7%
14. Homicide	3.5	6.2	+77.1%
15. Acquired Immune Deficiency Syndrome	4.2	2.5	-40.5%

Source: Sheila S. Pfaender, Public Health Consultant, via data from the NC State Center for Health Statistics, County Health Data Books.

The table below follows the same format to summarize the *long-term* change in leading causes of death. The data described in this table covers aggregate periods beginning in 2000-2004 and continuing through 2010-2014. The table displays a directional arrow for each cause of death. Each of these *overall trend direction* arrows describes the direction of the overall slope of the regression line calculated by MS Excel from the mortality rate data for each cause of death. The arrows are describing mortality rate changes: a **red/upward arrow** signifies an increasing rate trend, and a **green/downward arrow** signifies a decreasing rate trend.

- Over the 11-year period cited, Pasquotank County mortality rates **decreased** overall for **6 of the 15** leading causes of death: CLRD, stroke, diabetes, pneumonia and influenza, unintentional motor vehicle injuries and AIDS. Meanwhile, county mortality rates **increased** for **5 of the 15** LCDs: Alzheimer's disease, all other unintentional injuries, kidney disease, chronic liver disease and cirrhosis, and suicide. Mortality rates in the county were essentially unchanged overall for heart disease, total cancer, septicemia and homicide.

**Table 119. Long-Term Changes in Leading Causes of Death, Pasquotank County
(Between 2000-2004 and 2010-2014)**

Pasquotank County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Overall Trend Direction (determined by Excel trendline)
1. Diseases of the Heart	Little change
2. Total Cancer	Little change
3. Chronic Lower Respiratory Disease	▼
4. Cerebrovascular Disease	▼
5. Alzheimer's Disease	▲
6. All Other Unintentional Injuries	▲
7. Diabetes Mellitus	▼
8. Pneumonia and Influenza	▼
9. Septicemia	Little change
10. Nephritis, Nephrotic Syndrome, and Nephrosis	▲
11. Chronic Liver Disease and Cirrhosis	▲
12. Unintentional Motor Vehicle Injuries	▼
13. Suicide	▲
14. Homicide	Little change
15. Acquired Immune Deficiency Syndrome	▼

Source: Sheila S. Pfaender, Public Health Consultant, via data from the NC State Center for Health Statistics, County Health Data Books.

Differences in mortality statistics will be covered as each cause of death is discussed separately below, in the order of highest Pasquotank County rank to lowest, beginning with heart disease. It is important to emphasize once more that because of below-threshold numbers of deaths there will be no stable county rates for some causes of death, especially among racially stratified groups. Some unstable data will be presented in this document, but always accompanied by cautions regarding its use.

Note that all health data--however briefly it may be referenced in subsequent sections of this report--is available in detailed format in one or more of the following supporting document files: the 2016 Pasquotank County Health Data Workbook, the 2016 Pasquotank County CHA Presentation, or the 2016 Pasquotank County Hospital Data Summary Workbook.

Diseases of the Heart

Heart disease is an abnormal organic condition of the heart or of the heart and circulation. Heart disease is the number one killer in the US and a major cause of disability. The most common cause of heart disease, coronary artery disease, is a narrowing or blockage of the coronary arteries, the blood vessels that supply blood to the heart itself. Coronary artery disease is the major reason people have heart attacks, but other kinds of heart problems may originate in the valves in the heart, or the heart may not pump well and cause heart failure (58).

Heart disease was the leading cause of death in Pasquotank County in the 2010-2014 period (cited previously).

Heart Disease Hospitalizations

The table below presents inpatient hospital discharge rate trend data for several years. According to this data from NC SCHS, heart disease has been cause for a very high rate of inpatient hospitalization among Pasquotank County residents, at rates sometimes higher than the comparable state and regional averages.

Table 120. Heart Disease Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	11.7	13.2	12.0	10.6	9.4	8.9	10.3	10.7	10.9	11.9
Regional Average	11.4	11.9	11.1	10.6	9.7	9.7	9.9	11.1	10.8	11.1
Scotland County	20.8	19.8	19.6	19.0	21.4	20.5	19.0	19.0	18.4	16.6
State of NC	13.1	12.7	12.2	11.8	11.4	11.3	10.9	10.7	10.3	10.1

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with diagnoses of chronic rheumatic heart disease (ICD-9 Codes 393-398), hypertensive heart disease (ICD-9 Code 402), and other forms of heart disease (ICD-9 Codes 420-429). Note that while significant, these categories do *not* include all forms of heart disease.

- Over the period cited, 0.6% of all ED discharges and 12.9% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of heart disease.

Table 121. Hospital Discharges, Pasquotank County Residents: Heart Disease (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	157	0.6	160	0.6	317	0.6
IP	413	12.7	439	14.8	852	12.9

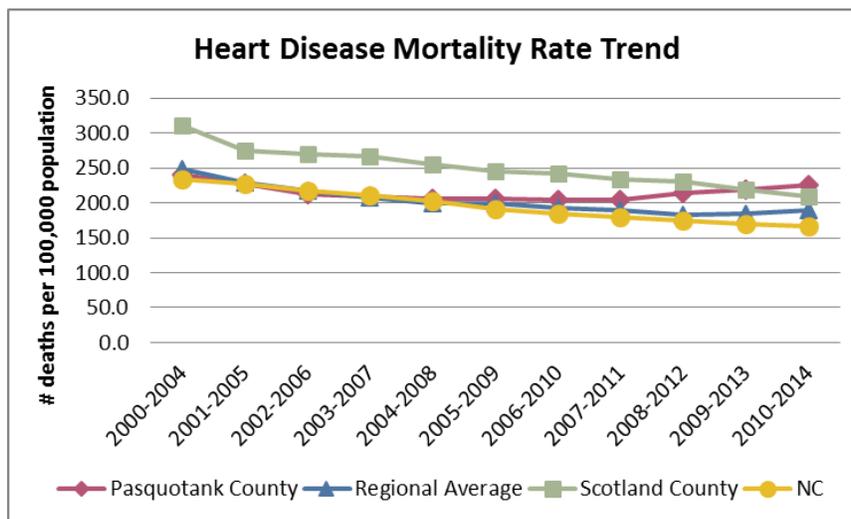
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Heart Disease Mortality Rate Trend

The figure below displays the heart disease mortality rate trend over time.

- The heart disease mortality rate fell significantly in all jurisdictions over the period cited except Pasquotank County. The heart disease mortality rate for Pasquotank County fell between 2000-2004 and 2006-2010, after which time it has risen steadily. By 2010-2014 the heart disease mortality rate in Pasquotank County was 226.3, only 6% lower than 240.9, the county rate in 2000-2004. (At the state level, the heart disease mortality rate fell 29% overall in the same period.)

Figure 24. Overall Heart Disease Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Heart Disease Mortality

The following table presents heart disease mortality data for 2010-2014, stratified by race.

- Due to below-threshold numbers of heart disease deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- In Pasquotank County the heart disease mortality rate among African American non-Hispanics (251.1) was 15% higher than the rate among white non-Hispanics (219.3).

Table 122. Race/Ethnicity-Specific Heart Disease Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	335	219.3	182	251.1	1	n/a	2	n/a	1	n/a	521	226.3
Regional Average	159	188.7	74	229.8	0	n/a	1	n/a	1	n/a	235	189.9
Scotland County	264	207.7	132	202.9	33	263.6	2	n/a	1	n/a	432	208.6
State of NC	67,699	163.8	17,190	190.0	863	190.4	397	70.5	550	52.7	86,699	165.9

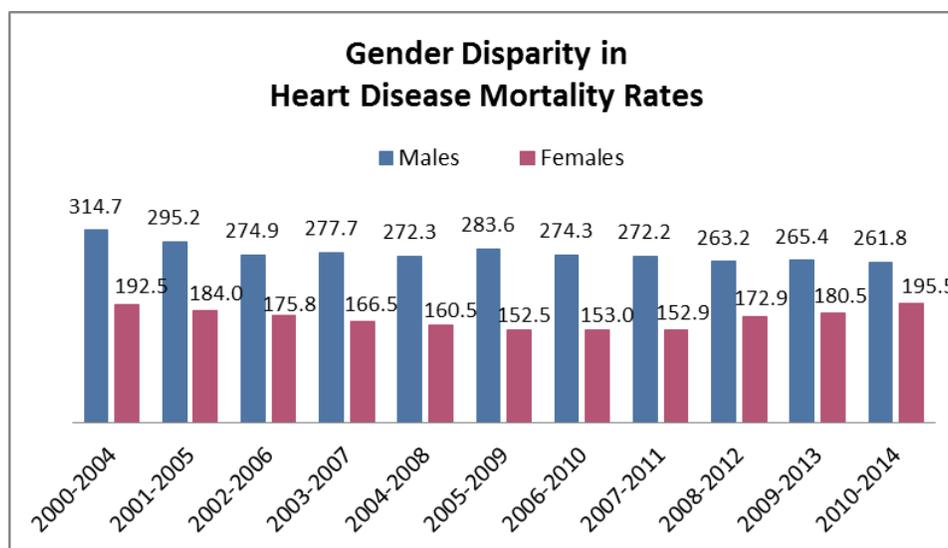
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Heart Disease Mortality

The figure below presents gender-stratified heart disease mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- It appears that there is a long-standing gender difference in heart disease mortality in Pasquotank County. The mortality rate among males has been consistently higher than the mortality rate among females, and the rate among males has changed very little since 2002-2006
- While the heart disease mortality rate among men in Pasquotank County has changed little since 2002-2006, the rate for females has risen most periods since 2005-2009, especially in the last three aggregate periods.

Figure 25. Sex-Specific Heart Disease Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2016), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Cancer

Cancer is a term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells also can spread to other parts of the body through the blood and lymph systems. If the disease remains unchecked, it can result in death (59).

Total Cancer

Total cancer (cancers of all types) was the second-leading cause of death in Pasquotank County in the 2010-2014 period (cited previously).

Malignant Neoplasm Hospitalizations

The table below presents the inpatient hospital discharge rate trend for malignant neoplasms.

- The malignant neoplasm discharge rate in Pasquotank County was the lowest or second-lowest among comparators in every year cited. Statewide, hospitalizations for this diagnosis decreased over time, the same general pattern was noted in Pasquotank County.

Table 123. All Malignant Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	3.2	3.1	3.3	3.3	2.7	2.7	2.5	2.2	2.3	2.4
<i>Regional Average</i>	3.6	3.4	3.5	2.9	2.9	2.4	2.4	2.4	2.2	2.4
Scotland County	4.6	4.5	4.8	3.7	3.2	3.2	3.5	3.5	3.8	4.0
<i>State of NC</i>	3.9	3.9	3.9	3.6	3.4	3.3	3.2	3.0	2.9	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with diagnoses of neoplasm (ICD-9 Codes 140-239).

- Over the period cited, 0.1% of all ED discharges and 2.8% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of neoplasm (cancer).

Table 124. Hospital Discharges, Pasquotank County Residents: All Malignant Neoplasms (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	27	0.1	26	0.1	533	0.1
IP	84	2.6	99	3.0	183	2.8

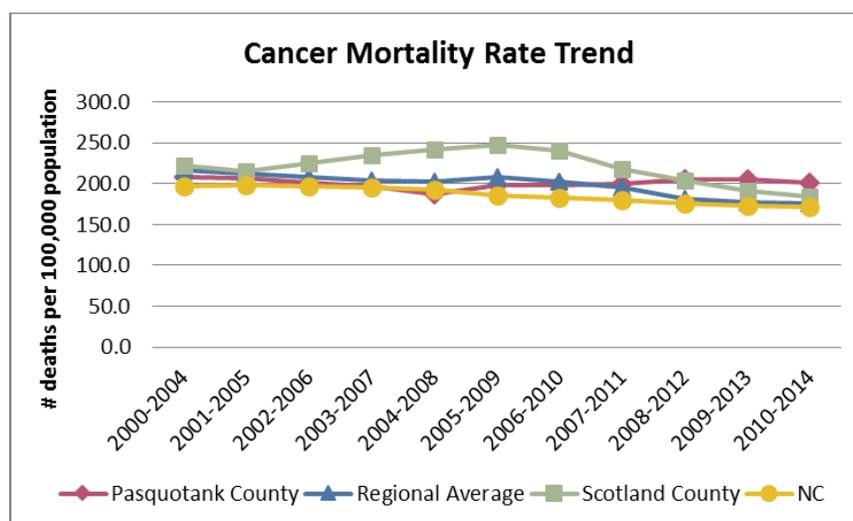
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Total Cancer Mortality Rate Trend

The figure below displays total cancer mortality rate trend over time.

- Throughout much of the period cited the total cancer mortality rate in Pasquotank County exceeded the comparable rates for the region and the state.
- The total cancer mortality rate for Pasquotank County fell by only 3% overall (from 208.1 to 201.2) between 2002-2004 and 2010-2014. At the state level, the total cancer mortality rate fell 13% overall in the same period.

Figure 26. Overall Total Cancer Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Total Cancer Mortality

The next table presents total cancer mortality data stratified by race.

- Due to below-threshold numbers of total cancer deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- In Pasquotank County the total cancer mortality rate among African American non-Hispanics (186.8) was 12% lower than the comparable rate among white non-Hispanics (212.9).

Table 125. Race/Ethnicity-Specific Total Cancer Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	322	212.9	139	186.8	0	n/a	1	n/a	2	n/a	464	201.2
Regional Average	156	174.2	68	187.6	0	n/a	0	n/a	1	n/a	225	175.1
Scotland County	242	189.4	128	177.5	23	190.9	2	n/a	1	n/a	396	184.1
State of NC	71,216	169.9	18,985	199.4	798	159.7	681	97.8	862	67.1	92,542	171.8

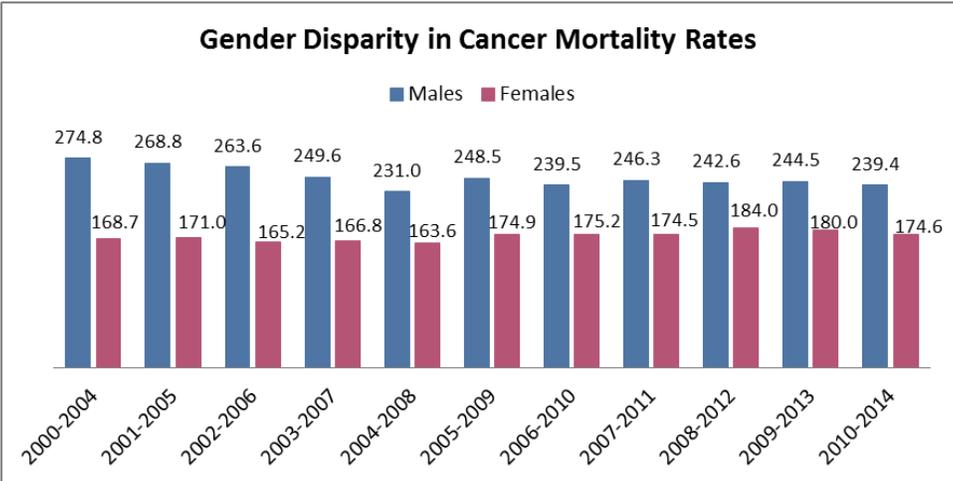
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Total Cancer Mortality

The table below depicts gender-stratified total cancer mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- It appears that there is a long-standing gender difference in total cancer mortality in Pasquotank County. The mortality rate among males has been consistently higher than the mortality rate among females.
- The total cancer mortality rate for males has decreased over the period cited, while the rate for females appears to have increased.

Figure 27. Sex-Specific Total Cancer Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

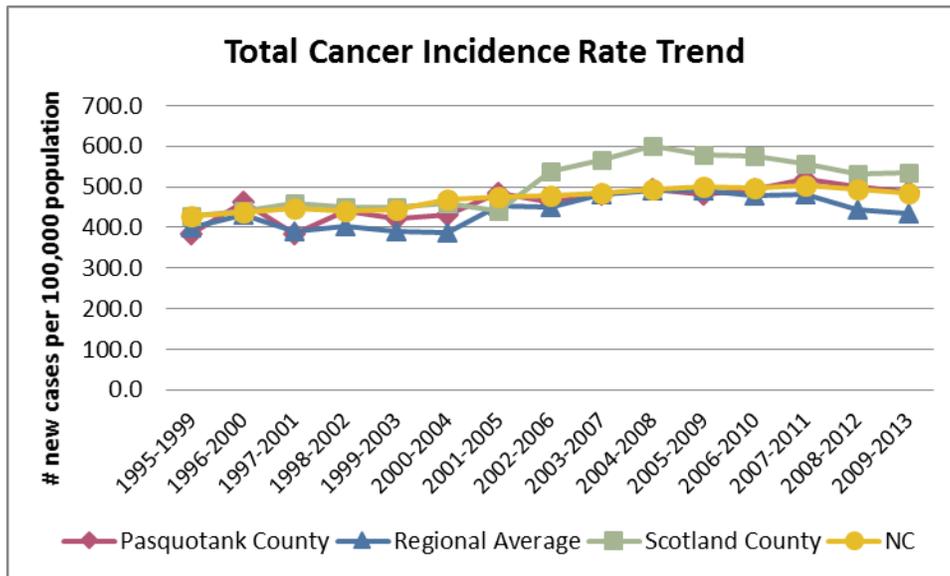
Total Cancer Incidence

Since total cancer is a significant cause of death, it is useful to examine patterns in the development of new cases. The statistic important to understanding the growth of a health problem is *incidence*, the population-based rate at which new cases of a disease occur and are diagnosed (methodology for which was described previously). Cancer incidence rates used in this report were obtained from the NC 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.

The following figure plots the incidence rate trend for total cancer.

- The total cancer incidence rate in Pasquotank County fluctuated over time, but increased 27% overall, from 383.8 in 1995-1999 to 489.0 in 2009-2013.
- The total cancer incidence rate for the state of NC increased gradually over the period cited, and was 13% higher in 2009-2013 (483.4) than in 1995-1999 (429.4).

**Figure 28. Overall Total Cancer Incidence Rate Trend
(Aggregate Periods 1995-1999 through 2009-2013)**



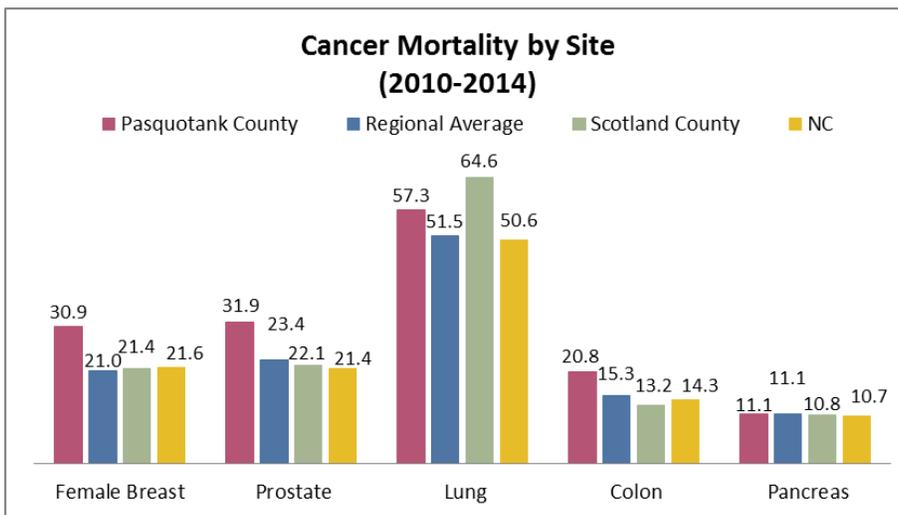
Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); <http://www.schs.state.us.nc/SCHS/CCR/reports.html>.

To this point the discussions of cancer mortality and incidence have focused on figures for total cancer. In Pasquotank County, as throughout the state of NC, there are four (or five) site-specific cancers that cause most cancer deaths: breast cancer, colon cancer, lung cancer, prostate cancer, and, sometimes, pancreas cancer. It should be noted that males also can have breast cancer, but since the number of cases tends to be small, the mortality rates for breast cancer (and prostate cancer) used here are gender-specific.

The following two figures present age-adjusted *mortality rate* data and *incidence rate* data for the four major site-specific cancers for the most recent aggregate periods.

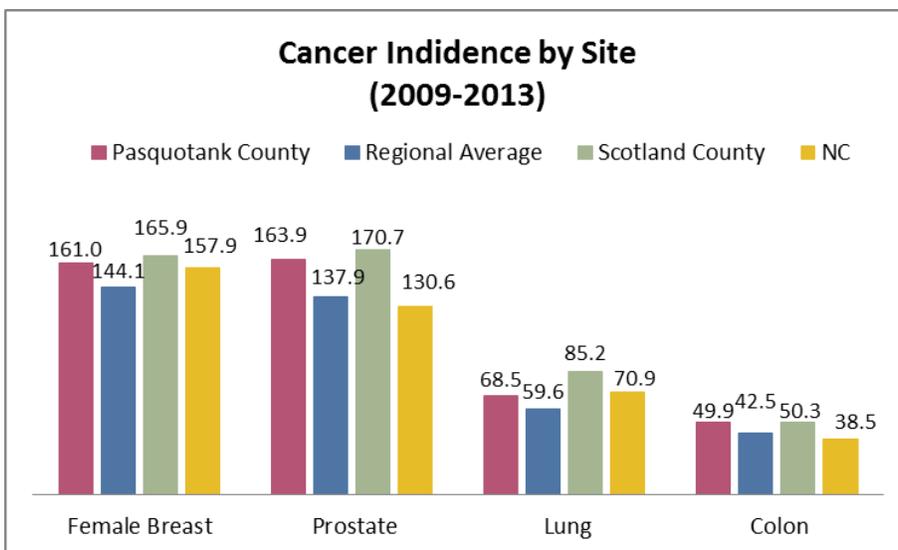
- In Pasquotank County, in 2010-2014 the site-specific cancer with the highest *mortality rate* was lung cancer, followed by prostate cancer, female breast cancer, colon cancer, and pancreas cancer.
- In Pasquotank County, in 2009-2013 the site specific cancer with the highest *incidence rate* was prostate cancer, followed by female breast cancer, lung cancer, and colon cancer.

Figure 29. Mortality Rates for Four Major Site-Specific Cancers (Aggregate Period, 2010-2014)



Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (2016). 2010-2014 NC Resident Race/Ethnicity and Sex-Specific Age-Adjusted Death Rates (counties and cancer sites as indicated); <http://www.schs.state.nc.us/schs/data/databook/>.

Figure 30. Incidence Rates for Four Major Site-Specific Cancers (Aggregate Period 2009-2013)



Source: NC State Center for Health Statistics, Cancer Data, Annual Reports. NC Cancer Incidence Rates 2009-2013, All Counties by Specified Site. http://www.schs.state.nc.us/data/cancer/incidence_rates.htm.

Multi-year mortality and incidence rate trends for these site-specific cancers will be presented subsequently, as each cancer type is discussed separately. The cancer topics are presented in decreasing order of site-specific cancer mortality rates in Pasquotank County: lung cancer, prostate cancer, female breast cancer, and colon cancer.

Lung Cancer

The category of cancer referred to as lung cancer traditionally *also* includes cancers of the trachea and bronchus.

Lung, Trachea and Bronchus Cancer Hospitalizations

The table below summarizes hospital discharge rate data for malignant trachea, bronchus and lung neoplasms. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data relative to lung cancer is not included here.

- The hospital discharge rate for lung cancer in Pasquotank County was variable between 2005 and 2014; the comparable state rate fell 33% over the same period.

Table 126. Malignant Trachea, Bronchus, Lung Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	0.5	0.4	0.6	0.7	0.4	0.5	0.6	0.5	0.4	0.6
<i>Regional Average</i>	0.5	0.5	0.7	0.5	0.4	0.5	0.4	0.5	0.3	0.5
Scotland County	0.5	0.9	0.5	0.8	0.4	0.6	0.7	0.4	0.6	0.9
State of NC	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence;

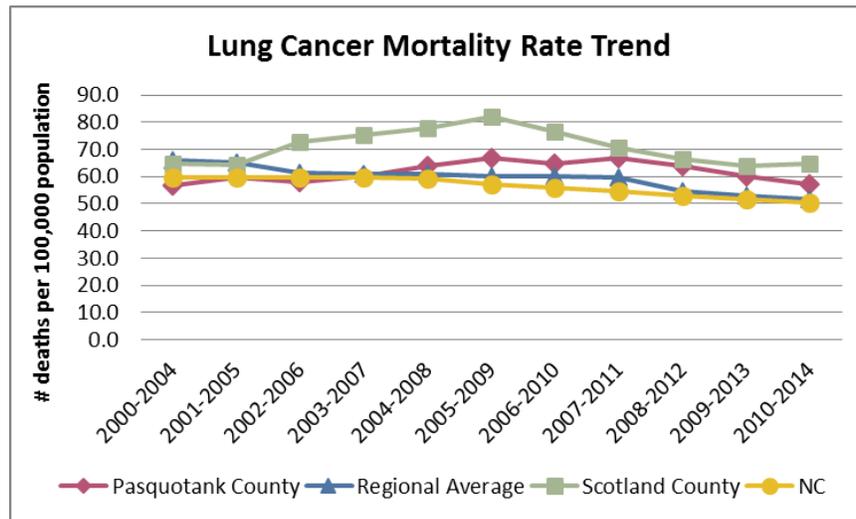
<http://www.schs.state.nc.us/SCHS/data/databook/>.

Lung Cancer Mortality Rate Trend

The following figure plots the lung cancer mortality rate trend over time.

- Over the period cited, lung cancer mortality rates fell overall in NC and the ARHS region, but rose slightly overall in Pasquotank County and Scotland County.
- The lung cancer mortality rate for Pasquotank County increased by 1% overall (from 56.6 to 57.3) between 2002-2004 and 2010-2014, with several periods of elevated rates in between. At the state level, the lung cancer mortality rate fell 15% overall in the same period.

**Figure 31. Overall Lung Cancer Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Lung Cancer Mortality

The following table presents lung cancer mortality data for the 2010-2014 aggregate period, stratified by race.

- Due to below-threshold numbers of lung cancer deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- In Pasquotank County the lung cancer mortality rate among African American non-Hispanics (45.3) was 31% lower than the comparable rate among white non-Hispanics (65.2).

**Table 127. Race/Ethnicity-Specific Lung Cancer Mortality
(Aggregate Period 2010-2014)**

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	99	65.2	34	45.3	0	n/a	0	n/a	0	n/a	133	57.3
Regional Average	51	59.4	17	44.2	0	n/a	0	n/a	0	n/a	67	51.5
Scotland County	89	69.8	38	57.4	9	n/a	1	n/a	0	n/a	137	64.6
State of NC	22,161	52.0	4,888	50.9	273.0	53.0	157	22.7	112	10.3	27,591	50.6

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

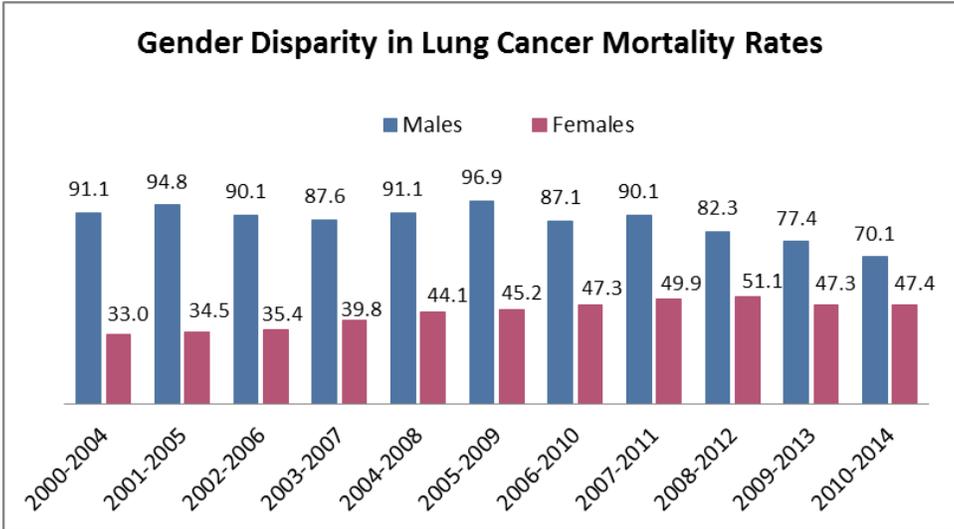
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Lung Cancer Mortality

The following figure plots gender-stratified lung cancer mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- The lung cancer mortality rate for Pasquotank County males traditionally has been higher than the comparable rate for females, but the “gap” has been narrowing.
- The lung cancer mortality rate among Pasquotank County males fell overall over the period cited, from 91.1 in 2000-2004 to 70.1 in 2010-2014, a 23% decrease.
- The lung cancer mortality rate among Pasquotank County females increased overall from 33.0 in 2000-2004 to 47.4 in 2010-2014, a 44% increase.

Figure 32. Sex-Specific Lung Cancer Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



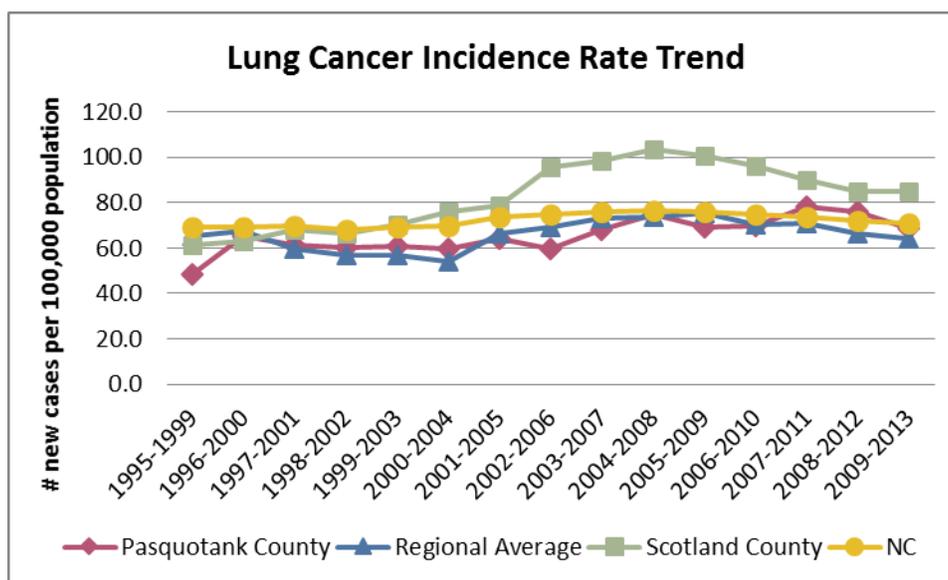
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2006-2016), Mortality, NC Resident Race-Specific and Sex-Specific Age-Adjusted Death Rates, by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Lung Cancer Incidence

The following figure plots the incidence rate trend for lung cancer.

- Despite year-to-year fluctuation, lung cancer incidence rates changed very little overall in the region and the state between 1995-1999 and 2009-2013. Lung cancer incidence rates in both counties increased overall over the period cited, by 41% in Pasquotank County and by 39% in Scotland County.
- Sometimes increases in incidence are noted after major screening campaigns. It is not known whether or not increased screening activity played a role in the lung cancer incidence changes in these county jurisdictions, especially since screenings for breast, prostate and colon cancer are more common than screenings for lung cancer.

**Figure 33. Lung Cancer Incidence Rate Trend
(Aggregate Periods 1995-1999 through 2009-2013)**



Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); <http://www.schs.state.us.nc/SCHS/CCR/reports.html>.

Prostate Cancer

Prostate Cancer Hospitalizations

The table below summarizes hospital discharge rate data for malignant neoplasms of the prostate. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

- The hospital discharge rates for prostate cancer in Pasquotank County and the state of NC were variable throughout the period cited. County rates were often unstable.

**Table 128. Malignant Prostate Neoplasms Hospital Discharge Rate Trend
(2005-2014)**

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.3	0.1
Regional Average	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Scotland County	0.6	0.4	0.5	0.4	0.4	0.4	0.6	0.4	0.2	0.4
State of NC	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

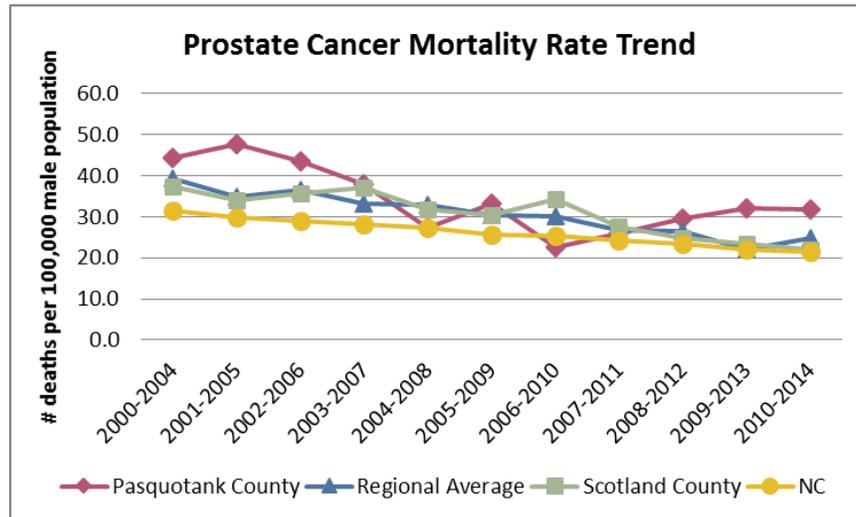
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Prostate Cancer Mortality Rate Trend

The following figure plots the prostate cancer mortality rate trend over time.

- The prostate cancer mortality rate in Pasquotank County was erratic over the period cited, due to small numbers of cases and unstable rates, but nevertheless appears to have decreased over time.
- The NC prostate cancer mortality rate decreased by 32% over the period cited, from 31.6 in 2000-2004 to 21.4 in 2010-2014.

Figure 34. Overall Prostate Cancer Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Prostate Cancer Mortality

The table below presents prostate cancer mortality rate data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of prostate cancer deaths among racially-stratified populations in all jurisdictions except NC, mortality rates for those groups were suppressed.
- Statewide, the prostate cancer mortality rate for African American non-Hispanic males (44.2) was 2.5 times the comparable rate for white non-Hispanic males (17.9).

Table 129. Race/Ethnicity-Specific Prostate Cancer Mortality Rate (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Male Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	15	n/a	13	n/a	0	n/a	1	n/a	0	n/a	29	31.9
Regional Average	7	n/a	6	n/a	0	n/a	0	n/a	0	n/a	13	24.8
Scotland County	12	n/a	4	n/a	0	n/a	0	n/a	0	n/a	16	22.1
State of NC	2,939	17.9	1,305	44.2	50	32.8	11	n/a	33	9.6	4,338	21.4

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

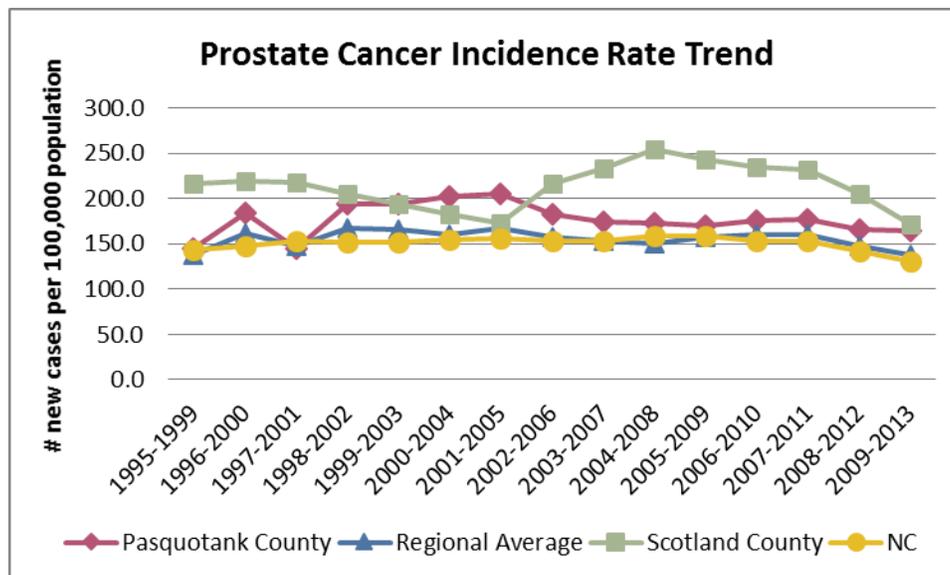
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Prostate Cancer Incidence

The following figure plots the incidence rate trend for prostate cancer.

- The prostate cancer incidence rate in Pasquotank County was higher than the state and regional rates throughout the period cited.
- The prostate cancer incidence rate in Pasquotank County rose by 13% overall between 1995-1999 (144.6) and 2009-2013 (163.9).

Figure 35. Prostate Cancer Incidence Rate Trend (Aggregate Periods 1995-1999 through 2009-2013)



Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); <http://www.schs.state.us.nc/SCHS/CCR/reports.html>.

It is not known whether or not increased screening activity played a role in any of the increases in prostate cancer incidence.

Female Breast Cancer

For purposes of this report, breast cancer pertains exclusively to women, although males can and do contract the disease. There were no breast cancer deaths among males in Pasquotank County in the 2010-2014 period; there also were no breast cancer deaths among males statewide. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

Breast Cancer Hospitalizations

The following table summarizes state inpatient hospital discharge rate data for female breast cancer.

- Hospital discharge rates for breast cancer in the two counties were frequently unstable due to small numbers of hospitalizations.
- Statewide, the discharge rate for female breast cancer was steady at 0.2 until 2011 when it fell to (and remained at) 0.1.

Table 130. Malignant Female Breast Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	0.3	0.2	0.2	0.3	0.2	0.3	0.1	0.1	0.1	0.2
<i>Regional Average</i>	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1
Scotland County	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.3	0.1	0.1
State of NC	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

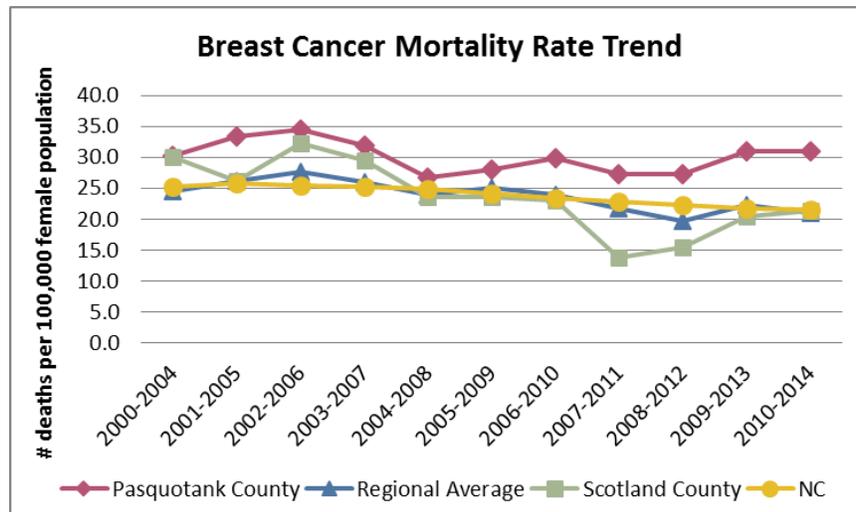
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Breast Cancer Mortality Rate Trend

The following figure displays the female breast cancer mortality rate trend over time.

- The breast cancer mortality rate in Pasquotank County was variable over the period cited, but was higher than the state or regional rates in every aggregate period.
- The Pasquotank County breast cancer mortality rate in 2010-2014 (30.9) was 2% higher than the rate in 2000-2004 (30.3).
- The NC breast cancer mortality rate declined 14% over the period cited, from 25.2 to 21.6.

Figure 36. Overall Female Breast Cancer Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Breast Cancer Mortality

The next table presents breast cancer mortality rate data for the 2010-2014 aggregate period, stratified by race.

- Due to below-threshold numbers of female breast cancer deaths among most racially-stratified populations, mortality rates for those groups were suppressed.
- Statewide, the breast cancer mortality rate for African American non-Hispanic females (29.0) was 43% higher than the comparable rate for white non-Hispanic females (20.3).

Table 131. Race/Ethnicity-Specific Female Breast Cancer Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Female Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	23	25.7	18	n/a	0	n/a	0	n/a	0	n/a	41	30.9
Regional Average	10	25.7	6	n/a	0	n/a	0	n/a	0	n/a	15	21.0
Scotland County	15	n/a	8	n/a	3	n/a	0	n/a	0	n/a	26	21.4
State of NC	4,645	20.3	1,678	29.0	43.0	15.0	15	11.6	74	9.1	6,491	21.6

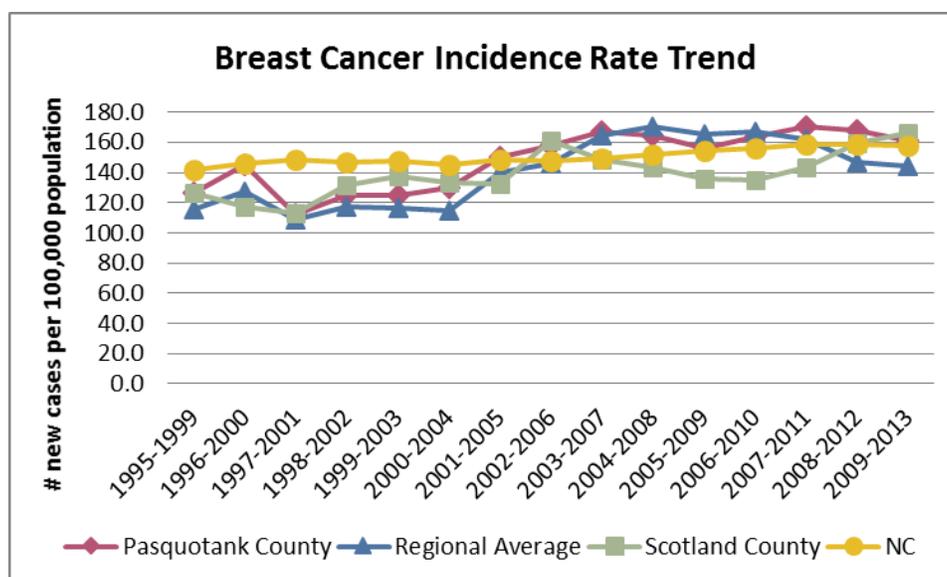
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Breast Cancer Incidence

The figure below plots the incidence rate trend for breast cancer.

- Breast cancer incidence rates increased overall in the period cited in every jurisdiction shown. In Pasquotank County the overall increase was 27%, from 126.7 in 1995-1999 to 161.0 in 2009-2013. The increase statewide in the same period was 12%.

Figure 37. Breast Cancer Incidence Rate Trend (Aggregate Periods 1995-1999 through 2009-2013)



Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); <http://www.schs.state.us.nc/SCHS/CCR/reports.html>.

Colon Cancer

The category of cancer referred to as colon cancer (sometimes referred to as *colorectal cancer*) traditionally *also* includes cancers of the rectum and anus.

Colon Cancer Hospitalizations

The table below summarizes hospital discharge rate data for malignant neoplasms of the colon, rectum and anus. Note that only inpatient data from the NC State Center for Health Statistics is used here; local hospital data revealed too few cases to report.

- The hospital discharge rates for colorectal cancer in Pasquotank County was variable over the period cited, and was the same in 2014 as in 2005. The NC rate has been static at 0.4 for several years.

Table 132. Malignant Colon, Rectum and Anus Neoplasms Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	0.4	0.6	0.4	0.4	0.6	0.5	0.5	0.4	0.4	0.4
<i>Regional Average</i>	0.5	0.7	0.6	0.5	0.5	0.3	0.4	0.4	0.4	0.4
Scotland County	0.5	0.4	0.7	0.4	0.7	0.4	0.3	0.4	0.4	0.6
State of NC	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

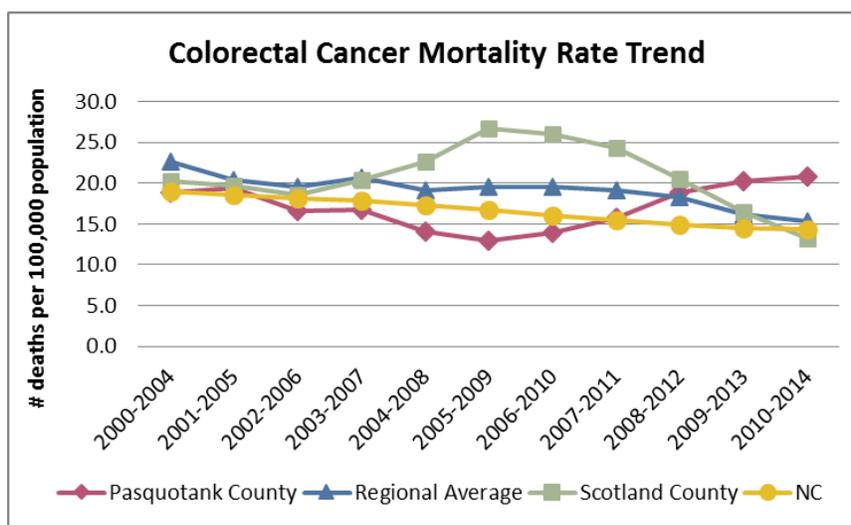
Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Colon Cancer Mortality Rate Trend

The following figure plots the colon cancer mortality rate trend over time.

- Over the period cited, the colorectal cancer mortality rates in all jurisdictions shown except Pasquotank County.
- The colorectal cancer mortality rate for Pasquotank County increased by 11% overall (from 18.8 to 20.8) between 2000-2004 and 2010-2014. At the state level, the colorectal cancer mortality rate fell 25% overall in the same period.

**Figure 38. Overall Colon Cancer Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Colon Cancer Mortality

The next table presents colorectal cancer mortality rates for the 2010-2014 aggregate period, stratified by race.

- Due to below-threshold numbers of colon cancer deaths among some racially stratified populations at the county level, mortality rates for those groups were suppressed.
- In Pasquotank County the colon cancer mortality rate among African American non-Hispanics was 33% higher than the rate among white non-Hispanics.
- Statewide, the colon cancer mortality rate for African American non-Hispanics was 51% higher than the comparable rate for white non-Hispanics.

**Table 133. Race/Ethnicity-Specific Colon Cancer Mortality
(Aggregate Period 2010-2014)**

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	28	19.5	20	26.0	0	n/a	0	n/a	0	n/a	48	20.8
Regional Average	13	19.1	7	26.0	0	n/a	0	n/a	0	n/a	20	15.3
Scotland County	21	16.6	7	n/a	1	n/a	0	n/a	0	n/a	29	13.2
State of NC	5,550	13.4	1,907	20.3	65	12.9	48	6.2	62	4.8	7,632	14.3

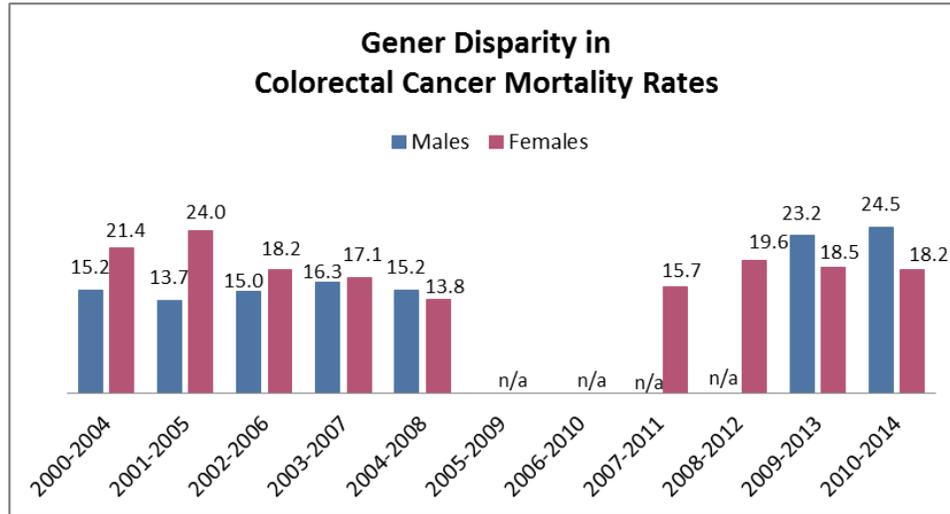
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Colon Cancer Mortality

The figure below plots gender-stratified colorectal cancer mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- According to the data plot below, the colorectal cancer mortality rate in Pasquotank County was sometimes higher (and stable) among males, sometimes higher (and stable) among females, and sometimes unstable and/or suppressed among both males and females.

Figure 39. Sex-Specific Colorectal Cancer Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)

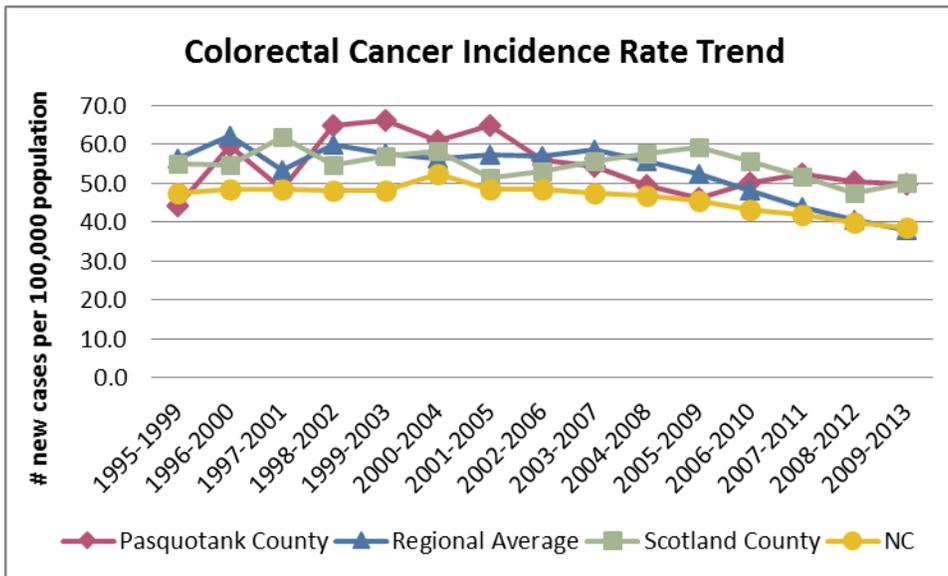


Colon Cancer Incidence

The following figure plots the incidence rate trend for colon cancer.

- Colorectal cancer incidence rates decreased in all jurisdictions over the period cited except Pasquotank County.
- In Pasquotank County the colorectal cancer incidence rate rose slightly over the period cited, from 44.4 in 1995-1999 to 49.9 in 2009-2013, an increase of 12%.
- At the state level, the colon cancer incidence rate fell from 47.4 in 1995-1999 to 38.5 in 2009-2013, an overall decrease of 19%.

**Figure 40. Colon Cancer Incidence Rate Trend
(Aggregate Periods 1995-1999 through 2009-2013)**



Source: NC State Center for Health Statistics, Health Data, Cancer, Cancer Data Available from SCHS, Annual Reports, NC Cancer Incidence Rates for All Counties by Specified Site (Years as noted); <http://www.schs.state.us.nc/SCHS/CCR/reports.html>.

Chronic Lower Respiratory Disease (CLRD)

Chronic lower respiratory disease (CLRD) is composed of three major diseases, chronic bronchitis, emphysema, and asthma, all of which are characterized by shortness of breath caused by airway obstruction and sometimes lung tissue destruction. The obstruction is irreversible in chronic bronchitis and emphysema, reversible in asthma. Before 1999, CLRD was called *chronic obstructive pulmonary disease (COPD)*. Some in the field still use the designation COPD, but limit it to mean chronic bronchitis and emphysema only. In the US, tobacco use is a key factor in the development and progression of CLRD/COPD, but exposure to air pollutants in the home and workplace, genetic factors, and respiratory infections also play a role (60).

CLRD was the third leading cause of death in Pasquotank County in the 2010-2014 period (cited previously).

The following table presents the inpatient hospital discharge rate trend data for COPD (the term still used by some data-compiling organizations). According to this data, COPD caused a significant proportion of illness-related hospitalizations among Pasquotank County residents over time, sometimes at a higher rate than in the other jurisdictions.

Table 134. COPD Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	6.0	5.4	5.2	5.3	3.7	2.9	4.2	3.0	2.6	2.8
<i>Regional Average</i>	4.3	3.8	4.0	4.3	3.3	3.3	3.7	2.2	2.1	1.8
Scotland County	7.9	7.0	6.5	7.0	7.7	5.9	7.0	4.2	2.9	3.5
<i>State of NC</i>	3.5	3.2	3.1	3.4	3.4	3.2	3.2	2.1	2.0	1.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In the ICD-9 system, Chronic Obstructive Pulmonary Disease and Allied Conditions appear in the code range of 490-496. This category includes chronic bronchitis, emphysema, asthma, and other forms of chronic airway obstruction. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with a primary diagnosis of COPD and Allied Conditions (ICD-9 490-496xx).

- Over the period cited, 2.6% of all ED discharges and 4.4% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of COPD and Allied Conditions.

Table 135. Hospital Discharges, Pasquotank County Residents: COPD and Allied Conditions (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	733	2.8	656	2.5	1,389	2.6
IP	138	4.2	151	4.5	289	4.4

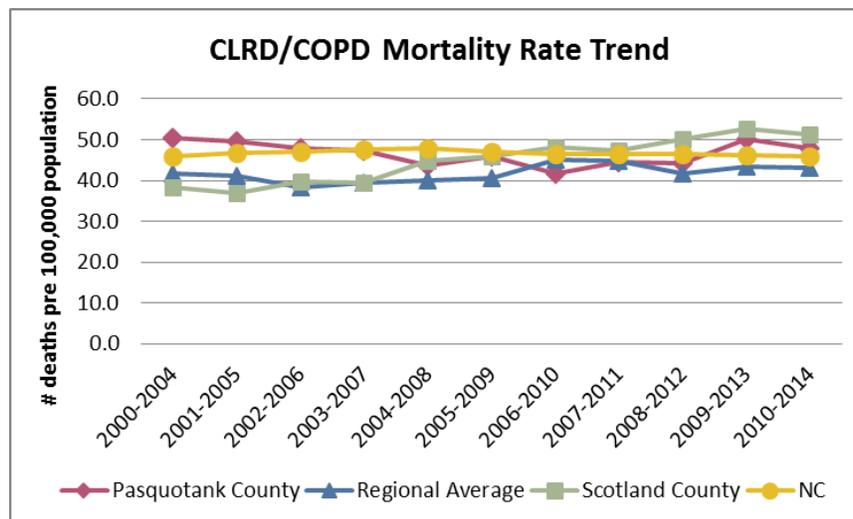
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital and Sentara Albemarle Medical Center.

CLRD Mortality Rate Trend

The figure below plots the CLRD mortality rate trend over time.

- The CLRD mortality rate in Pasquotank County, lower than the comparable rate for NC but higher than the ARHS regional rate through most of the interval cited, fell 5% overall, decreasing from 50.3 in 2000-2004 to 47.8 in 2010-2014.
- At the state level, the CLRD mortality rate was essentially unchanged over the period.

Figure 41. Overall CLRD Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in CLRD Mortality

The following table presents CLRD mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of CLRD disease deaths among some stratified populations, mortality rates were suppressed for those groups.
- Statewide the CLRD mortality rate for African American non-Hispanic persons was 45% lower than the rate for white non-Hispanic persons. The second-highest CLRD mortality rate statewide occurred among American Indian non-Hispanics.

Table 136. Race/Ethnicity-Specific CLRD Mortality (Aggregate Period 2010-2014)

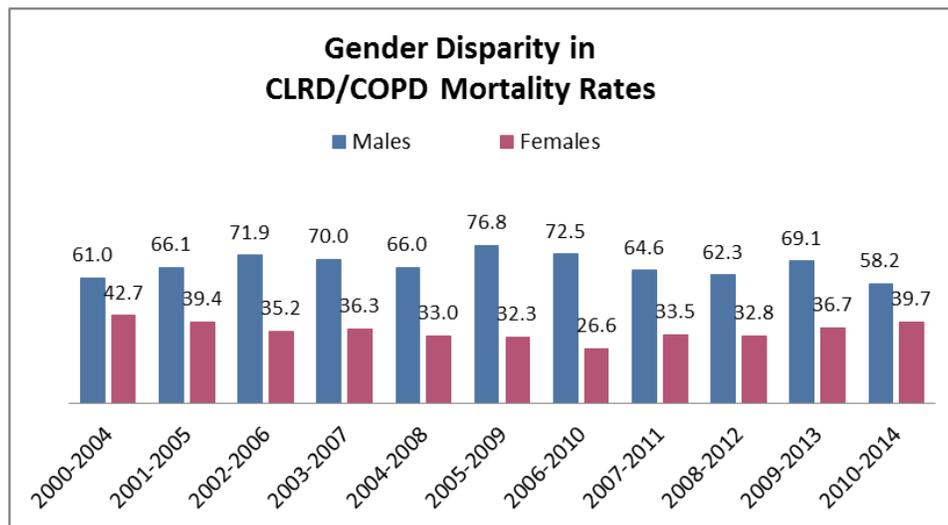
Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	92	60.5	17	n/a	0	n/a	0	n/a	0	n/a	109	47.8
<i>Regional Average</i>	44	51.2	8	28.3	0	n/a	0	n/a	0	n/a	52	43.2
Scotland County	72	55.0	26	39.5	10	n/a	0	n/a	0	n/a	108	51.3
State of NC	21,274	51.0	2,466	27.9	175.0	40.8	56	11.3	71	8.7	24,042	46.0

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The figure below plots gender-stratified CLRD mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- It appears that there has been a long-standing gender difference in CLRD mortality rates in Pasquotank County. The CLRD mortality rate among Pasquotank County males has been up to nearly 3 times the comparable rate for females, but the gap is narrowing. For 2010-2014 the rate for males was 33% higher than the rate for females.

Figure 42. Sex-Specific CLRD Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Cerebrovascular Disease

Cerebrovascular disease describes the physiological conditions that lead to stroke. Strokes happen when blood flow to the brain stops and brain cells begin to die. There are two types of stroke. Ischemic stroke (the more common type) is caused by a blood clot that blocks or plugs a blood vessel in the brain. The other kind, called hemorrhagic stroke, is caused by a blood vessel that breaks and bleeds into the brain (61).

Cerebrovascular disease was the fourth leading cause of death in Pasquotank County in the 2010-2014 period (cited previously).

Cerebrovascular Disease Hospitalizations

The table below presents the inpatient hospital discharge rate trend data for cerebrovascular disease (CVD). According to this data, CVD caused a significant proportion of illness-related hospitalizations among Pasquotank County residents over time, but for the most part at a lower rate than in the other jurisdictions.

Table 137. Cerebrovascular Disease Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	3.2	3.3	2.9	2.4	2.6	2.5	2.2	2.4	2.9	2.0
<i>Regional Average</i>	3.1	3.0	2.8	2.5	2.4	2.8	2.2	2.4	2.7	2.7
Scotland County	4.6	4.4	3.8	4.5	5.3	4.5	4.9	4.3	4.1	3.5
<i>State of NC</i>	3.2	3.1	3.1	3.0	3.1	3.1	3.0	3.0	2.9	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In the ICD-9 system, cerebrovascular disease is in the category Diseases of the Circulatory System, within the specific ICD-9 Code range of 430-438. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with a diagnosis of cerebrovascular disease (ICD-9 430-438xx).

- Over the period cited, 0.2% of all ED discharges and 2.9% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of cerebrovascular disease.

Table 138. Hospital Discharges, Pasquotank County Residents: Cerebrovascular Disease (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	38	0.1	50	0.2	88	0.2
IP	115	3.5	78	2.3	193	2.9

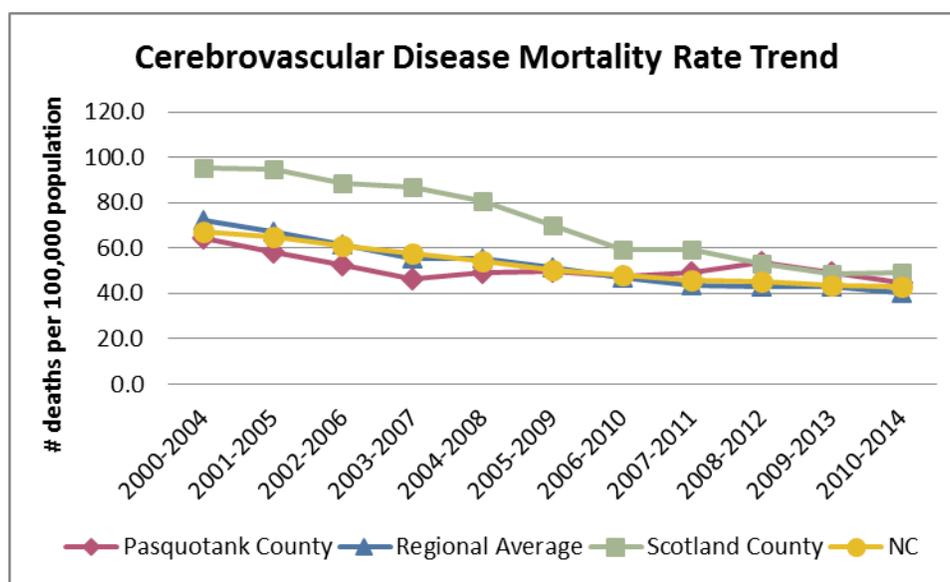
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital and Sentara Albemarle Medical Center.

Cerebrovascular Disease Mortality Rate Trend

The figure below plots the CVD mortality rate trend over time.

- The CVD mortality rate in Pasquotank County was lower than the comparable rates for the region and the state from 2000-2004 through 2007-2011, when it began to exceed both.
- CVD mortality rates in every jurisdiction fell over the period cited.
- The Pasquotank County CVD mortality rate in 2010-2014 was 44.6, 31% lower than the rate in 2000-2004 (64.5).
- The CVD mortality rate for NC as a whole decreased 25% over the period cited.

Figure 43. Overall Cerebrovascular Disease Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Cerebrovascular Disease Mortality

The table below presents CVD mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of CVD disease deaths among some stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups.
- In Pasquotank County the CVD mortality rate for African American non-Hispanic persons (59.4) was 34% higher than the rate for white non-Hispanic persons (39.0).

Table 139. Race/Ethnicity-Specific Cerebrovascular Disease Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	60	39.0	41	59.4	0	n/a	0	n/a	0	n/a	101	44.6
<i>Regional Average</i>	32	41.6	18	56	0	n/a	0	n/a	0	n/a	50	40.9
Scotland County	66	50.4	31	49.1	4	n/a	0	n/a	0	n/a	101	49.2
State of NC	16,713	40.6	4,870	55.8	158	37.2	167	30.9	208	19.3	22,116	43.0

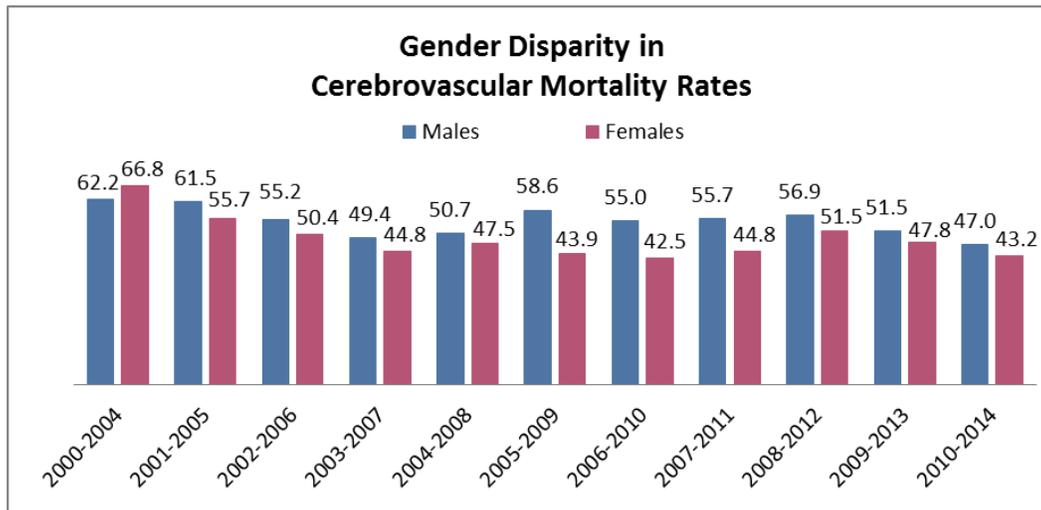
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Cerebrovascular Disease Mortality

The figure below plots gender-stratified CVD mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- The graph demonstrates that the CVD mortality rate among Pasquotank County males exceeded the rate among Pasquotank County for every period cited except the first. The rates for both sexes decreased overall over time.

Figure 44. Sex-Specific Cerebrovascular Disease Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Alzheimer's Disease

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 (62).

Alzheimer's disease was the fifth leading cause of death in Pasquotank County in the 2010-2014 aggregate period (cited previously).

Alzheimer's Disease Hospitalizations

At the present time the NC SCHS does not track Alzheimer's disease-related hospitalizations.

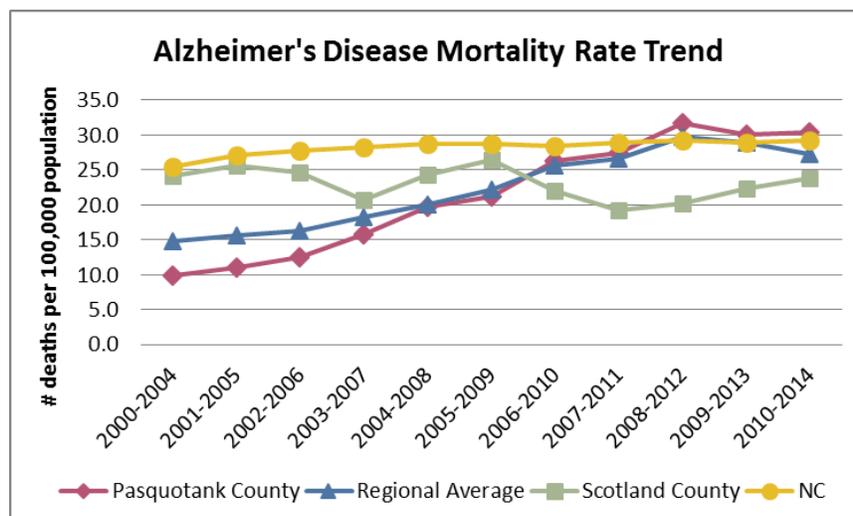
Alzheimer's disease is coded 331.0 in the ICD-9 system; however, it can be difficult to diagnose and may first be identified as another form of dementia. There were no ED or IP discharges of Pasquotank County residents from area hospitals coded with that primary diagnosis in 2013 or 2014.

Alzheimer's Disease Mortality Rate Trend

The figure below plots the Alzheimer's disease mortality rate trend over time.

- The Alzheimer's disease mortality rate in Pasquotank County was lower than the rate for NC throughout much of the interval cited. However, the Pasquotank County rate rose dramatically by 207% over the period, from 9.9 in 2000-2004 to 30.4 in 2010-2014, the highest rate among comparators. Over the same period the NC rate rose 15%.

Figure 45. Overall Alzheimer's Disease Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Alzheimer’s Disease Mortality

The table below presents Alzheimer’s disease mortality data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of Alzheimer’s disease deaths among many stratified populations, mortality rates were suppressed for those groups.
- In Pasquotank County the Alzheimer’s disease mortality rate among African American non-Hispanic residents (30.3) was 3% lower than the comparable rate among white non-Hispanic residents (31.3).
- Statewide, the Alzheimer’s disease mortality rate was highest among American Indian non-Hispanics, followed by white non-Hispanics and African American non-Hispanics.

Table 140. Race/Ethnicity-Specific Alzheimer’s Disease Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	50	31.3	22	30.3	0	n/a	0	n/a	0	n/a	72	30.4
<i>Regional Average</i>	22	32.1	12	33.8	0	n/a	0	n/a	0	n/a	34	27.3
Scotland County	34	25.4	14	n/a	1	n/a	0	n/a	0	n/a	49	23.9
State of NC	12,318	30.1	2,017	26.5	134	41.0	39	9.9	87	13.2	14,595	29.2

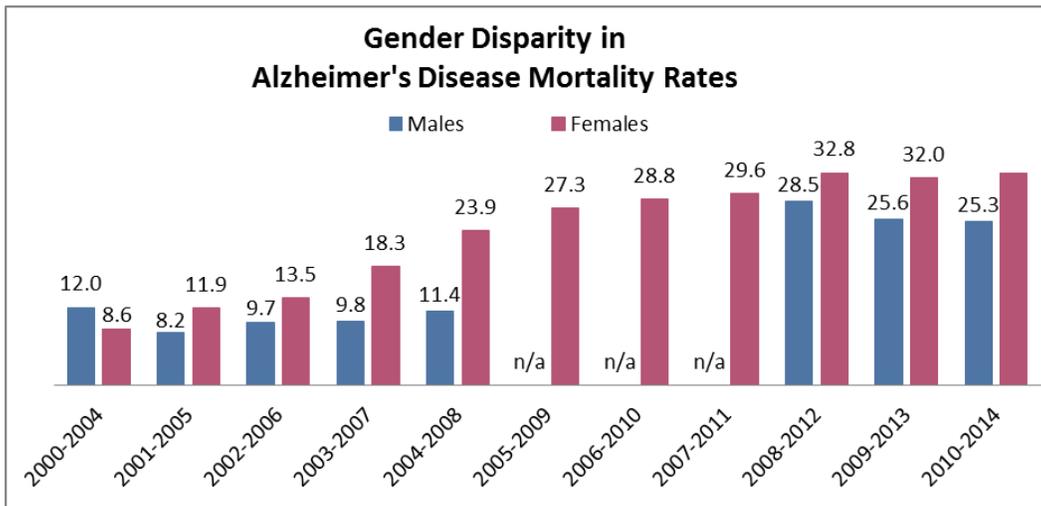
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Alzheimer’s Disease Mortality

The following figure plots gender-stratified Alzheimer’s disease mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- In Pasquotank County the Alzheimer’s disease mortality rates for females were significantly higher than the comparable rates among males. Note that all the rates for males were either unstable or suppressed due to below-threshold numbers of events. This disproportional pattern of gender-based Alzheimer’s disease mortality has been common throughout NC.

Figure 46. Sex-Specific Alzheimer’s Disease Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

All Other Unintentional Injury

This category includes death without purposeful intent due to poisoning, falls, burns, choking, animal bites, drowning, and occupational or recreational injuries; it expressly excludes unintentional injury due to motor vehicle crashes. (Death due to injury involving motor vehicles is a separate cause of death and will be covered subsequently.)

All other unintentional injury was the sixth leading cause of death in Pasquotank County in the 2010-2014 period (cited previously).

All Other Unintentional Injury Hospitalizations

In its customary reports in the public domain the NC State Center for Health Statistics separates mortality from injury due to unintentional motor vehicle crashes (“unintentional motor vehicle injury”) from injury due to unintentional *non*-motor vehicle events (“all other unintentional injury”). At the present time the Center does not provide inpatient hospitalization data specific to motor vehicle injury, but it *does* report hospitalization data for the broad category “injury and poisoning”. The table below presents trend data on inpatient hospitalization discharges for injury and poisoning hospitalizations.

- The inpatient hospitalization discharge rate for injury and poisoning In Pasquotank County was lower—usually *significantly* so—than the comparable rates in the comparator jurisdictions throughout the period cited.

Table 141. Injury and Poisoning Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	6.9	6.3	6.3	5.1	4.7	5.1	4.5	4.1	4.1	4.2
<i>Regional Average</i>	6.6	6.3	6.3	5.6	5.3	5.6	5.2	5.8	5.6	4.8
Scotland County	10.2	10.7	11.3	10.2	11.6	11.1	11.8	11.2	11.4	8.8
<i>State of NC</i>	8.5	8.6	8.6	8.5	8.3	8.2	8.2	8.1	7.7	7.6

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The large ICD-9 code category called *all injuries and poisonings* (ICD-9 Codes 800-999) includes injuries resulting from motor vehicle crashes as well as all other injuries. This category also covers poisoning from all sources, including drug overdoses.

The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with a primary diagnosis of Injury and Poisoning (ICD-9 800-999xx).

- Over the period cited, 18.8% of all ED discharges and 4.3% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of injury and poisoning.

Table 142. Hospital Discharges, Pasquotank County Residents: All Injury and Poisoning (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	5,152	19.4	4,858	18.3	10,010	18.8
IP	128	3.9	156	4.7	284	4.3

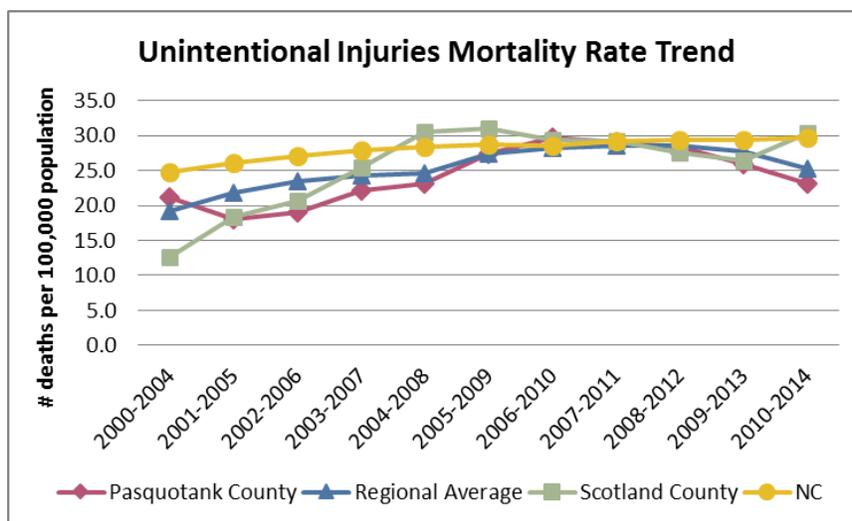
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

All Other Unintentional Injury Mortality Rate Trend

The figure below plots the all other unintentional injury mortality rate trend over time.

- The all other unintentional injury mortality rate in Pasquotank County rose steadily between 2001-2005 and 2006-2010 before falling again. Over the entire period cited, the county mortality rate rose 10% overall, from 21.1 in 2000-2004 to 23.2 in 2010-2014.
- At the state level, the all other unintentional injury mortality rate rose 19% over the period cited.

Figure 47. Overall All Other Unintentional Injury Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in All Other Unintentional Injury Mortality

The following table presents all other unintentional injury mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of all other unintentional injury deaths among some stratified populations, mortality rates were suppressed for those groups.

- The only racial group in Pasquotank County for which a stable rate can be calculated is white non-Hispanics, so no local rate comparisons are possible.
- At the state level, the all other unintentional injury mortality rate is highest among American Indian non-Hispanics (41.0), followed by white non-Hispanics (34.3) and African American non-Hispanics (19.9).

Table 143. Race/Ethnicity-Specific All Other Unintentional Injury Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	36	26.8	14	n/a	0	n/a	0	n/a	1	n/a	51	23.2
Regional Average	22	32.7	7	28.5	0	n/a	0	n/a	0	n/a	29	25.3
Scotland County	38	39.4	13	n/a	7	n/a	0	n/a	0	n/a	58	30.4
State of NC	12,247	34.3	1,963	19.9	217	41.0	86	11.7	278	11.9	14,791	29.6

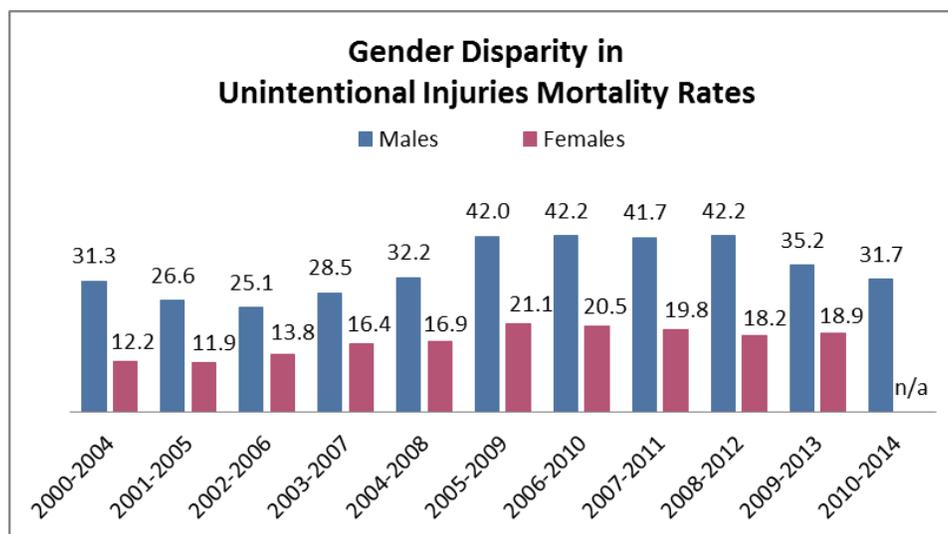
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in All Other Unintentional Injury Mortality

The figure below plots gender-stratified all other unintentional injury mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- This data appears to indicate a significant gender disparity in mortality, with males experiencing the higher rate. Rates for both sexes appeared to go through a phase of increase followed by decrease.

Figure 48. Sex-Specific All Other Unintentional Injury Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Diabetes Mellitus

Diabetes is a disease in which the body's blood glucose levels are too high due to problems with insulin production and/or utilization. Insulin is a hormone that helps glucose get to cells where it is used to produce energy. With Type 1 diabetes, the body does not make insulin. With Type 2 diabetes, the more common type, the body does not make or use insulin well. Without enough insulin, glucose stays in the blood. Over time, having too much glucose in the blood can damage the eyes, kidneys, and nerves. Diabetes can also lead to heart disease, stroke and even the need to remove a limb (63).

Diabetes was the seventh leading cause of death in Pasquotank County in 2010-2014 (cited previously).

Diabetes Mellitus Hospitalizations

The table below presents inpatient hospitalization discharge rate trend data for diabetes. The rates for Pasquotank County were lower than comparable NC rates in all but the first year cited.

Table 144. Diabetes Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	2.5	1.7	1.3	1.4	1.3	1.5	1.8	1.8	1.6	2.0
<i>Regional Average</i>	1.9	1.7	1.5	1.7	1.2	1.6	1.5	1.5	1.5	1.3
Scotland County	3.1	3.2	4.1	3.2	3.8	3.8	3.4	3.8	3.0	3.1
<i>State of NC</i>	1.8	1.8	1.9	1.8	1.8	1.9	2.0	1.9	1.9	1.9

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In ICD-9 coding, diabetes falls in the category Endocrine and Metabolic Diseases (ICD-9 Codes 240-279), with a specific ICD-9 Code of 250 for diabetes mellitus. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with a diagnosis of diabetes (ICD-9 250xx).

- Over the period cited, 0.5% of all ED discharges and 2.3% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of diabetes.

Table 145. Hospital Discharges, Pasquotank County Residents: Diabetes Mellitus (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	138	0.5	129	0.5	267	0.5
IP	72	2.2	78	2.3	150	2.3

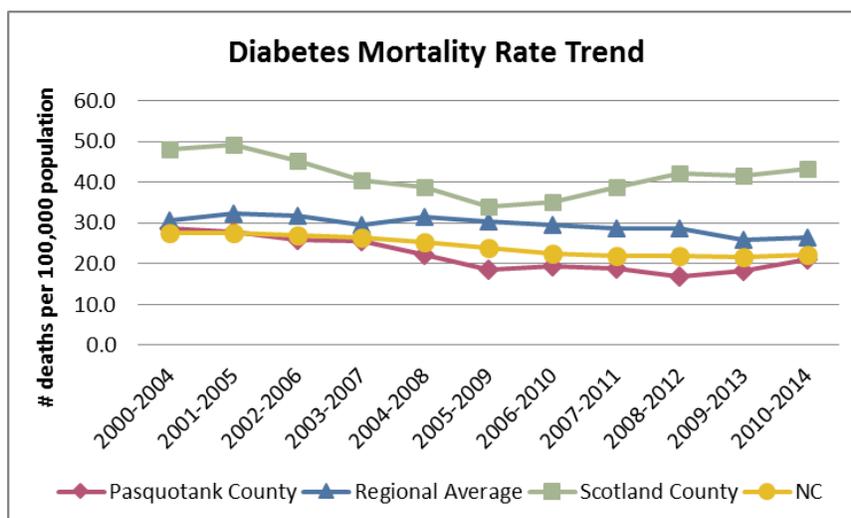
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital and Sentara Albemarle Medical Center.

Diabetes Mellitus Mortality Rate Trend

The figure below plots the diabetes mortality rate trend over time.

- The diabetes mortality rate in Pasquotank County was lower than the regional and state rates throughout most of the period cited.
- The Pasquotank County diabetes mortality rate decreased by 26% overall, from 28.7 in 2000-2004 to 21.2 in 2010-2014.
- The diabetes mortality rate for NC as a whole decreased 20% over the period cited.

**Figure 49. Overall Diabetes Mellitus Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Diabetes Mellitus Mortality

The following table presents diabetes mortality data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of diabetes deaths among some minority populations at the county-level, mortality rates were suppressed for these groups.
- In Pasquotank County the diabetes mortality rate among African American non-Hispanics (36.6) was more than double the comparable rate among white non-Hispanics (15.0).
- Statewide, the highest diabetes mortality rate occurs among American Indian non-Hispanics, followed by African American non-Hispanics and white non-Hispanics.

Table 146. Race/Ethnicity-Specific Diabetes Mellitus Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	22	15.0	27	36.6	0	n/a	0	n/a	0	n/a	49	21.2
<i>Regional Average</i>	16	28.2	18	53.1	0	n/a	0	n/a	0	n/a	34	26.5
Scotland County	36	28.7	47	69.4	8	n/a	0	n/a	0	n/a	91	43.3
<i>State of NC</i>	7,432	17.9	3,961	43.3	219	46.0	69	11.9	117	9.3	11,798	22.1

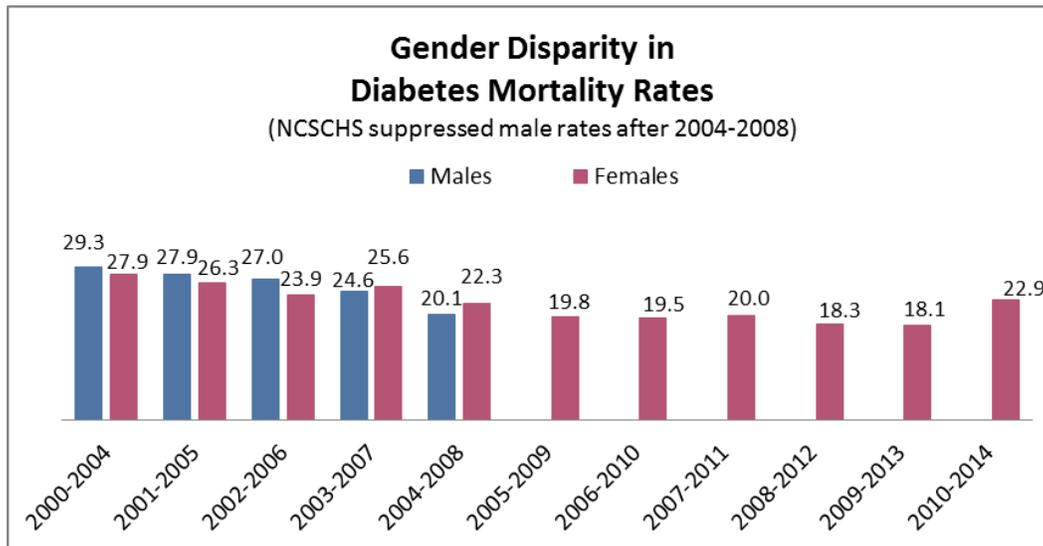
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Diabetes Mellitus Mortality

The figure below plots gender-stratified diabetes mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- While the diabetes mortality rate among Pasquotank County males was higher than the comparable rate among females for the first three periods cited, it appears that generally rates for females are higher and more likely to be stable. All rates for males in the county were suppressed after 2004-2008.

Figure 50. Sex-Specific Diabetes Mellitus Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Pneumonia and Influenza

Pneumonia and influenza are diseases of the lungs. Pneumonia is an inflammation of the lungs caused by either bacteria or viruses. Bacterial pneumonia is the most common and serious form of pneumonia and among individuals with suppressed immune systems it may follow influenza or the common cold. Influenza (the “flu”) is a contagious infection of the throat, mouth and lungs caused by an airborne virus (64).

Pneumonia/influenza was the eighth ranked cause of death in Pasquotank County in 2010-2014 (cited previously).

Pneumonia and Influenza Hospitalizations

The table below presents hospital discharge rate trend data. According to this data, pneumonia and influenza has consistently generated a higher discharge rate in Pasquotank County than the average state or regional average rate.

Table 147. Pneumonia and Influenza Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	5.2	4.0	3.1	3.2	2.4	2.7	3.3	2.6	2.5	2.2
<i>Regional Average</i>	4.1	3.5	2.6	3.0	2.9	2.7	2.8	2.6	2.7	2.1
Scotland County	6.2	4.6	4.1	4.3	3.5	3.6	4.5	5.5	4.7	3.3
<i>State of NC</i>	4.1	3.7	3.4	3.3	3.5	3.1	3.2	3.2	3.1	2.8

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

The ICD-9 codes for pneumonia are 480-487 and the code for influenza is 488. The next table presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with a primary diagnosis of pneumonia (ICD-9 Codes 480-487xx) or influenza (ICD-9 Code 488xx).

- Over the period cited, 0.5% of all ED discharges and 2.8% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of pneumonia.
- Over the period cited, 0.5% of all ED discharges and 0.08% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of influenza.

Table 148. Hospital Discharges, Pasquotank County Residents: Pneumonia and Influenza (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
Pneumonia						
ED	113	0.4	138	0.5	251	0.5
IP	99	3.0	87	2.6	186	2.8
Influenza						
ED	152	0.6	97	0.4	249	0.5
IP	3	0.1	2	0.06	5	0.08

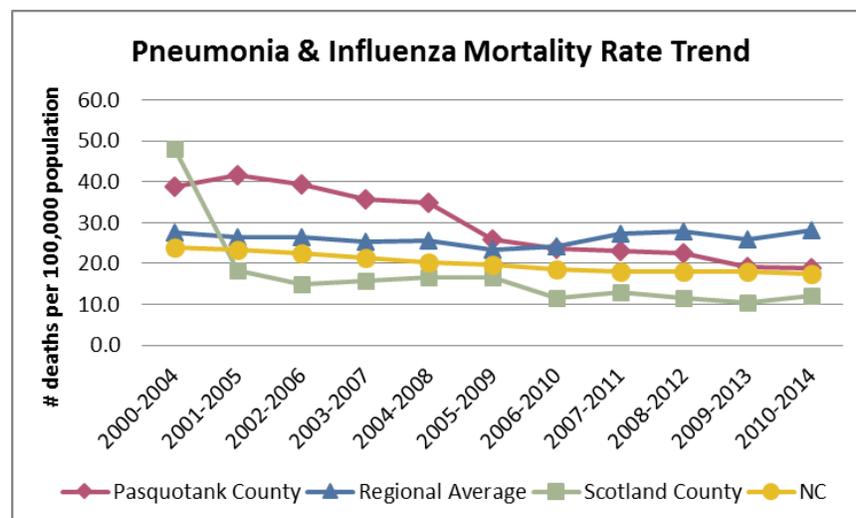
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Pneumonia and Influenza Mortality Rate Trend

The following figure plots the pneumonia/influenza mortality rate trend over time.

- The pneumonia/influenza mortality rate in Pasquotank County was significantly higher than the rates for either the region or the state from 2000-2004 through 2005-2009. After 2006-2010 the local rate fell below the regional rate but remained above the NC rate.
- Between 2000-2004 and 2010-2014 the pneumonia/influenza mortality rate in Pasquotank County decreased by 52%, falling from 38.9 to 18.8.
- At the state level, the pneumonia/influenza mortality rate fell gradually to a current low of 17.6.

Figure 51. Overall Pneumonia and Influenza Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Pneumonia and Influenza Mortality

The next table presents pneumonia/influenza mortality data for the aggregate period 2010-2014, stratified by race.

- Due to below-threshold numbers of pneumonia/influenza deaths among stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups, so no county-level comparisons are possible.
- At the state level the pneumonia/influenza mortality rate for African American non-Hispanic persons was slightly lower than the rate for white non-Hispanic persons.

Table 149. Race/Ethnicity-Specific Pneumonia and Influenza Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	30	18.9	13	n/a	0	n/a	0	n/a	1	n/a	44	18.8
<i>Regional Average</i>	26	58.6	6	n/a	0	n/a	0	n/a	0	n/a	32	28.2
Scotland County	16	n/a	7	n/a	1	n/a	0	n/a	1	n/a	25	12.1
State of NC	7,421	18.1	1,412	16.2	57	13.2	50	10.9	71	6.2	9,011	17.6

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

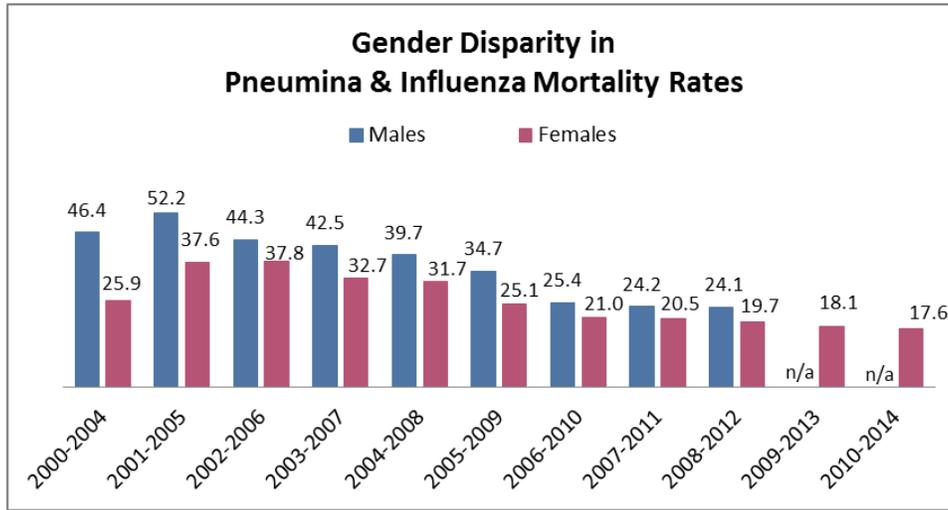
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Pneumonia and Influenza Mortality

The next figure depicts gender-stratified pneumonia/influenza mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- Over the period cited below, the mortality rate for males was consistently higher than the rate for females. It should be noted however, that after 2008-2012 all the rates for males were suppressed. (All rates shown were stable.)
- It is noteworthy that all rates appeared to decrease overall over time.

**Figure 52. Sex-Specific Pneumonia and Influenza Mortality Rate Trend, Pasquotank County
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Septicemia

Septicemia is a rapidly progressing infection resulting from the presence of bacteria in the blood. The disease often arises from other infections throughout the body, such as meningitis, burns, and wound infections. Septicemia can lead to septic shock in which case low blood pressure and low blood flow cause organ failure (65). While septicemia can be community-acquired, some cases are acquired by patients hospitalized initially for other conditions; these are referred to as nosocomial infections. Sepsis is now a preferred term for septicemia, but NC SCHS continues to use the older term.

Septicemia was the ninth-ranked cause of death in Pasquotank County in 2010-2014 (cited previously).

Septicemia Hospitalizations

The table below presents inpatient hospital discharge rate trend data for septicemia. According to this data, septicemia discharge rates in Pasquotank County were highly variable, but have shown a definite increase since 2010. Note also that all Scotland County rates were high.

Table 150. Septicemia Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	1.5	1.0	0.7	0.8	1.2	1.6	3.1	3.5	5.1	4.3
<i>Regional Average</i>	1.4	1.7	1.5	1.5	1.4	1.9	3.0	3.4	4.3	4.1
Scotland County	1.3	2.8	4.1	4.2	4.2	3.7	4.2	4.3	4.8	5.9
State of NC	1.6	1.8	2.0	2.3	2.5	2.9	3.4	3.7	4.2	4.8

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

In the case of septicemia, it is more convenient to use the DRG (Diagnosis-Related Group) diagnosis code rather than the ICD-9 diagnosis code, despite the fact that DRG codes apply only to inpatient hospitalizations. The table below presents data on 2013 and 2014 inpatient hospital discharges at qualifying area hospitals for Pasquotank County residents with a primary diagnosis of septicemia (DRG Codes 870-872xx).

- Over the period cited, 4.9% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of septicemia.

Table 151. Hospital Discharges, Pasquotank County Residents: Septicemia (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
IP	191	5.9	133	4.0	324	4.9

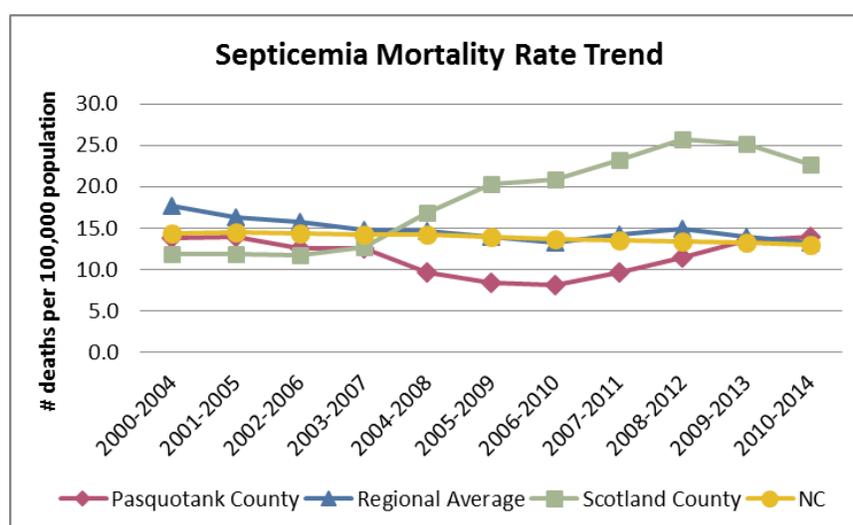
The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Septicemia Mortality Rate Trend

The following figure plots the septicemia mortality rate trend over time.

- Scotland County had by far the highest septicemia mortality rate in every period after 2003-2007.
- The septicemia mortality rate in Pasquotank County was lower than the comparable rates for the region and the state throughout the period cited. The local rate was essentially the same in 2010-2014 (13.9) as in 2000-2004 (13.8).
- The septicemia mortality rate for NC as a whole decreased 9% overall between 2000-2004 and 2010-2014.

Figure 53. Overall Septicemia Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2009 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Septicemia Mortality

The following table presents septicemia mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of septicemia disease deaths among stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups.
- Statewide, the septicemia mortality rate was highest among African American non-Hispanic persons, followed by American Indian non-Hispanics and white non-Hispanics.

Table 152. Race/Ethnicity-Specific Septicemia Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	22	15.1	9	n/a	0	n/a	0	n/a	0	n/a	31	13.9
<i>Regional Average</i>	10	15.1	5	n/a	0	n/a	0	n/a	0	n/a	15	13.3
Scotland County	23	18.5	18	n/a	3	n/a	0	n/a	0	n/a	44	22.7
State of NC	4,974	12.1	1,664	18.6	58	13.3	33	5.5	69	5.5	6,798	13.0

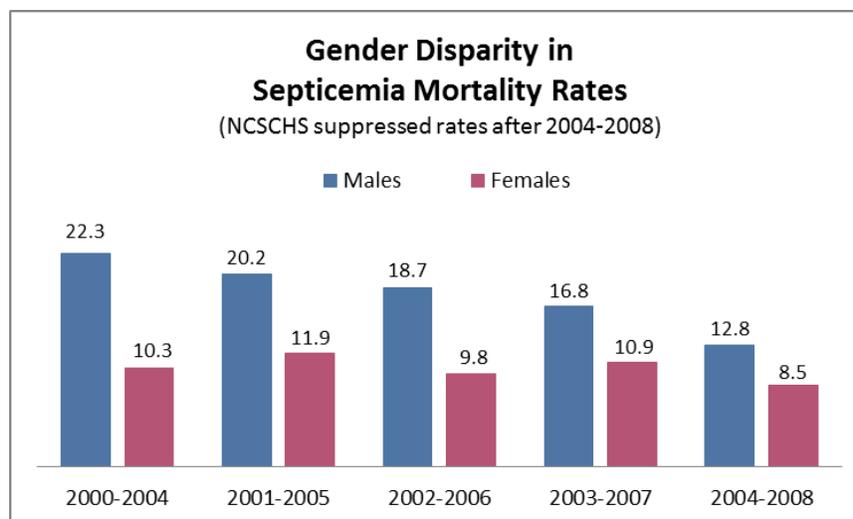
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Septicemia Mortality

The next figure depicts gender-stratified septicemia mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2004-2008. Note that rates in subsequent periods were suppressed.

- According to the graph, the septicemia mortality rate among Pasquotank County males was higher than the comparable rate among Pasquotank County females for all the time periods shown, although the gap appears to be narrowing. However, it should be noted that all the gender-stratified septicemia mortality rates in the graph were unstable.

Figure 54. Sex-Specific Septicemia Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Nephritis, Nephrotic Syndrome, and Nephrosis

Nephritis refers to inflammation of the kidney, which causes impaired kidney function. Nephritis can be due to a variety of causes, including kidney disease, autoimmune disease, and infection. Nephrotic syndrome refers to a group of symptoms that include protein in the urine, low blood protein levels, high cholesterol levels, high triglyceride levels, and swelling. Nephrosis refers to any degenerative disease of the kidney tubules, the tiny canals that make up much of the substance of the kidney. Nephrosis can be caused by kidney disease, or it may be a complication of another disorder, particularly diabetes (66,67).

This composite set of kidney disorders was the tenth leading cause of death in Pasquotank County in 2010-2014 (cited previously).

Nephritis, Nephrotic Syndrome and Nephrosis Hospitalizations

The table below presents the hospital discharge rate trend data for the composite of kidney disorders. According to this data, kidney disease caused a higher rate of hospitalizations in Pasquotank County than in the ARHS region or statewide in the last three years cited.

Table 153. Nephritis, Nephrosis, Nephrotic Syndrome Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	1.8	1.2	1.1	1.4	1.1	1.1	1.7	1.9	2.1	2.5
<i>Regional Average</i>	1.3	1.4	1.3	1.0	1.0	1.2	1.3	1.6	1.7	2.0
Scotland County	1.6	2.2	2.7	2.7	2.0	3.2	3.6	2.9	3.2	3.6
State of NC	1.2	1.3	1.7	1.6	1.4	1.5	1.8	1.8	1.8	1.9

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Diagnoses of nephritis, nephrotic syndrome and nephrosis are coded 580-589 in the ICD-9 system. The table below presents data on 2013 and 2014 hospital discharges at qualifying area hospitals for Pasquotank County residents with a primary diagnosis of any of the above listed kidney diseases (ICD-9 Codes 580-589xx).

- Over the period cited, 0.05% of all ED discharges and 2.5% of all IP discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of kidney disease.

Table 154. Hospital Discharges, Pasquotank County Residents: Kidney Diseases (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	12	0.05	12	0.05	24	0.05
IP	73	2.2	95	2.8	168	2.5

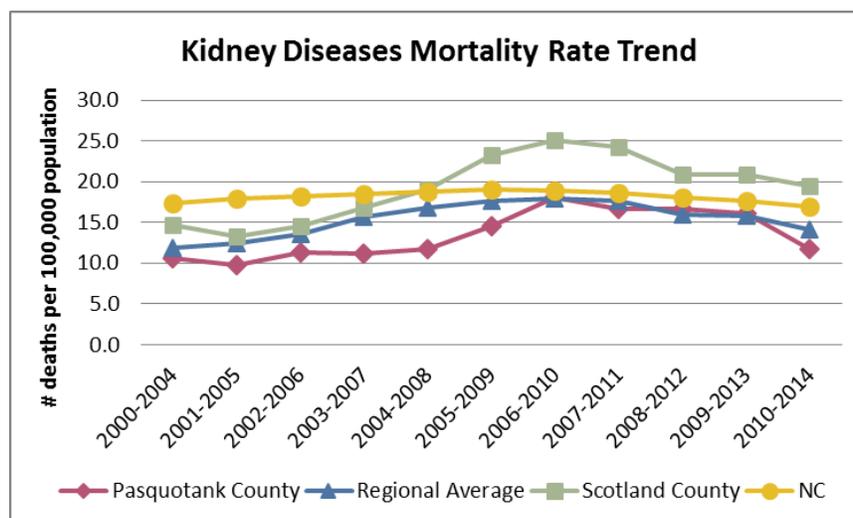
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital and Sentara Albemarle Medical Center.

Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend

The figure below plots the kidney disease mortality rate trend over time.

- The kidney disease mortality rate in Pasquotank County, which was lower than the NC or regional rates throughout most of the period cited, increased 10% overall (from 10.6 to 11.7) between 2000-2004 and 2010-2014.
- The kidney disease mortality rate for NC as a whole rose 7% overall between 2000-2004 and 2010-2014.

Figure 55. Overall Nephritis, Nephrotic Syndrome and Nephrosis Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2016), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Racial Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality

The following table presents kidney disease mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of kidney disease deaths among stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups.
- Statewide the kidney disease mortality rate among African American non-Hispanic persons was more than twice the rate for white non-Hispanic persons.

Table 155. Race/Ethnicity-Specific Nephritis, Nephrotic Syndrome and Nephrosis Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	15	n/a	12	n/a	0	n/a	0	n/a	0	n/a	27	11.7
<i>Regional Average</i>	10	n/a	7	25.7	0	n/a	0	n/a	0	n/a	17	14.2
Scotland County	17	n/a	23	33.4	1	n/a	0	n/a	0	n/a	41	19.4
State of NC	5,667	13.8	2,910	32.9	100	24.5	48	8.8	88	9.1	8,813	17.0

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

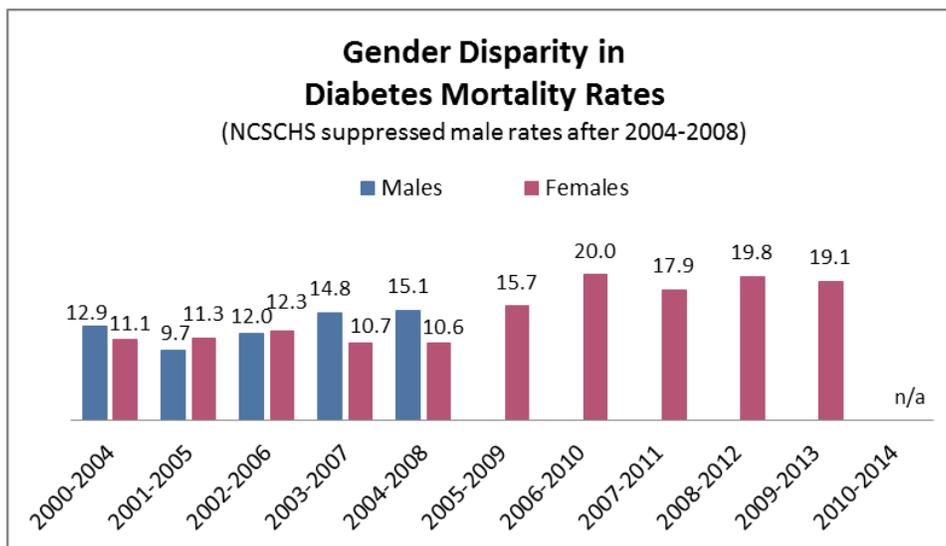
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Nephritis, Nephrotic Syndrome and Nephrosis Mortality

The figure below depicts gender-stratified kidney disease mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2010-2014.

- According to the graph, the kidney disease mortality rates among Pasquotank County males appeared to be higher than the comparable rates among Pasquotank County females for three of five aggregate periods up to the point when NCSCHS began to suppress the rates for males. It should be noted that all the kidney disease mortality rates in the graph for males and for females from 2000-2004 through 2004-2008 were unstable; all rates for females from 2005-2009 through 2009-2013 were stable.

Figure 56. Sex-Specific Nephritis, Nephrotic Syndrome, Nephrosis Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Chronic Liver Disease and Cirrhosis

Chronic liver disease describes an ongoing disturbance of liver function that causes illness. Liver disease, also referred to as hepatic disease, is a broad term that covers all the potential problems that cause the liver to fail to perform its designated functions. Usually, more than 75% or three quarters of liver tissue needs to be affected before decrease in function occurs. Cirrhosis is a term that describes permanent scarring of the liver. In cirrhosis, the normal liver cells are replaced by scar tissue that cannot perform any liver function (68).

Chronic liver disease and cirrhosis was the eleventh-ranked cause of death in Pasquotank County in 2010-2014 (cited previously).

Chronic Liver Disease and Cirrhosis Hospitalizations

The table below presents hospital discharge rate trend data for chronic liver disease and cirrhosis. Note that most of the Pasquotank County rates were unstable.

Table 156. Chronic Liver Disease and Cirrhosis Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	0.4	0.2	0.2	0.6	0.1	0.2	0.2	0.2	0.1	0.2
<i>Regional Average</i>	0.3	0.3	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2
Scotland County	0.4	0.5	0.4	0.6	0.4	0.3	0.3	0.2	0.2	0.4
State of NC	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence;

<http://www.schs.state.nc.us/SCHS/data/databook/>.

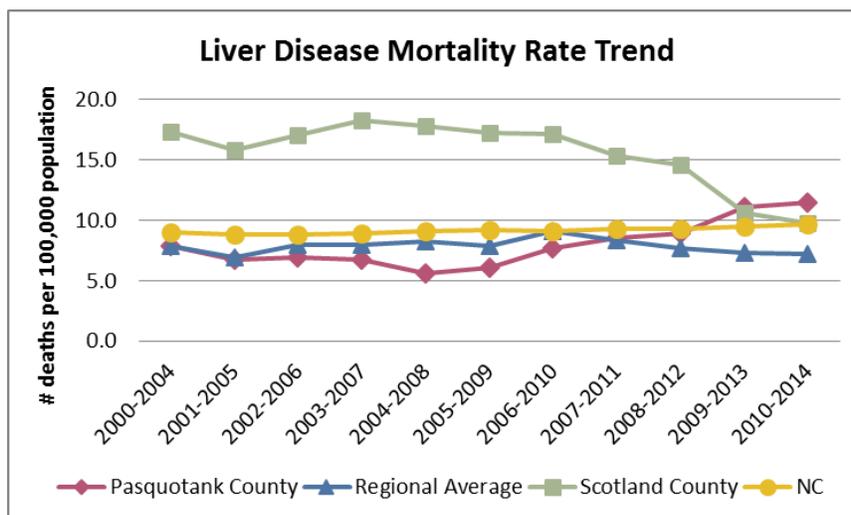
The ICD-9 Code for chronic liver disease and cirrhosis is 571, but there were too few discharges at any of the participating hospitals to warrant tabulation for this report.

Chronic Liver Disease and Cirrhosis Mortality Rate Trend

The following figure displays the chronic liver disease and cirrhosis mortality rate trend over time.

- The chronic liver disease and cirrhosis mortality rate for Pasquotank County fluctuated widely over the period cited, due to small numbers of deaths and unstable rates. The local mortality rate was 7.7 (unstable) in 2000-2004 and 11.5 (stable) in 2010-2014, a 46% increase.
- The chronic liver disease and cirrhosis mortality rate for NC as a whole rose 8% over the period cited, from 9.0 in 2000-2004 to 9.7 in 2010-2014.

Figure 57. Overall Chronic Liver Disease and Cirrhosis Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Chronic Liver Disease and Cirrhosis Mortality

The table below presents chronic liver disease and cirrhosis mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of chronic liver disease and cirrhosis deaths among stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups.
- Statewide, the chronic liver disease and cirrhosis mortality rate was highest among American Indian non-Hispanics, followed by white non-Hispanics and African American non-Hispanics.

Table 157. Race/Ethnicity-Specific Chronic Liver Disease and Cirrhosis Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	18	n/a	8	n/a	0	n/a	0	n/a	0	n/a	26	11.5
Regional Average	8	n/a	2	n/a	0	n/a	0	n/a	0	n/a	11	7
Scotland County	14	n/a	6	n/a	2	n/a	0	n/a	0	n/a	22	9.8
State of NC	4,404	10.8	798	7.3	65	11.2	28	3.4	83	4.4	5,378	9.7

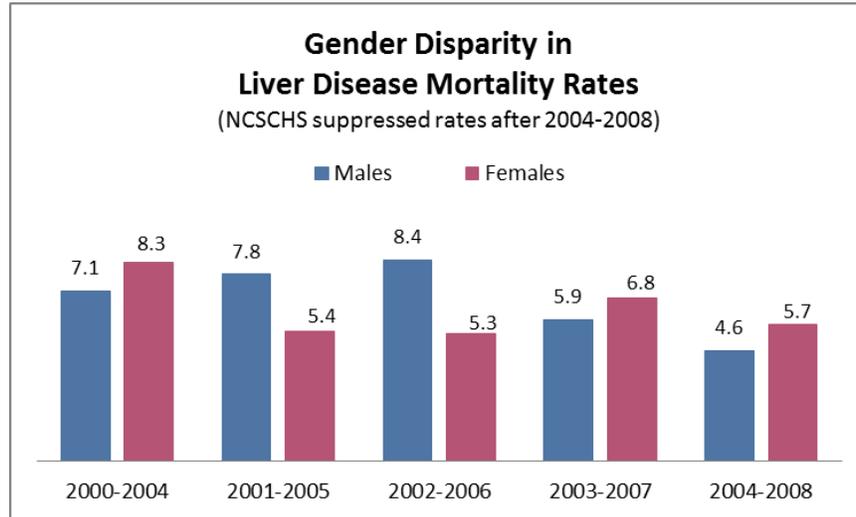
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Chronic Liver Disease and Cirrhosis Mortality

The following figure plots gender-stratified chronic liver disease and cirrhosis mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2004-2008. Note that subsequent rates were suppressed.

- Over the brief period cited in the graph, chronic liver disease and cirrhosis mortality rates in Pasquotank County were sometimes higher among males and other times higher among females... However, it should be noted that all the gender-stratified mortality rates in the graph were unstable.

Figure 58. Sex-Specific Chronic Liver Disease and Cirrhosis Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Unintentional Motor Vehicle Injury

As described earlier in this report, the NC State Center for Health Statistics distinguishes unintentional motor vehicle injuries from all other injuries when calculating mortality rates and ranking leading causes of death. (Deaths due to all other unintentional injuries were discussed in detail in a previous section of this report.)

Mortality attributable to unintentional motor vehicle injury was the twelfth leading cause of death in Pasquotank County in the aggregate period 2010-2014 (cited previously).

Unintentional Motor Vehicle Injury Hospitalizations

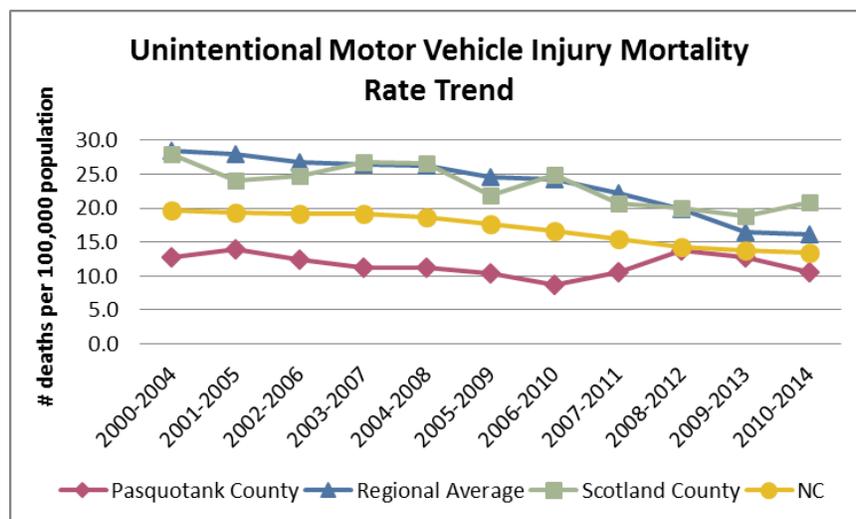
Neither the NC State Center for Health Statistics nor the hospitals participating in this assessment use a *diagnosis* code specific for hospitalizations caused by motor vehicle injury. The hospitals do code *causation* for injury and poisoning, but that data is not included in this report.

Unintentional Motor Vehicle Injury Mortality Rate Trend

The figure below plots the unintentional motor vehicle injury mortality rate trend over time.

- The unintentional motor vehicle injury mortality rate in Pasquotank County was significantly lower than the comparable rates in all the other jurisdictions throughout most of the period cited.
- Although it rose for a span near the end of the period cited, the unintentional motor vehicle injury mortality rate in Pasquotank County fell 17% overall between 2000-2004 and 2010-2014, from 12.7 to 10.6.
- At the state level, the unintentional motor vehicle injury mortality rate fell 31% over the period cited.

Figure 59. Unintentional Motor Vehicle Injury Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Unintentional Motor Vehicle Injury Mortality

The next table presents unintentional motor vehicle injury mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of unintentional motor vehicle injury deaths among racially stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups, leaving no local data to compare.
- Statewide the unintentional motor vehicle injury mortality rate was highest for American Indian non-Hispanics, followed by African American non-Hispanics and white non-Hispanics.

Table 158. Race/Ethnicity-Specific Unintentional Motor Vehicle Injury Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	8	n/a	12	n/a	0	n/a	1	n/a	1	n/a	22	10.6
<i>Regional Average</i>	8	n/a	6	n/a	0	n/a	0	n/a	0	n/a	14	16.1
Scotland County	19	n/a	11	n/a	5	n/a	0	n/a	0	n/a	35	20.9
<i>State of NC</i>	4,513	13.6	1,512	14.2	150	25.8	74	6.0	430	9.9	6,679	13.5

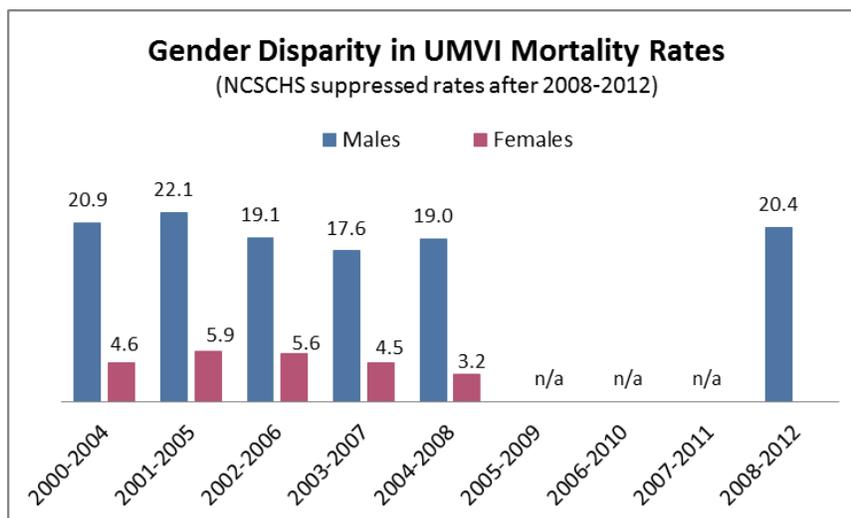
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.
 Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Unintentional Motor Vehicle Injury Mortality

The figure below plots gender-stratified unintentional motor vehicle injury mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2008-2012. Note that all rates for females and all but one rate for males were suppressed after 2003-2008.

- Over the period cited, the unintentional motor vehicle injury mortality rate among males in the county was more than several times the comparable rate for females.

Figure 60. Sex-Specific Unintentional Motor Vehicle Injury Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2008-2012)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2014), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Age Disparities in Motor Vehicle Injury Mortality

The unintentional motor vehicle injury mortality rate has a strong age component.

The table below presents unintentional motor vehicle injury mortality data, stratified by age group, for the aggregate period 2010-2014. Note that this data is *not* age-adjusted.

- In Pasquotank County, the 20-39 age group has the highest motor vehicle injury mortality rate. Note, however, that this rate is based on a small number of events and should be considered unstable.
- Statewide, the 20-39 age group has the highest motor vehicle injury mortality rate, followed by the 40-64 age group.

Table 159. Motor Vehicle Injury Mortality, Numbers and Rates, by Age (Aggregate Period 2010-2014)

Location	Number of Deaths and Unadjusted Death Rates per 100,000 Population							
	All Ages		0-19		20-39		40-64	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	n/a	n/a	3	5.8	9	16.2	n/a	n/a
<i>Regional Average</i>	17	22.6	2	10.9	6	26.5	4	13.4
Scotland County	35	19.4	2	4.1	20	45.5	9	14.8
State of NC	n/a	n/a	794	6.2	2,354	18.1	2,357	14.5

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, 2016 County Health Databook, Death Counts and Crude Death Rates per 100,000 Population for Leading Causes of Death, by Age Groups, NC 2010-2014; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Alcohol-Related Traffic Crashes

The table below presents several years of data on the proportion of traffic crashes that were alcohol-related.

- The percent of alcohol-related crashes varied over time without a clear pattern in all the jurisdictions.
- In Pasquotank County the six-year average of alcohol-related traffic crashes was 5.2%. Region-wide the comparable average was 5.8%, in Scotland County it was 6.6%, and in NC it was 5.2%

Table 160. Alcohol-Related Traffic Crashes Trend (2008-2013)

Location	2008			2009			2010			2011			2012			2013		
	Total Crashes			Total Crashes			Total Crashes			Total Crashes			Total Crashes			Total Crashes		
	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes
Pasquotank County	756	35	4.6	821	50	6.1	709	31	4.4	790	41	5.2	736	45	6.1	697	34	4.9
<i>Regional Average</i>	345	18	5.3	367	21	6.2	348	20	6.0	347	18	5.0	333	21	6.0	329	19	6.0
Scotland County	567	42	7.4	559	45	8.1	633	43	6.8	575	38	6.6	530	33	6.2	641	28	4.4
State of NC	214,358	11,982	5.6	209,695	11,384	5.4	213,573	10,696	5.0	208,509	10,708	5.1	213,641	11,274	5.3	220,309	10,802	4.9

Note: statistical information for North Carolina Alcohol Facts was obtained from the NC Administrative Office of the Courts (AOC) and the NC Division of Motor Vehicles (DMV) for the years 2000 through 2013 (single years).

Note: Percentages appearing in **bold** type are based on fewer than 10 alcohol-related crashes per year. Such figures are likely unstable and should be interpreted with caution.

1 - UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts (2008-2013); <http://www.hsrb.unc.edu/ncaf/crashes.cfm>.

2 - Calculated (% alcohol related crashes is calculated by dividing # alcohol-related crashes by # reportable crashes)

The next table presents detail on the outcomes of alcohol-related crashes in 2013.

- In 2013 in Pasquotank County 4.9% of all crashes, 4.3% of all property damage only crashes, 6.2% of non-fatal crashes, and none of the fatal crashes were alcohol-related.
- Statewide in 2013, 4.9% of all crashes, 3.5% of all property damage only crashes, 7.6% of all non-fatal crashes, and 28.0% of fatal crashes were alcohol-related.

Table 161. Outcomes of Alcohol-Related Traffic Crashes (2013)

Location	Total Crashes			Property Damage Only Crashes			Non-Fatal Crashes			Fatal Crashes		
	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes	# Reportable Crashes	# Alcohol-Related Crashes	% Alcohol-Related Crashes
Pasquotank County	697	34	4.9	487	21	4.3	210	13	6.2	0	0	0.0
<i>Regional Average</i>	329	19	6.0	236	12	5.0	91	9	11.8	2	0	4.8
Scotland County	641	28	4.4	358	6	1.7	274	22	8.0	9	0	0.0
<i>State of NC</i>	220,309	10,802	4.9	149,604	5,172	3.5	69,547	5,306	7.6	1,158	324	28.0
Source	1	1	2	1	1	2	1	1	2	1	1	2

Note: statistical information for North Carolina Alcohol Facts was obtained from the NC Administrative Office of the Courts (AOC) and the NC Division of Motor Vehicles (DMV) for the year 2011.

Note: Percentages appearing in bold type are based on fewer than 10 alcohol-related crashes per year. Such figures are likely unstable and should be interpreted with caution.

Note: Regional arithmetic mean percentages appearing in italic type include unstable county percentages. Such mean figures likely are unstable and should be interpreted with caution.

1 - Source: UNC Chapel Hill, Highway Safety Research Center. North Carolina Alcohol Facts, 2013;

<http://www.hsrc.unc.edu/ncaf/crashes.cfm>.

2 - Calculated (% alcohol related crashes is calculated by dividing # alcohol-related crashes by # reportable crashes)

Suicide

Suicide was the thirteenth-ranked cause of death in Pasquotank County in 2010-2014.

Suicide Hospitalizations

At the present time the NC State Center for Health Statistics does not track hospitalizations related to suicide or attempted suicide.

Hospitals do, however, track a diagnosis called Suicide Ideation, which is coded V62.84 in the ICD-9 system. As shown in the table below, there were no inpatient hospitalizations of Pasquotank County residents with that ICD-9 code at any of the qualifying hospitals in 2013 or 2014. There were, however, 125 emergency department visits by Pasquotank County residents coded for suicide ideation in the same period.

- Over the period cited, 0.2% of all ED discharges of Pasquotank County residents at qualifying hospitals involved a primary diagnosis of suicide ideation.

Table 162. Hospital Discharges, Pasquotank County Residents: Suicide Ideation (2013-2014)

Service	Number and Percent of All Discharges					
	2013		2014		Total	
	#	%	#	%	#	%
ED	44	0.2	81	0.3	125	0.2
IP	0	0	0	0	0	0

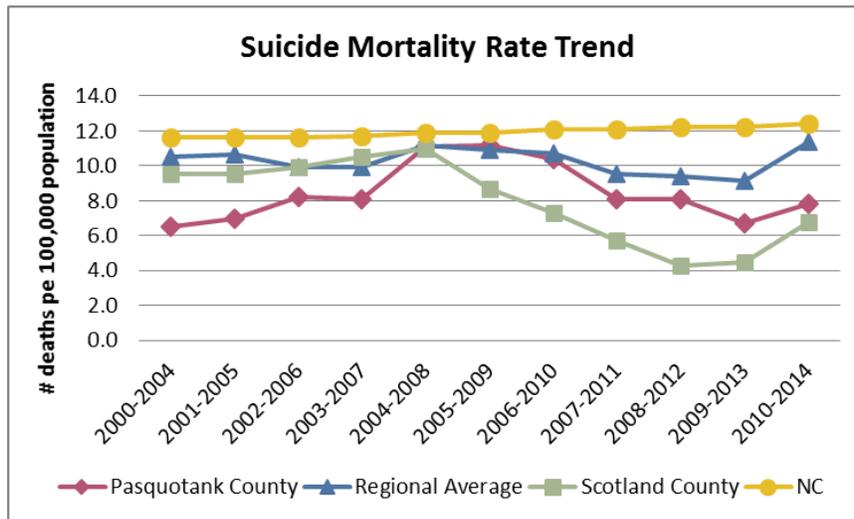
The hospitals qualifying for inclusion on the basis of more than 20 ED discharges over the period cited were: Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The hospitals qualifying on the basis of more than 20 IP discharges over the period cited are: Vidant Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Suicide Mortality Rate Trend

The following figure plots the suicide mortality rate trend over time.

- The suicide mortality rate for Pasquotank County was lower than the comparable regional and state rates through almost all of the period cited. Note, however, that all the Pasquotank County suicide rates were technically unstable.
- The Pasquotank County rate fluctuated over the period cited, and increased by 20% overall, rising from 6.5 in 2000-2004 to 7.8 in 2010-2014.
- The state suicide rate was relatively static over the period cited. The rate in 2010-2014 (12.4) was 7% higher than the rate in 2000-2004 (11.6).

**Figure 61. Overall Suicide Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Suicide Mortality

The following table presents suicide mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of suicide deaths among stratified populations in Pasquotank County and elsewhere, mortality rates were suppressed for those groups.
- Statewide the highest suicide rate occurred among white non-Hispanics, followed by American Indian non-Hispanics and Other races non-Hispanic.

**Table 163. Race/Ethnicity-Specific Suicide Mortality
(Aggregate Period 2010-2014)**

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	16	n/a	1	n/a	0	n/a	0	n/a	0	n/a	17	7.8
Regional Average	11	18.2	1	n/a	0	n/a	0	n/a	0	n/a	11	11.4
Scotland County	10	n/a	2	n/a	0	n/a	0	n/a	0	n/a	12	6.8
State of NC	5,466	15.9	518	4.9	66	11.4	78	5.9	128	3.5	6,256	12.4

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

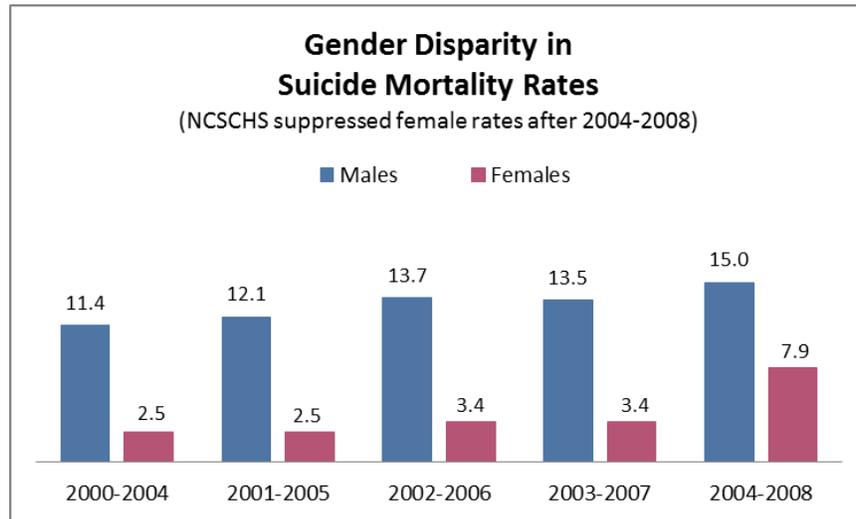
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Suicide Mortality

The following figure plots gender-stratified suicide mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2004-2008. Suicide rates in subsequent aggregate periods were suppressed.

- For the interval shown it appears that the suicide rate among Pasquotank County males was several times the comparable mortality rate among Pasquotank County females. Although all the local rates for both sexes were unstable due to below-threshold numbers of deaths, this disproportionate-pattern of gender-based suicide mortality is common throughout NC.

Figure 62. Sex-Specific Suicide Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Homicide

Homicide was the fourteenth-ranked cause of death in Pasquotank County in 2010-2014 (cited previously).

Homicide Hospitalizations

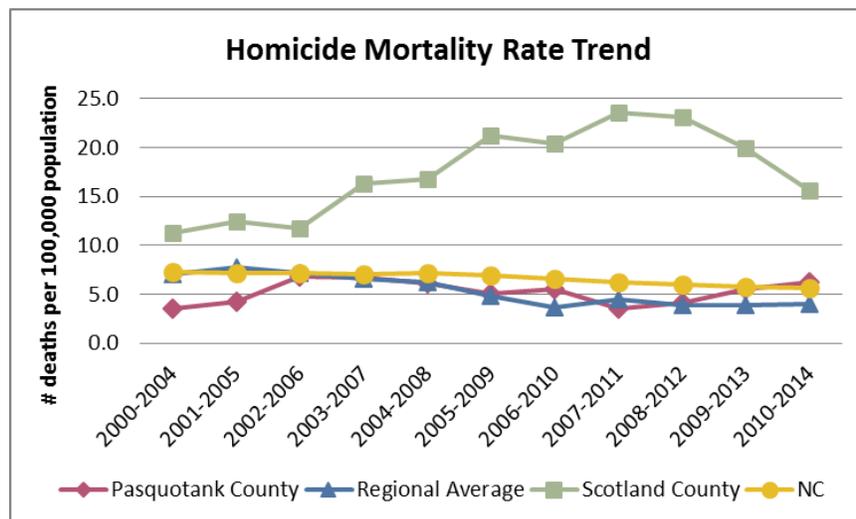
At the present time the NC SCHS does not track hospitalizations related to homicide or attempted homicide. There is an ICD-9 code descriptive of Homicidal Ideation (V62.85), but it has not been pursued for inclusion in this report.

Homicide Mortality Rate Trend

The figure below plots the homicide mortality rate trend over time.

- The somewhat volatile homicide mortality rate in Pasquotank County appeared to be lower than the comparable rate for the state during most of the period cited, but increased 72% overall, from 3.6 in 2000-2004 to 6.2 in 2010-2014. It should be noted, however, that all the Pasquotank County homicide rates were unstable.
- At the state level, the homicide rate decreased 22% over the period cited.

Figure 63. Overall Homicide Mortality Rate Trend (Aggregate Periods 2000-2004 through 2010-2014)



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2009 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in Homicide Mortality

The next table presents homicide mortality data for the period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of homicide deaths among stratified populations at the county level, all mortality rates were suppressed for those groups.
- Statewide, the homicide mortality rate was highest for American Indian non-Hispanics, followed by African American non-Hispanics and Hispanics.

Table 164. Race/Ethnicity-Specific Homicide Mortality (Aggregate Period 2010-2014)

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	4	n/a	9	n/a	0	n/a	0	n/a	0	n/a	13	6.2
<i>Regional Average</i>	2	n/a	2	n/a	0	n/a	0	n/a	0	n/a	4	4.0
Scotland County	6	n/a	18	n/a	3	n/a	0	n/a	0	n/a	27	15.6
State of NC	997	3.1	1,416	13.0	88	15.0	40	3.2	187	4.3	2,728	5.7

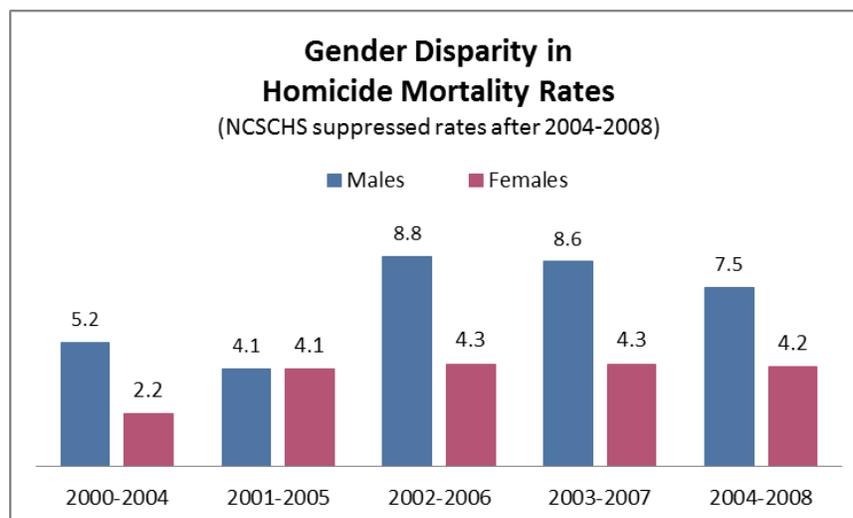
Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases. Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in Homicide Mortality

The figure below plots gender-stratified homicide mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2004-2008. Rates for subsequent aggregate periods were suppressed.

- Although all the rates for both sexes were unstable, the disproportional gender-based pattern of homicide mortality depicted in the graph—a mortality rate usually significantly higher among males—is common throughout NC.

Figure 64. Sex-Specific Homicide Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Acquired Immune Deficiency Syndrome (AIDS)

The human immune deficiency virus (HIV) is the virus that causes AIDS. HIV attacks the immune system by destroying CD4 positive (CD4+) T cells, a type of white blood cell that is vital to fighting off infection. The destruction of these cells leaves people infected with HIV vulnerable to other infections, diseases and other complications. The acquired immune deficiency syndrome (AIDS) is the final stage of HIV infection. A person infected with HIV is diagnosed with AIDS when he or she has one or more opportunistic infections, such as pneumonia or tuberculosis, and has a dangerously low number of CD4+ T cells (less than 200 cells per cubic millimeter of blood) (69).

AIDS was the fifteenth-ranked cause of death in Pasquotank County in 2010-2014 (cited previously).

AIDS Hospitalizations

The table below presents hospital discharge rate trend data for AIDS. Almost all the rates at the county-level were unstable. Statewide, the AIDS hospital discharge was 0.2 for many years, but in 2011 it decreased to 0.1.

Table 165. AIDS Hospital Discharge Rate Trend (2005-2014)

Location	Rate (Discharges per 1,000 Population)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	0.2	0.2	0.1	0.1	0.2	0.1	0.0	0.1	0.1	n/a
<i>Regional Average</i>	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2
Scotland County	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.4
State of NC	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

Note: Bold type indicates a likely unstable rate based on a small (fewer than 20) number of cases.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2007-2016), Morbidity, Inpatient Hospital Utilization and Charges by Principal Diagnosis and County of Residence; <http://www.schs.state.nc.us/SCHS/data/databook/>.

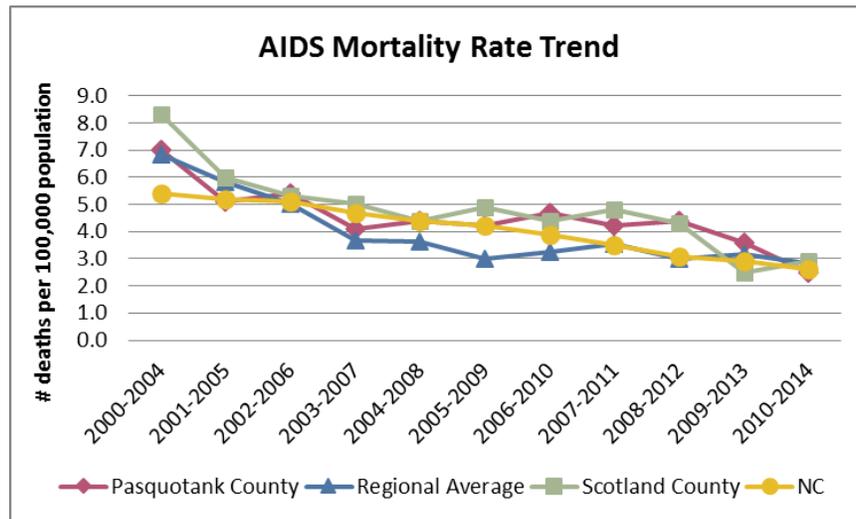
In the ICD-9 coding scheme, AIDS falls in the category Infectious and Parasitic Diseases, with the specific code of 042. There were too few discharges at any of the participating hospitals to warrant tabulation in this report.

AIDS Mortality Rate Trend

The following figure plots the AIDS mortality rate trend over time.

- The county- and regional-level AIDS mortality rates for the entire period cited were unstable. Despite the instability, it appeared that the AIDS mortality rate was decreasing in both counties, in the state, and across the region. The unstable rate in Pasquotank County fell from 7.0 in 2000-2004 to 2.5 in 2010-2014, a decrease of 64%.
- The AIDS mortality rate for NC as a whole decreased 52% (from 5.4 to 2.6) over the period cited.

**Figure 65. Overall AIDS Mortality Rate Trend
(Aggregate Periods 2000-2004 through 2010-2014)**



Source: NC State Center for Health Statistics, Vital Statistics, Volume 2: Leading Causes of Death (2004 through 2014), <http://www.schs.state.nc.us/data/vital.cfm>.

Racial Disparities in AIDS Mortality

The table below presents AIDS mortality data for the aggregate period 2010-2014, stratified by race.

- Note that due to below-threshold numbers of AIDS deaths among all stratified populations at the county- and regional level, mortality rates were suppressed for those groups.
- Statewide, the AIDS mortality rate was highest among African American non-Hispanics, followed by Hispanics and white non-Hispanics.

**Table 166. Race/Ethnicity-Specific AIDS Mortality
(Aggregate Period 2010-2014)**

Location	Deaths, Number and Rate (Deaths per 100,000 Population)											
	White, Non-Hispanic		African American, Non-Hispanic		American Indian, Non-Hispanic		Other Races, Non-Hispanic		Hispanic		Overall	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Pasquotank County	1	n/a	5	n/a	0	n/a	0	n/a	0	n/a	6	2.5
Regional Average	0	n/a	2	n/a	0	n/a	0	n/a	0	n/a	3	2.8
Scotland County	1	n/a	4	n/a	0	n/a	0	n/a	0	n/a	5	2.9
State of NC	306	0.9	973	9.0	9	n/a	4	n/a	39	1.4	1,331	2.6

Note: The use of "n/a" in lieu of a numeral indicates a likely unstable rate based on a small (fewer than 20) number of cases.

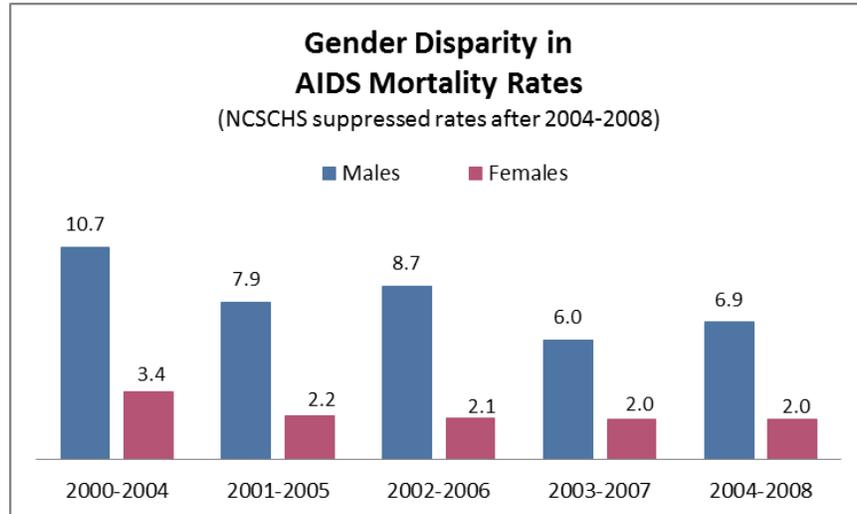
Source: NC State Center for Health Statistics, County Health Data Book (2016), Mortality, 2010-2014 Race/Ethnicity Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

Gender Disparities in AIDS Mortality

The following figure plots gender-stratified AIDS mortality rates in Pasquotank County for the aggregate periods 2000-2004 through 2004-2008. Mortality rates in subsequent aggregate periods were suppressed.

- All the AIDS mortality rates shown in the graph were unstable, but the pattern of higher rates for males than for females is common. Noteworthy is the decrease in AIDS mortality among the county's males.

Figure 66. Sex-Specific AIDS Mortality Rate Trend, Pasquotank County (Aggregate Periods 2000-2004 through 2004-2008)



Source: NC State Center for Health Statistics, County Health Data Books (2006-2010), Mortality, Race-Specific and Sex-Specific Age-Adjusted Death Rates by County; <http://www.schs.state.nc.us/SCHS/data/databook/>.

MORBIDITY

Morbidity refers generally to the current presence of injury, sickness or disease (and sometimes the symptoms and/or disability resulting from those conditions) in the living population. In this report, communicable disease (including sexually-transmitted infections), asthma, diabetes, obesity, oral health, and mental health conditions are the topics covered under morbidity.

The parameter most frequently used to describe the current extent of any condition of morbidity in a population is *prevalence*: the number of existing cases of a disease or health condition in a population at a defined point in time or during a period. Prevalence usually is expressed as a proportion, not a rate, and often represents an estimate rather than a direct count.

Communicable Disease

A communicable disease is a disease transmitted through direct contact with an infected individual or indirectly through a vector.

Sexually Transmitted Infections

The topic of communicable diseases includes sexually transmitted infections (STIs). The STIs of greatest regional interest are chlamydia and gonorrhea. HIV/AIDS is sometimes grouped with STIs, since sexual contact is one mode of HIV transmission. While AIDS, as the final stage of HIV infection, was discussed previously among the leading causes of death, HIV is discussed here as a communicable disease.

Chlamydia

Chlamydia is the most frequently reported bacterial STI in the US, with an estimated 2.8 million new cases reported in the US each year. Chlamydia cases frequently go undiagnosed and can cause serious problems in men and women, such as penile discharge and infertility respectively, as well as infections in newborn babies of infected mothers (70).

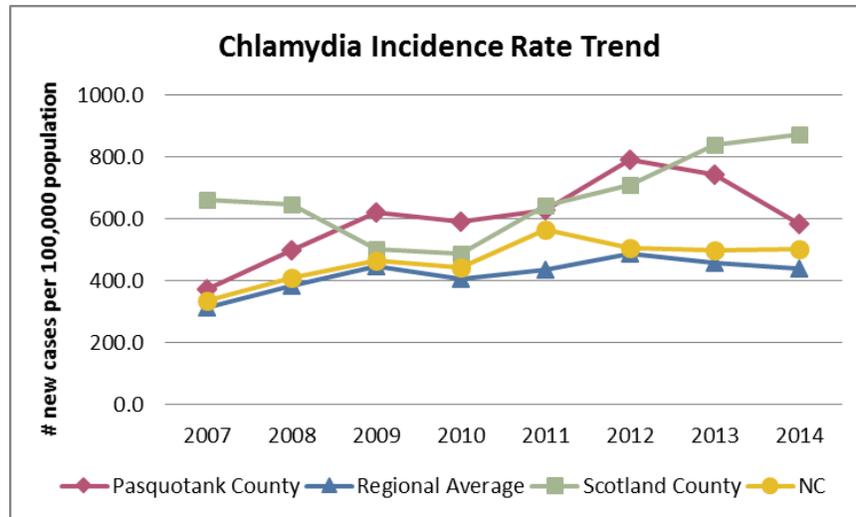
The following figure presents incidence data (i.e., new cases diagnosed) on chlamydia infections.

- There is considerable variability in the annual incidence rates for chlamydia at the county level, which is not uncommon for an infectious disease (see also disclaimer, below).
- The chlamydia incidence rate in Pasquotank County was well above the comparable NC rate and regional average in every year cited.
- The NC Communicable Disease Branch provides the following disclaimer to this chlamydia incidence data:

Note: chlamydia case reports represent persons who have a laboratory-confirmed Chlamydial infection. It is important to note that Chlamydial infection is often asymptomatic in both males and females and most cases are detected through screening. Changes in the number of reported cases may be due to changes in screening practices. The disease can cause serious complications in females and a number of screening programs are in place to detect infection in young women. There are no comparable screening programs for young men. For this reason, Chlamydia

case reports are always highly biased with respect to gender. The North Carolina STD Surveillance data system has undergone extensive changes since 2008 when North Carolina implemented North Carolina Electronic Disease Surveillance System (NC ESS). During this transition, Chlamydia morbidity counts for some counties may have been affected. Report totals for 2011 should be considered with this in mind. Reports are summarized by the date received in the Communicable Disease Surveillance Unit office rather than by date of diagnosis.

Figure 67. Chlamydia Infection Incidence Trend (2007-2014)



Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures. AIDS/HIV and STDs. Annual Reports. Years as noted. Table 13; <http://epi.publichealth.nc.gov/cd/stds/annualrpts.html>.

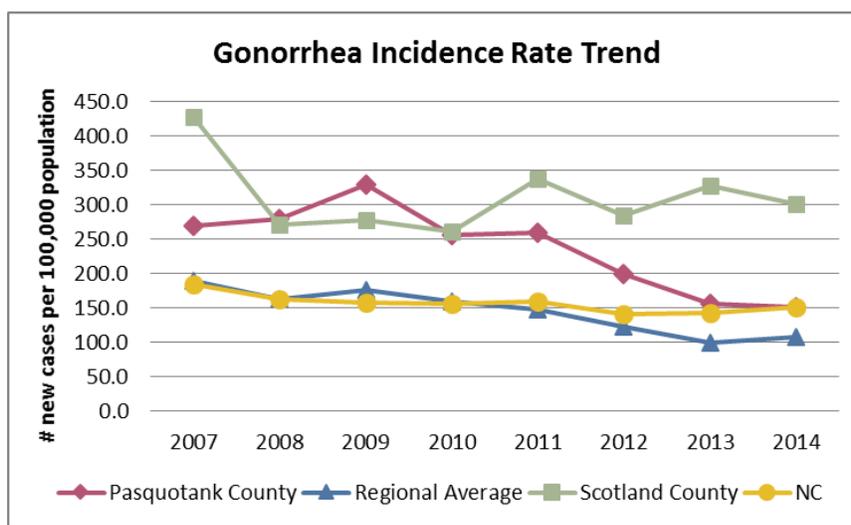
Gonorrhea

Gonorrhea is the second most commonly reported bacterial STI in the US. The highest rates of gonorrhea have been found in African Americans, people 20 to 24 years of age, and women, respectively. In women, gonorrhea can spread into the uterus and fallopian tubes, resulting in pelvic inflammatory disease (PID). PID affects more than one million women in the US every year and can cause tubal pregnancy and infertility in as many as 10 percent of infected women. In addition, some health researchers think gonorrhea adds to the risk of getting HIV infection (71).

The following figure presents incidence data (i.e., new cases diagnosed) for gonorrhea infections.

- The gonorrhea incidence rate in Pasquotank County was higher than the comparable state and regional average rates in almost every aggregate period cited, but did decrease significantly over time.

Figure 68. Gonorrhea Infection Incidence Trend (2007-2014)



Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures. AIDS/HIV and STDs. Annual Reports. Years as noted. Table 8; <http://epi.publichealth.nc.gov/cd/stds/annualrpts.html>.

The table below presents the 2006-2010 racially/ethnically-stratified gonorrhea infection rates for the four comparator jurisdictions. Note that this is old data, but no update was available from the source at the time this report was developed.

- In every jurisdiction the highest gonorrhea incidence occurred among the African American non-Hispanic population, in which group the incidence rate was approximately 8 times the comparable rate among the white non-Hispanic population.
- Gonorrhea incidence rates for other stratified groups at the local level were unstable.

Table 167. Gonorrhea Infection Incidence Rate, Stratified by Race/Ethnicity (Aggregate Period 2006-2010)

Location	Incidence, All Ages, Number and Rate (New cases per 100,000 population)									
	Total		White, Non-Hispanic		African American, Non-Hispanic		Other, Non-Hispanic		Hispanic	
	# Cases	Rate	# Cases	Rate	# Cases	Rate	# Cases	Rate	# Cases	Rate
Pasquotank County	584	286.2	87	74.8	492	623.8	1	29.3	4	72.3
<i>Regional Average</i>	195	179.5	34	51.6	158	430.1	0	39.2	2	178.7
Scotland County	572	314.8	79	88.4	465	666.8	24	121.2	4	140.5
State Total	77,867	168.9	16,488	52.9	58,041	581.6	1,485	96.7	1,853	54.2

Note: Rates for 5-year aggregates appearing in **bold** type are based on fewer than 20 cases per five year period. Such rates are unstable and should be interpreted with caution.

Note: Regional arithmetic mean rates appearing in *italic* type include more than three unstable county rates. Such mean rates likely are unstable and should be interpreted with caution.

Source: NC State Center for Health Statistics, County-level Data, County Health Data Books (2012). NC Resident Gonorrhea Cases and Rates per 100,000 Population (years and counties as noted): <http://www.schs.state.nc.us/schs/data/databook/>.

Human Immune Deficiency Virus (HIV)

From the standpoint of traditional incidence rates, the numbers of new HIV cases in smaller counties like Pasquotank County tend to be low and yield extremely variable or suppressible rates. (For example, there were 26 new HIV cases in Pasquotank County in the five-year period from 2010-2014.) Instead, the following table approximates a *prevalence* estimate for each jurisdiction on the basis of how many persons are living with HIV on a particular date.

- As of December 31, 2014 there were 92 persons with HIV/AIDS living in Pasquotank County.

**Table 168. HIV Prevalence: HIV and AIDS Cases Living as of December 31, 2014
(By County of Residence)**

Location	Number of Living Cases
Pasquotank County	92
<i>Regional Average</i>	<i>36</i>
Scotland County	127
<i>State of NC</i>	<i>28,526</i>

Source: NC DHHS, Division of Public Health, Epidemiology Section, Communicable Disease Branch. Facts and Figures. AIDS/HIV and STDs. Annual Reports. 2014. Table 1. <http://epi.publichealth.nc.gov/cd/stds/figures/std14rpt.pdf>.

Asthma

Asthma, a disease that affects the lungs, is one of the most common long-term diseases of children, but adults also can have asthma. Asthma causes wheezing, breathlessness, chest tightness, and coughing at night, early in the morning, or upon exertion. The symptoms result because the sides of the airways in the lungs swell and the airways shrink. Less air gets in and out of the lungs, and mucous naturally produced by the body further clogs the airways. In most cases, the cause of asthma is unknown (although there likely is a hereditary component), and there is no known cure. Asthma can be hard to diagnose (72).

The table below presents hospital discharge data for asthma, stratified by age, for the period 2011-2014. (At the present time this is the best measure of asthma prevalence available from NC SCHS.)

- Among comparators, the overall asthma hospitalization rate in Pasquotank County was usually the second-lowest or lowest.
- Recent county-level discharge rates for youth were unstable; at the state level the rates for youth (age 0-14) were half-again higher than the overall rates.

Table 169. NC Hospital Discharges with a Primary Diagnosis of Asthma, Numbers and Rates per 100,000 (2011-2014)

Location	Discharges, Number and Rate (Discharges per 100,000 Population)															
	2011				2012				2013				2014			
	All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14		All Ages		Age 0-14	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Pasquotank County	48	117.9	13	172.7	48	118.3	13	169.7	22	55.0	4	54.3	45	113.1	3	41.3
<i>Regional Average</i>	24	118.1	3	52.7	26	134.6	5	124.6	21	122.1	3	86.3	21	102.7	1	33.5
Scotland County	100	278.9	34	466.3	91	252.1	27	377.6	81	224.8	21	296.3	44	123.7	21	304.0
State of NC	9,880	102.3	3,004	157.3	9,786	100.3	3,128	163.7	9,021	91.6	2,841	148.9	9,035	90.9	2,754	144.6

Note: Bold type indicates a likely unstable rate based on a small (fewer than 10) number of cases.
 Source: NC State Center for Health Statistics, County-level Data, County Health Data Book (Years as noted), Morbidity, Asthma Hospital Discharges (Total and Age 10-14) per 100,000 Population (years and counties as noted); <http://www.schs.state.nc.us/SCHS/data/databook>.

Because, according to NC SCHS, the hospital discharge rate for asthma in Pasquotank County frequently has been higher than the comparable state rate, it may be illustrative to examine local hospital discharge data for asthma (ICD-9 Code 493xx). The table below presents ED and IP data summarizing 2013 and 2014 discharges of Pasquotank County residents associated with a primary diagnosis of asthma, *stratified by race*. The data is from Sentara Albemarle Medical Center only. (Sentara Albemarle Medical Center discharge figures were highlighted because that hospital saw the largest number of ED and IP patients from Pasquotank County.)

- The total number of ED discharges under this code for blacks was more than 3 times the comparable figure for whites.
- The total number of IP discharges under this code for blacks was almost 2 times the comparable figure for whites.
- Blacks compose 37% of the Pasquotank County population, but account for 73% of ED discharges and 66% of IP discharges associated with a diagnosis of asthma.

Table 170. Hospital Discharges, Pasquotank County Residents, by Race: Asthma (2013-2014)

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	411	135	565	20	4	24
2014	369	114	497	24	19	43
Total	780	249	1,062	44	23	67

Source: Sentara Albemarle Medical Center.

The following table presents ED and IP data summarizing 2013 and 2014 discharges of Pasquotank County residents associated with a primary diagnosis of asthma, *stratified by age group*. Again the data is from Sentara Albemarle Medical Center.

- The percentage of ED discharges for children age 14 and younger totaled 41% of all ED discharges under this code; this age group composes 18% of the Pasquotank County population.

- There were only 8 IP discharges among children age 14 and younger over the period cited.

Table 171. Hospital Discharges, Pasquotank County Residents, by Age Group: Asthma (2013-2014)

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Age 0-14	Age > 14	Total	Age 0-14	Age > 14	Total
2013	220	345	565	5	19	24
2014	216	281	497	3	40	43
Total	436	626	1,062	8	59	67

Source: Sentara Albemarle Medical Center

Diabetes

Diabetes mellitus, or simply, diabetes, is a group of diseases characterized by high blood glucose levels that result from defects in the body's ability to produce and/or use insulin. Diabetes can cause serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations. There are three major types of diabetes:

Type 1 diabetes results from the body's failure to produce insulin. This form was previously referred to as "insulin-dependent diabetes mellitus" or "juvenile diabetes". *Type 2 diabetes* results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with an absolute insulin deficiency. This form was previously referred to as "non-insulin-dependent diabetes mellitus" or "adult-onset diabetes". The third main form, *gestational diabetes*, occurs when pregnant women without a previous diagnosis of diabetes develop a high blood glucose level. Gestational diabetes is caused by the hormones of pregnancy or a shortage of insulin. Although this form of diabetes usually goes away after the baby is born, a woman who has had it is more likely to develop Type 2 diabetes later in life.

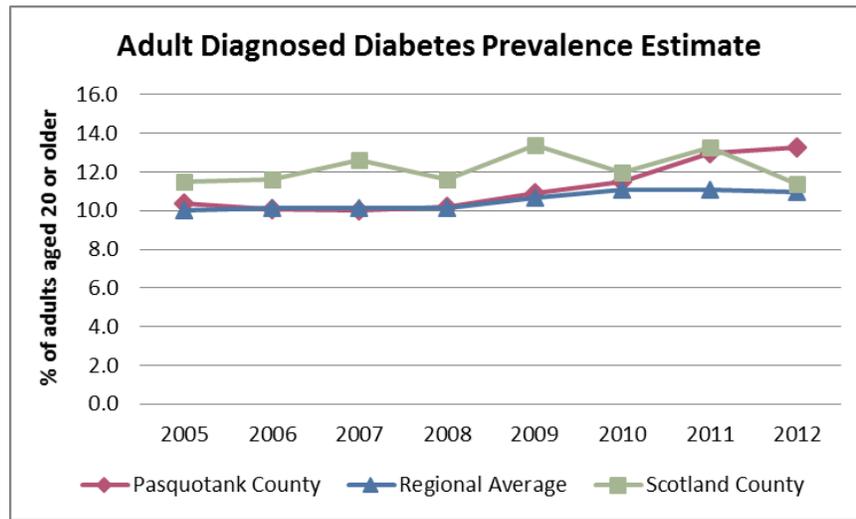
In recent years, medical professionals have begun to diagnose *prediabetes*, a condition in which blood glucose levels are higher than normal but not high enough for a diagnosis of diabetes. People with prediabetes are at increased risk for developing Type 2 diabetes and for heart disease and stroke (73).

As discussed previously in the mortality section of this report, diabetes was the 7th leading cause of death in Pasquotank County for the 2010-2014 aggregate period, causing 49 deaths. However, diabetes is a chronic condition, and, as noted above can have multiple significant health effects on its sufferers long before it might cause death.

The following figure plots estimates of the prevalence of diagnosed diabetes in adults age 20 and older in Pasquotank County and its local comparators (state-level data was not available).

- The annual estimated prevalence of diabetes among Pasquotank County adults was higher than the Region for most of the period shown.
- Over the 8-year period presented, the average annual estimated prevalence of adult diabetes in Pasquotank County was 11.2%, compared to 10.5% Region-wide.

Figure 69. Adult Diagnosed Diabetes Prevalence Estimate Trend (2005-2012)



Note: The prevalence of diagnosed diabetes and selected risk factors by county was estimated using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors.

Source: Centers for Disease Control and Prevention, Diabetes. Data and Statistics. County Data: Maps and Data Tables. Indicator: Diagnosed Diabetes, Age Adjusted Percentage.

Years as noted; <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>.

Although the current diabetes mortality rate in Pasquotank County is lower than the NC rate, and the long-term mortality rate trend shows a decrease, the condition has been slightly more prevalent in the county than the region, the short-term trend shows an increase, and the diabetes mortality rate among blacks is significantly higher than the rate among whites. Therefore it may be illustrative to examine hospital discharges for diabetes (ICD-9 Code 250xx). The data are from Sentara Albemarle Medical Center, because that hospital saw the largest number of ED and IP patients from Pasquotank County.

The data in the table below are for 2013 and 2014, and are stratified by race.

- The number of ED discharges under these codes among blacks was 1.8 times the number of discharges among whites.
- The number of IP discharges for blacks was 2.3 times the number for whites.
- While 37% of the Pasquotank County population is black, 64% of all ED discharges and 69% of IP discharges associated with a diagnosis of diabetes occur among blacks. The current diabetes mortality rate among blacks is approximately 1.4 times the rate among whites.

Table 172. Hospital Discharges, Pasquotank County Residents, by Race: Diabetes (2013-2014)

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	82	48	130	50	21	72
2014	82	41	127	53	23	78
Total	164	89	257	103	44	150

Source: Sentara Albemarle Medical Center

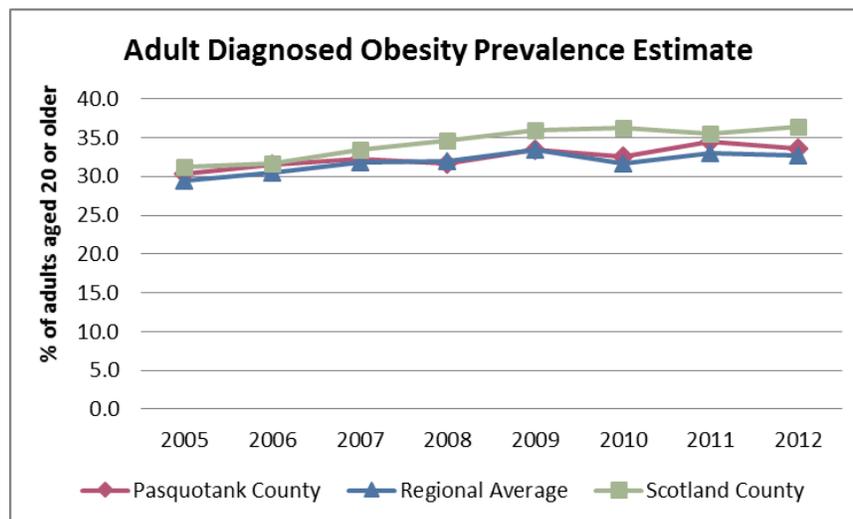
Obesity

Obesity in Adults

The figure below plots recent estimates of the prevalence of diagnosed obesity in adults age 20 and older in the three local jurisdictions being compared in this CHA. Comparable state-level data was not available.

- The annual estimated prevalence of adult obesity in the county was slightly higher than in the Region for much of the period presented and increased slightly overall.
- The average annual estimated prevalence of adult obesity in Pasquotank County was 32.5% in the period from 2005 through 2012, compared to 31.8% in the Region [State data is not available].

Figure 70. Adult Diagnosed Obesity Prevalence Estimate Trend (2005-2012)



Note: The prevalence of diagnosed diabetes and selected risk factors by county was estimated using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors.

Source: Centers for Disease Control and Prevention, Diabetes. Data and Statistics. County Data: Maps and Data Tables. Indicator: Diagnosed Diabetes, Age Adjusted Percentage. Years as noted; <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>

Obesity in Children

There is limited “measured” obesity data for children in Pasquotank County. One source is the NC *Healthy Weight Initiative*, which via the NC Nutrition and Physical Activity Surveillance System (NC NPASS), collects height and weight measurements from children seen in NC DPH-sponsored WIC and Child Health Clinics, as well as some school-based Health Centers (74). (It is important to note that this data is not necessarily representative of the county-wide population of children.) This data is used to calculate Body Mass Indices (BMIs) in order to gain some insight into the prevalence of childhood obesity. BMI is a calculation relating weight to height by the following formula:

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

For children, a BMI in the 95th percentile or above is considered “obese” (formerly defined as “overweight”), while BMIs that are between the 85th and 94th percentiles are considered “overweight” (formerly defined as “at risk for overweight”).

The table below presents NC NPASS data for children ages 2-4 for the period 2008-2012. Data for other age groups in Pasquotank County represented small numbers of children and too many unstable rates for inclusion here. Unfortunately, more recent data was not available from this source at the time this report was developed.

- In Pasquotank County in 2012, 13.3% of the participating children age 2-4 were “overweight” and 15.9% were “obese” (total = 29.2%)
- In NC in the same period, 14.9% were overweight and 14.5% were obese (total = 29.4%)

Table 173. Prevalence of Obesity and Overweight in Children, Ages 2-4, NC NPASS (2008-2012)

Location	Prevalence of Overweight and Obesity in Children Ages 2-4, by Percent									
	2008		2009		2010		2011		2012	
	Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese	Overweight	Obese
Pasquotank County	15.2	17.1	13.7	13.7	17.6	15.0	14.2	16.3	13.3	15.9
<i>Regional Average</i>	15.5	17.1	14.0	15.1	15.6	16.2	15.2	16.6	13.0	16.9
Scotland County	16.9	12.8	16.4	13.0	14.1	13.6	14.2	14.4	10.4	12.8
State of NC	16.3	15.4	15.8	15.4	16.1	15.6	16.2	15.7	14.9	14.5

Note: Figures denoted in **bold** type indicate percentages based on fewer than 10 cases.

Note: NC-NPASS data for children ages 2 to 4 are reflective of the population at 185% of the federal poverty level. Approximately 85 to 95% of the children included in the NC-NPASS sample for ages 2 to 4 are WIC participants. Since children are not eligible to participate in WIC once they become 5 years old, the sample size for NC-NPASS data received from the child health clinics was not adequate to calculate county-specific rates for children age 5 and older.

Source: Eat Smart, Move More, Data on Children and Youth in NC, North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), NC-NPASS Data (2008-2012), counties and age groups as noted;
<http://www.eatsmartmovemorenc.com/Data/ChildAndYouthData.html>.

Oral Health

Adult Oral Health

Counties are expected to use data from the annual Behavioral Risk Factor Surveillance System (BRFSS) survey to describe dental problems in the community. In NC, the BRFSS survey results are compiled on the county level only for large jurisdictions or metropolitan areas. Pasquotank County responses are combined among those of 40 other counties in an eastern NC region BRFSS data summary. Consequently, it is necessary to look elsewhere to adequately describe the dental needs of adults in Pasquotank County.

As noted in the Health Resources section of this report the ratio of dentists-to-population in Pasquotank County is very low, and there appears to be only one or two dentists in the county that accept Medicaid and/or HealthChoice patients. With resources for dental care in such short supply, it might be expected that county residents would have some difficulty accessing needed dental care.

Sometimes an indicator of a dental care access problem is the frequency with which the local emergency department is used as a dental provider. The ICD-9 Codes 520-525, Diseases of Oral Cavity, Salivary Glands, and Jaws, include diagnoses typically associated with dentistry (e.g., dental caries, gingivitis, periodontitis, tooth loss, etc.) and ICD-9 Code 528, Diseases of the Oral Soft Tissue. The table below lists ED visits to the region's five qualifying hospitals in 2013-2014 by Pasquotank County residents for conditions associated with these code categories.

- For the period 2013-2014, Pasquotank County residents made a total of 1,436 visits (an annual average of 718 visits) to local EDs for attention to dental problems.

Table 174. Emergency Department Admissions of Pasquotank County Residents for Dental Conditions (2013-2014)

ICD-9 Code	Diagnosis	Number of ED Discharges		
		2013	2014	Total
520-525xx	Diseases of the oral cavity	710	662	1,372
528xx	Diseases of the oral soft tissue	26	38	64
Total		736	700	1,436

Source: Vidant Bertie Hospital, Vidant Chowan Hospital, Vidant Roanoke-Chowan Hospital, The Outer Banks Hospital, and Sentara Albemarle Medical Center.

Since cost of dental care can be daunting but is covered for Medicaid-eligible patients, it is interesting to examine the proportion of Medicaid clients who actually receive dental services. The following table presents dental service utilization figures for Medicaid clients for SFY2010. This data is very old, but the source has not added data any more recent.

- From this data it appears that Medicaid-eligible persons under the age of 21 in Pasquotank County receive dental services at an 18% higher proportion than Medicaid-eligible persons age 21 and older. The direction, if not the proportion, of difference is the same in the other three jurisdictions.

Table 175. Dental Service Utilization by Medicaid Recipients, by Age Group (SFY2010)

Location	SFY2010					
	<21 Years Old			21+ Years Old		
	# Eligible for Services	# Receiving Services	% Eligibles Receiving Services	# Eligible for Services	# Receiving Services	% Eligibles Receiving Services
Pasquotank County	4,987	1,495	30.0	3,565	904	25.4
<i>Regional Average</i>	<i>2,256</i>	<i>773</i>	<i>34.6</i>	<i>1,716</i>	<i>464</i>	<i>26.5</i>
Scotland County	7,176	3,124	43.5	4,923	1,537	31.2
<i>State Total</i>	<i>1,113,692</i>	<i>541,210</i>	<i>48.6</i>	<i>679,139</i>	<i>214,786</i>	<i>31.6</i>

Source: NC DHHS, NC Division of Medical Assistance, Statistics and Reports, County Specific Snapshots for NC Medicaid Services (2008 and 2011); <http://www.ncdhhs.gov/dma/countyreports/index.htm>.

Child Oral Health

Each year about 200,000 NC elementary school children participate in dental screenings, also called assessments. Public health dental hygienists screen for tooth decay and other disease conditions in individuals. The hygienists refer children who have dental problems and need dental care to public or private practice dental care professionals (75).

The table below presents partial summaries of the screenings conducted in SY2009-2010 and SY2012-2013. Note that 2012-2013 data for Pasquotank County was not available at the source.

- Statewide and region-wide, the percent of untreated decay among both age groups decreased between SY2009-2010 and SY2012-2013.

Table 176. Child Dental Screening Summary (SY2009-2010 and SY2012-2013)

Location	School Dental Screening Results							
	2009-2010				2012-2013			
	Kindergarten		5th Grade		Kindergarten		5th Grade	
	% Screened	% Untreated Decay	% Screened	% Untreated Decay	% Screened	% Untreated Decay	% Screened	% Untreated Decay
Pasquotank County	88	22	93	4	n/a	n/a	n/a	n/a
<i>Regional Average</i>	<i>95</i>	<i>23</i>	<i>95</i>	<i>5</i>	<i>93</i>	<i>19</i>	<i>94</i>	<i>3</i>
Scotland County	85	28	89	4	24	24	36	9
<i>State of NC</i>	<i>74</i>	<i>15</i>	<i>69</i>	<i>3</i>	<i>58</i>	<i>13</i>	<i>51</i>	<i>2</i>

Source: NC DHHS, Oral Health, References and Statistics, School Oral Health Assessments, NC County Level Oral Health Assessment Data by Year (years and counties as noted); <http://www.ncdhhs.gov/dph/oralhealth/stats/MeasuringOralHealth.htm>.

Mental Health

With the mental health system in the state—and Pasquotank County—still coping with system reform growing pains, mental health merits a closer look.

As previously noted in the Mental Health Services and Facilities section of this report, the unit of NC government responsible for overseeing mental health services is the Division of Mental Health, Developmental Disabilities and Substance Abuse Services (DMH/DD/SAS).

In 2001, the NC General Assembly passed the Mental Health System Reform Act, which ended the previous system by which quasi-independent local entities such as counties and regional agencies delivered mental health services by directly employing the care providers. The new law essentially privatized mental health services by requiring the governmental local management entities (LMEs) to contract with other public or private providers or provider groups to serve area residents in need of mental health services. The local counties and regions no longer directly controlled the provision of services, but instead were responsible for managing provider contracts (76).

The status quo of the mental health system in NC did not remain static for long, since state government recognized that even with reorganization of the service system the budget for Medicaid-funded mental health services was not adequately managed and was growing at a high rate each year. In 2004 the state Division of Medical Assistance chose to implement the 1915(b)(c) Medicaid Waiver Program as a means to control and budget the costs of Medicaid-funded services. This program budgets and manages expenditures on the basis of a capitation formula and other fiscal adjustments that take into account the historical service costs associated with different Medicaid-eligible groups. Starting in 2005 the state established one LME (Piedmont Behavioral Health) as a pilot Medicaid managed care vendor via the waiver program. Expansions of the pilot program were undertaken in 2008 and 2010, and in 2011 NCDHHS was instructed to implement the 1915(b)(c) Waiver Program statewide by July 1, 2013 (77).

The state established a series of minimum requirements for LMEs to participate in the Waiver Program, and if an LME could not meet the minimum standards it was required to merge with another LME. As a result of standards enforcement, the state's original 23 LMEs had shrunk to 10 by December, 2013, at which time NCDHHS proposed to consolidate the remaining 10 into four agencies (78). The LME/MCO serving Pasquotank County is Trillium Health Resources.

One goal of mental health reform in NC was to refocus mental health, developmental disabilities and substance abuse care in the community instead of in state mental health facilities. The data below clearly illustrates how utilization of some state-level services has diminished.

Mental Health Service Utilization

The following table presents an annual summary of the number of persons in each jurisdiction served by LMEs/Area Programs from 2005 through 2014.

- The number of Pasquotank County residents served by the Area Mental Health Program has decreased overall, from 1,690 in 2005 to 1,209 in 2014.

Table 177. Persons Served by Mental Health Area Programs/Local Management Entities (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	1,690	1,603	1,614	1,693	1,560	1,700	1,773	942	1,478	1,209
<i>Regional Average</i>	758	724	730	730	733	706	765	382	611	511
Scotland County	1,959	1,694	1,548	1,930	1,876	1,972	1,407	1,484	2,204	2,984
State of NC	337,676	322,397	315,338	306,907	309,155	332,796	360,180	315,284	306,080	316,863

Note: The figures in the table represent all clients of a community-based Area Program for mental health, developmental disabilities, and drug and alcohol abuse active at the beginning of the state fiscal year plus all admissions during the year. Also included are persons served in three regional mental health facilities. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. State figures include clients reported to reside out-of-state and sometimes contains individuals of Unknown County of residence.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 519); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Since mental health reform in NC, only the most seriously ill mental health patients qualify for treatment at state psychiatric hospitals. The individual must be assessed as meeting the diagnostic criteria for (1) acute schizophrenia and/or other psychotic disorders, (2) acute mood disorders or (3) the combination of both, with or without medical and/or physical complications that are within the parameters of what the state hospital can manage (79).

At the present time, there are three state-operated psychiatric hospitals in NC: Broughton Hospital (Morganton), Central Regional Hospital (Butner), and Cherry Hospital (Goldsboro).

The table below presents a summary of the number of persons in each comparator jurisdiction served in NC State Psychiatric Hospitals for the period from 2005 through 2014.

- Over the 10-year period cited the number of Pasquotank County residents served by State Psychiatric Hospitals *decreased* by 91%. In 2014, 11 persons were served.

Table 178. Persons Served in NC State Psychiatric Hospitals (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	119	114	92	46	34	23	20	9	8	11
<i>Regional Average</i>	41	39	33	18	13	9	8	5	4	4
Scotland County	34	46	62	50	40	34	35	41	43	30
State of NC	18,435	18,292	18,498	14,643	9,643	7,188	5,754	4,572	3,964	3,529

Note: Sometimes referred to as "episodes of care", these counts reflect the total number of persons who were active (or the resident population) at the start of the state fiscal year plus the total of first admissions, readmissions, and transfers-in which occurred during the fiscal year at the three state alcohol and drug treatment centers. Excluded are visiting patients and outpatients. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 519); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Developmental Disabilities Service Utilization

According to NC MH/DD/SAS, *developmental disability* means a severe, chronic disability of a person which:

- a. is attributable to a mental or physical impairment or combination of mental and physical impairments;
- b. is manifested before the person attains age 22, unless the disability is caused by a traumatic head injury and is manifested after age 22;
- c. is likely to continue indefinitely;
- d. results in substantial functional limitations in three or more of the following areas of major life activity: self-care, receptive and expressive language, capacity for independent living, learning, mobility, self-direction and economic self-sufficiency; and
- e. reflects the person's need for a combination and sequence of special interdisciplinary, or generic care, treatment, or other services which are of a lifelong or extended duration and are individually planned and coordinated; or
- f. when applied to children from birth through four years of age, may be evidenced as a developmental delay (80).

Although community care is preferred where available, the state currently operates three facilities serving the developmentally disabled: Caswell Developmental Center (Kinston), Murdoch Developmental Center (Butner), and J. Iverson Riddle Developmental Center (Morganton).

The next table presents a summary of the persons in each jurisdiction served in NC State Developmental Centers for the period from 2005 through 2014.

- The numbers of persons in the three local jurisdictions served in state developmental centers were small and variable, and demonstrated no definitive pattern.
- At the state level, the number of persons served decreased by 41% between 2005 and 2014.

Table 179. Persons Served in NC State Developmental Centers (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	14	14	5	2	16	16	12	2	12	9
<i>Regional Average</i>	6	6	1	1	6	6	5	0	5	5
Scotland County	15	13	11	3	4	5	3	3	5	6
State of NC	2,172	1,690	1,713	1,409	1,404	1,375	1,355	1,340	1,331	1,282

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 517); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Substance Abuse Service Utilization

Alcohol and Drugs

There are three state-operated residential alcohol and drug abuse treatment centers (ADATC): the Julian F. Keith ADATC (Black Mountain), the R.J. Blackley ADATC (Butner), and the Walter B. Jones ADATC (Greenville).

The following table presents a summary of the persons in each jurisdiction served in NC State ADATC for the period from 2005 through 2014.

- During the 10-year period from 2005 through 2014, a total of 343 Pasquotank County residents were served by NC State Alcohol and Drug Abuse Treatment Centers (ADATCs), with the number varying from year to year. A high of 72 were served in 2009; 20 were served in 2014.

Table 180. Persons Served in NC Alcohol and Drug Abuse Treatment Centers (2005-2014)

Location	Number of Persons Served									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	35	43	22	41	72	33	24	22	31	20
<i>Regional Average</i>	11	14	9	19	21	13	11	8	11	8
Scotland County	19	9	16	15	12	7	7	11	5	5
State of NC	3,732	4,003	3,733	4,284	4,812	4,483	4,590	4,265	4,343	4,049

Sometimes referred to as "episodes of care", these counts reflect the total number of persons who were active (or the resident population) at the start of the state fiscal year plus the total of first admissions, readmissions, and transfers-in which occurred during the fiscal year at the three state alcohol and drug treatment centers. Excluded are visiting patients and outpatients. Multiple admissions of the same client are counted multiple times. County of residence is reported at the time of admission. North Carolina data include clients reported to reside out-of-state.

Source: Log Into North Carolina (LINC) Database, Topic Group Vital Statistics and Health (Data Item 518); http://data.osbm.state.nc/pls/linc/dyn_linc_main.show.

Utilization of the Hospital for Mental Health Services

It is unclear whether local mental health resources are actually meeting the need in Pasquotank County, because the hospitals, especially the emergency departments in the region, are seeing many mental health patients.

The table below presents 2013-2014 data on ED and IP discharges of Pasquotank County residents with diagnoses associated with mental health issues, or primary diagnosis of ICD-9 Codes 290-319xx. The data are from the ARHS Region hospitals seeing more than 20 Pasquotank County patients in the two years cited. The ED data is from Vidant Bertie, Chowan and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. The IP data is from Vidant Chowan, and Roanoke-Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center. Note that IP discharges for mental health diagnoses may be "skewed" because Vidant Roanoke-Chowan Hospital has a specialized inpatient mental health unit.

- Over the two-year period cited, ED discharges related to all Mental, Behavioral and Neurological Disorder diagnoses composed an average of 2.3% of all ED discharges, and IP discharges for mental health diagnoses composed an average of 2.9% of all IP discharges.
- Note that these diagnoses (ICD-9 290-319xx) include psychotic and non-psychotic disorders, and conditions associated with alcohol and drug abuse.

Table 181. ED and IP Discharges of Pasquotank County Residents with Mental Health Diagnoses

Year	No. Emergency Department Discharges	No. In-Patient Hospitalization Discharges
2013	602 (2.3% of all ED discharges)	112 (3.4% of all IP discharges)
2014	583 (2.2%)	77 (2.3%)

The following table provides more detailed 2013-2014 hospital data for Pasquotank County residents from the five ARHS region hospitals that saw more than 20 Pasquotank County patients over the period cited. The diagnoses covered in this case include codes in the ICD-9 code category 290-319xx, Mental, Behavioral and Neurodevelopmental Disorders specific to drug- and alcohol-related conditions.

- In the period cited there was a total of 1,185 ED discharges of Pasquotank County residents diagnosed with mental or behavioral disorders.
- The most commonly-diagnosed drug- or alcohol-related mental health problem among this patient group was non-dependent use of drugs. There was a total of 164 discharges under this code, or 14% of all mental, behavioral and neurodevelopmental disorder discharges.

Table 182. Detailed ED Discharges of Pasquotank County Residents with Mental Health Diagnoses (2013-2014)

ICD-9 Code	Diagnosis	Number of ED Discharges		
		2013	2014	Total
290-319xx	Mental, Behavioral and Neurodevelopmental Disorders	602	583	1,185
290-299.9	Psychosis	188	180	368
291	<i>Alcohol-induced mental disorders</i>	6	7	13
292	<i>Drug-induced mental disorders</i>	15	19	34
300	Neurotic, Personality Disorders, etc. (non-psychotic)	413	403	816
300.9	<i>Suicidal risk and tendencies</i>	4	3	7
303	<i>Alcohol dependence syndrome</i>	16	12	28
304	<i>Drug dependence</i>	13	11	24
305-305.99	<i>Non-dependent use of drugs (excluding 305.1)</i>	78	86	164
305.1	<i>Tobacco use disorder</i>	1	1	2

Source: Vidant Bertie, Chowan, and Roanoke Chowan Hospitals, The Outer Banks Hospital, and Sentara Albemarle Medical Center

CHAPTER FIVE: ENVIRONMENTAL DATA

AIR QUALITY

Air Quality Index

Nationally, outdoor air quality monitoring is the responsibility of the Environmental Protection Agency (EPA). In NC, the agency responsible for monitoring air quality is the Division of Air Quality (DAQ) in the NC Department of Environment and Natural Resources (NC DENR).

The impact of air pollutants in the environment is described on the basis of emissions, exposure, and health risks. A useful measure that combines these three parameters is the EPA's Air Quality Index (AQI). The EPA monitors and catalogues AQI measurements at the county level, but not in all counties. There is no AQI monitoring station in or near Pasquotank County.

Toxic Releases

Over 4 billion pounds of toxic chemicals are released into the nation's environment each year. The US Toxic Releases Inventory (TRI) program, created in 1986 as part of the Emergency Planning and Community Right to Know Act, is the tool the EPA uses to track these releases. Approximately 20,000 industrial facilities are required to report estimates of their environmental releases and waste generation annually to the TRI program office. These reports do not cover all toxic chemicals, and they omit pollution from motor vehicles and small businesses (81).

Although at least two facilities in Pasquotank County (Fortress Wood Products and UFP Elizabeth City LLC, both in Elizabeth City) have reported releases of copper compounds in the past, neither reported any releases in 2014.

Table 183. Facilities Releasing TRI Chemicals, Pasquotank County (2014)

Location	Total On- and Off-Site Disposal or Other Releases, In Pounds	County Rank (of 86 reporting) for Total Releases	Compounds Released in Greatest Quantity	Quantity Released, In Pounds	Releasing Facility	Facility Location
Pasquotank County	0	87	Copper compounds	0	Fortress Wood Products UFP Elizabeth City LLC	Elizabeth City Elizabeth City
<i>Regional Total</i>	<i>2,746,802</i>					
NC Total	61,903,968					
NC County Average	619,040					

Source: *TRI Release Reports: Chemical Reports, 2014*. US EPA TRI Explorer, Release Reports, Chemical Reports website: http://iaspub.epa.gov/triexplorer/tri_release.chemical.

WATER QUALITY

Drinking Water Systems

The EPA is responsible for monitoring the safety of drinking water and water system violations of the federal Safe Drinking Water Act (SDWA). The EPA's Safe Drinking Water Information System (SDWIS) contains information about public water systems and their violations of EPA's drinking water regulations, as reported to EPA by the states. These regulations establish maximum contaminant levels, treatment techniques, and monitoring and reporting requirements to ensure that water systems provide safe water to their customers (82).

As of February 14, 2016, SDWIS listed four active community water systems in Pasquotank County, serving an estimated total of 37,083 persons (93.2% of the county population). A community water system is one that serves at least 15 service connections used by year-round residents or regularly serves 25 year-round residents. This category includes municipalities, subdivisions and mobile home parks.

The EPA records in SDWIS violations of drinking water standards reported to it by states. It records violations as either *health-based* (contaminants exceeding safety standards or water not properly treated) or *monitoring- or reporting-based* (system failed to complete all samples or sample in a timely manner, or had another non-health related violation). The table below lists the active water systems in Pasquotank County as of October 28, 2015. The table also includes any *health-based* violations for the period from 2005 through 2015.

- All the community water systems are operated by municipalities.
- All the water systems rely on groundwater sources.
- There were no health violations recorded in the period 2005-2015.

Table 184. Active Water Systems in Pasquotank County (2015)

Type of Water System	Total Population Served	Primary Water Source Type	Health Violations 2005-2015
Community Water Systems			
Elizabeth City Annex	200	Purchased groundwater	None
Elizabeth City, Town of	18,683	Groundwater	None
Pasquotank County RO Water System	8,185	Groundwater	None
Pasquotank County Water System	10,015	Groundwater	None
Total	37,083		
Non-Transient, Non-Community Water Systems			
None		n/a	n/a
Total	0		
Transient, Non-Community Water Systems			
None		n/a	n/a
Total	0		

Source: *Safe Drinking Water Search for the State of North Carolina*. US EPA Envirofacts Safe Drinking Water Information System (SDWIS) website: <http://www3.epa.gov/enviro/facts/sdwis/search.html>.

Municipal Drinking Water Systems

Pasquotank County maintains a county water system, but provides no information on-line describing its facilities.

City of Elizabeth City Water Treatment System

The city water treatment plant was originally constructed in 1926 with a design capacity to treat five million gallons of water daily. The current average daily treatment is 2.4 million gallons. The system currently serves a total of 7,034 customers with the average household using 150 gallons of water per day. The municipal water source consists of eleven groundwater wells that are capable of pumping 3.5 million gallons a day.

The facility has four finished water booster pumps that supply water to the distribution system. The plant has a finished water storage capacity of 6 million gallons, consisting of 2 ground level clear wells at the facility site and 3 elevated tanks in the distribution system.

Water is treated using a conventional lime softening process to treat the raw groundwater. Water is drawn from the raw water holding reservoir to the head of the treatment facility where it is aerated to strip out the carbon dioxide. As the water travels to the up flow clarifier, aluminum sulfate and polymer is added for coagulation. Hydrated lime is added to raise the pH for softening. As the pH is increased, hardness is precipitated out as calcium carbonate and magnesium hydroxide. Water then enters the flocculation basin where it is re-carbonated to lower the pH to an acceptable level for drinking purposes. After leaving the flocculation basin the water enters the sedimentation basins where larger suspended particles are allowed to settle out. Any remaining particles are then filtered out through the use of dual media rapid sand filters. These filters are made up of anthracite and sand on a support bed of gravel. Once the water is filtered, phosphate is added for corrosion control. Fluoride is also added to help prevent tooth decay. A combination of chlorine and ammonia is added for disinfection and to prevent the formation of THM's.

The facility's laboratory is certified by the state of North Carolina to perform bacteriological analyses on drinking water. Bacteriological analysis is performed daily on the filtered and finished water. Once a week 5 random samples are collected from the distribution system for bacteriological analysis. The lab also performs daily routine chemical and physical analyses on the raw, filtered and finished water. These analyses include: pH, alkalinity, hardness, fluoride, color, iron, manganese, carbon dioxide, dissolved oxygen and orthophosphate. Chlorine residual and turbidity is monitored every 4 hours.

Due to the use of lime for softening, the facility generates approximately 1,022 dry tons of lime sludge a year. Currently, we have access to 1,800 acres of land permitted by the state on which to apply these residuals (83).

Wastewater Systems

Municipalities operate jurisdiction-wide wastewater treatment systems. It appears that Pasquotank County government does not operate a wastewater treatment system, but Elizabeth City does.

City of Elizabeth City Central Wastewater System

The Rogerson Wastewater Treatment Facility in Elizabeth City is a secondary treatment facility which utilizes a conventional activated sludge process to produce a high quality effluent. It also has the capability to utilize a biological nutrient removal process to eliminate nutrients (nitrogen and phosphorus) from the effluent. The Facility has a design capacity of 4.5 MGD (million gallons per day) with a peak flow of 11.25 MGD. Wastewater is received at the facility via three pipes: a 24-inch force main from the downtown area, another 24-inch force main, and an 8-inch force main from the north side of town. The make-up of the wastewater is primarily domestic with some light industrial wastewater. The treated wastewater is permitted for discharge into the Pasquotank River. The sludge that is produced is thickened and stabilized with lime to meet Class B requirements as defined by EPA regulations and then hauled to a permit area in the county to be land applied (84).

NPDES Permits

Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into US waters. Point sources are discrete conveyances such as pipes or man-made ditches. Individual homes that are connected to a municipal system, use a septic system, or do not have a surface discharge do not need an NPDES permit; however, industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters.

The following table lists the NPDES-permitted dischargers in Pasquotank County and the destinations and permitted volumes of their discharges. Three of the four permitted dischargers are water treatment plants operated by governments; the fourth is a wastewater treatment plant also operated by a municipality.

Table 185. National Pollutant Discharge Elimination System (NPDES) Permitted Dischargers, Pasquotank County (September, 2015)

Owner	Facility	Type	Discharge Destination	Permitted Flow (Gal/Day)
City of Elizabeth City	Elizabeth City WTP	Water Treatment Plant	Knobbs Creek	not limited
Pasquotank County	Pasquotank County Reverse Osmosis WTP	Water Treatment Plant	Albemarle Sound	not limited
City of Elizabeth City	Elizabeth City WWTP	Wastewater Treatment Plant, Municipal, Large	Pasquotank River	4,500,000
Pasquotank County	Pasquotank County WTP	Water Treatment Plant	New Begun Creek	not limited

Source: NC Department of Environment and Natural Resources, Division of Water Quality, Surface Water. NPDES Wastewater Permitting and Compliance Program. Permit Info, List of Active Individual Permits as of 9/4/15; <http://portal.ncdenr.org/web/wq/swp/ps/npdes/>.

SOLID WASTE

Solid Waste Disposal

The next table presents figures summarizing tonnage of solid waste disposed for the period FY2009-10 through FY2013-14.

- In FY2013-14, Pasquotank County managed 41,358 tons of municipal solid waste (MSW) for a rate of 1.05 tons per capita. This tonnage represented an increase of 8% from the per capita rate for FY1991-92 (the period customarily used for the base rate).
- As a regional average, the per capita rate of waste disposed in FY2013-14 fell by 1% from the rate for the base year.
- During the same FY2013-14 period the overall state per capita solid waste management rate was 12% less than the FY1991-92 base per capita rate.

**Table 186. Solid Waste Disposal
FY2009-10 through FY2013-14**

Location	MSW Tons Managed 1991-1992	MSW Tons Disposed					Base Year Per Capita (1991-1992)	Per Capita Rate 2013-14	%Change Base Year to 2013-14
		2009-2010	2010-2011	2011-12	2012-13	2013-14			
Pasquotank County	30,150.34	42,932.63	39,385.28	40,879	42,125	41,358	0.97	1.05	8
<i>Regional Total</i>	<i>90,272.93</i>	<i>112,837.00</i>	<i>116,918.14</i>	<i>111,229</i>	<i>109,034</i>	<i>118,565</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>Regional Average</i>	<i>12,896.13</i>	<i>16,119.57</i>	<i>16,702.59</i>	<i>15,890</i>	<i>15,576</i>	<i>16,938</i>	<i>0.78</i>	<i>0.78</i>	<i>-1</i>
Scotland County	39,867.42	25,016.54	26,381.74	22,636	23,582	18,726	1.17	0.55	-56
State of NC	7,257,428.09	9,395,457.19	9,467,044.71	9,443,380.00	9,149,130.00	9,273,571.00	1.07	0.94	-12

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Program, NC Solid Waste Management Annual Report, Fiscal Years as noted. County Per Capita Report; <http://portal.ncdenr.org/web/wm/sw/swmar>.

The following table presents the FY2013-14 County Waste Disposal Report for Pasquotank County.

- The majority of Pasquotank County's solid waste is either transferred or transported directly outside the county, some of it to Virginia. The only solid waste that stays in-county is construction and demolition waste.

**Table 187. County Waste Disposal Report, Pasquotank County
(FY2013-14)**

Location	Facility Name	Facility Type	Tons Received	Tons Transferred
Pasquotank County	East Carolina Regional Landfill	Municipal Solid Waste Landfill	15,768.45	0.00
	Uwharrie Environmental Regional Landfill	Municipal Solid Waste Landfill	2.17	0.00
	Pasquotank County C&D Landfill	Construction & Demolition Landfill	10,295.97	0.00
	Pasquotank County Transfer Station	Municipal Solid Waste Transfer Station	29,048.33	29,048.33
	C & D Landfill	Construction & Demolition Landfill	5.51	0.00
	Atlantic Waste Disposal, Inc. (VA)	Municipal Solid Waste Landfill	18,416.45	0.00

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section. Solid Waste Management Annual Reports, FY2013-2014; County Waste Disposal Report Fiscal Year 2013-2014. http://portal.ncdenr.org/c/document_library/get_file?p_l_id=4649434&folderId=4667253&name=DLFE-38490.pdf.

The table below describes the capacity of the landfill in Pasquotank County.

- Based on current fiscal year tons, the estimated remaining “life” capacity of the Pasquotank County Construction and Demolition Landfill was approximately 1.6 years from FY2013-14.

Table 188. Landfill Capacity, Pasquotank County (FY2013-14)

Location	Facility Name	Open Date	Volume Overall	Volume Overall Remaining	Volume Overall Remaining in Tons	Volume Overall Remaining in Years (Fiscal Year Tons)
Pasquotank County	Pasquotank County C&D Landfill	4/1/96	780,149	56,318	16,896	1.60

Source: NC Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section. Solid Waste Management Annual Reports, FY2013-2014; Landfill Capacity Report Fiscal Year 2010-2011.

http://portal.ncdenr.org/c/document_library/get_file?p_l_id=4649434&folderId=4667253&name=DLFE-41641.pdf.

Convenience Centers

Pasquotank County maintains seven convenience centers for waste collection:

- Newland Site
- Providence Site
- Welfield Road Site
- Mt. Hermon Site
- Landfill Site
- Coast Guard Site
- Weeksville Site

While focused on recyclable waste, these convenience sites also accept non-recyclable waste (85).

Municipal Solid Waste Programs

Pasquotank County solid waste collection appears to be accomplished via the convenience centers. The City of Elizabeth City conducts its own solid waste collection and recycling program.

City of Elizabeth City Solid Waste Management Program

The City of Elizabeth City provides a 90-gallon trash receptacle to each home within the City’s corporate limits for the collection of all normal household garbage, small items and non-recyclables. To assure pickup, all refuse must be at curbside by 8:00 a.m. on the scheduled collection day. The preferred location for the container for collection is at the edge of the street with the handle facing the house. Excess trash, placed outside the container, WILL NOT be picked up.

Items that must NOT be placed in the containers include: dirt or sod, rocks or concrete, yard waste, toxic or flammable materials such as oil, gas or paint, hot ashes and debris from construction, remodeling or demolition. City-issued containers will hold the equivalent of three

or four normal garbage cans. No other container will be permitted other than the automated container. There is a limit of two containers per household (86).

The city's recycling program is a *mandatory program* for all residents in order to collect recyclable items at curbside on the same day trash is collected. Violators shall be subject to civil fines. Only three types of container are approved for recyclables: the orange, City-issued 65-gallon cart, 19-gallon recycling bin, and clear see-through plastic bags for extra recycling items. Residents that currently have the yellow recycle bins are limited to five bins per household. The Official City Website contains lists of allowed recyclables (87).

Hazardous Waste Generation

The EPA maintains a database that catalogs generators, transporters, and other handlers of hazardous wastes. The data, located in the Resource Conservation and Recovery Act Information (RCRAInfo) database, is accessed via EPA Envirofacts. The table below lists the hazardous waste generators in Pasquotank County.

**Table 189. Hazardous Waste Generators, Pasquotank County
(Accessed February, 2016)**

County	Generator Name	Location	Type of Business (NAICS Code/Description)	Type of Generator
Pasquotank County	7-Eleven #20578	Elizabeth City	not available	unspecified
	American Metal Transfer	Elizabeth City	recyclable material wholesalers	unspecified
	Big Buck's Recycling	Elizabeth City	automotive parts and accessories stores	unspecified
	Bigg's Collision Center	Elizabeth City	New Car Dealer	Conditionally Exempt Small Quantity
	Blackwater Airships	Elizabeth City	Aircraft Manufacturing	unspecified
	C & C Auto Salvage	Elizabeth City	recyclable material wholesalers	unspecified
	Carolina Dunes Inc	Elizabeth City	all other miscellaneous manufacturing	unspecified
	Carquest Auto Parts #1085	Elizabeth City	automotive parts and accessories stores	Conditionally Exempt Small Quantity
	College of the Albemarle	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Colonial Cleaners	Elizabeth City	not available	Small Quantity
	Colony Tire	Elizabeth City	not available	Conditionally Exempt Small Quantity
	CVS Pharmacy #3620	Elizabeth City	Pharmacies and Drug Stores; One-Hour Photofinishing	Large Quantity
	Davis Yachts Inc	Elizabeth City	Boat Building	unspecified
	Dolphin Systems Corporation	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Don Jennings	Elizabeth City	not available	unspecified
	DRS Technical Services Inc	Elizabeth City	Museums; Other Support Activities for Air Transportation	Conditionally Exempt Small Quantity
	DRS Technologies	Elizabeth City	Aircraft Manufacturing; Aircraft Engine and Engine Parts Manufacturing; Other support activities for air transportation; other aircraft parts and auxiliary equipment manufacturing	Large Quantity
	Elizabeth City State University	Elizabeth City	not available	Small Quantity
	Farm Fresh 6273	Elizabeth City	Supermarkets and other grocery stores; Pharmacies and drug stores	Conditionally Exempt Small Quantity
	Federal Courthouse Building	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Fortress Wood Products	Elizabeth City	Wood preservation	Small Quantity
	Friskie Petcare	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Hall Ford Hyundai Elizabeth City	Elizabeth City	general automotive repair; automotive body, paint, and interior repair and maintenance	Conditionally Exempt Small Quantity
	Hockmeyer Equipment Corporation	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Hughes Supply #HDHG0085	Elizabeth City	Plumbing and heating equipment and supplies, merchant wholesalers	Conditionally Exempt Small Quantity
	J & R Transportation	Elizabeth City	not available	unspecified
	K Mart	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Kaiser Agricultural Chemicals	Elizabeth City	not available	unspecified
	Mann's Auto	Elizabeth City	Automotive parts and accessories stores; recyclable material wholesalers	unspecified
	Merchant's Tire and Auto #333	Elizabeth City	Automotive mechanical and electrical repair and maintenance	Conditionally Exempt Small Quantity
	Morris Auto Sales	Elizabeth City	not available	unspecified
	National Water Works #HDWW5470	Elizabeth City	Plumbing and heating equipment and supplies, merchant wholesalers	Conditionally Exempt Small Quantity
	NCDSCA 070-0001 (Southgate Koretizing)	Elizabeth City	Drycleaning and laundry services	Small Quantity
	Perry Motors Toyota Inc	Elizabeth City	not available	unspecified
	Petrochem Recovery Services of NC Inc	Elizabeth City	not available	unspecified
	Rappahannock Coatings Inc	Elizabeth City	not available	unspecified
	Rochelle Cleaners Inc	Elizabeth City	not available	Conditionally Exempt Small Quantity
	Sentara Albemarle Regional Medical Center	Elizabeth City	General medical and surgical hospitals	Small Quantity
	Superior Fiberglass Inc	Elizabeth City	not available	unspecified
	TCOM L P (several locations)	Elizabeth City	Wood kitchen cabinet and countertop manufacturing; Softwood veneer and plywood manufacturing; Other wood product manufacturing	Conditionally Exempt Small Quantity
	Tractor Supply #1495	Elizabeth City	all other miscellaneous store retailers	Conditionally Exempt Small Quantity
	Turner Honda	Elizabeth City	not available	Conditionally Exempt Small Quantity
	UFP Elizabeth City	Elizabeth City	Wood preservation	Small Quantity
	US Coast Guard Base Elizabeth City	Elizabeth City	National security; Air traffic control; Regulation and administration of transportation programs; other support activities for air transportation	Large Quantity
	Veeco Elizabeth City District Office	Elizabeth City	not available	unspecified
	Walmart #1527	Elizabeth City	Department Stores; Warehouse clubs and superstores	unspecified
	Walmart Supercenter #1527	Elizabeth City	Warehouse clubs and superstores	Small Quantity

Source: US EPA, Envirofacts, RCRAInfo, Search; <http://www.epa.gov/enviro/facts/rcrainfo/search.html>.

LEAD

Lead is a highly toxic natural metal found in the environment in soil, dust, air, and water. Historically it was used for many years in common household products such as paint, batteries, makeup, and ceramics, as an additive to gasoline, and as an ingredient in pesticides. Currently, it is used in lead-acid batteries, fishing weights, marine paint, lead shot, bullets, and in the manufacture of some plastics. Recently, the electronics industry is using more lead in magnetic imaging equipment, transistors, night vision equipment, and energy generation (88).

People can get lead in their body if they put their hands or other objects covered with lead dust in their mouths, ingest paint chips, soil, or water that contains lead, or breathe in lead dust, especially during renovations that disturb painted surfaces. Children are at greatest risk.

The Children's Environmental Health Branch of DENR, via its Lead Poisoning Prevention Program, catalogues data on the results of blood lead level monitoring among children. The following table presents blood lead monitoring data for 2006-2011. This site offers no data that is more recent.

The data for Ages 1 and 2 are routine screening results; the data for Ages 6 Months to 6 Years represents children who have been tested because a lead poisoning hazard had been identified in their residential housing unit or their child-occupied facility (e.g., daycare facility). All results at the county level likely are unstable due to small numbers of positive cases.

**Table 190. Blood Lead Assessment Results
(2006-2011)**

Location	Year	Ages 1 and 2					Ages 6 Months to 6 Years		
		Target Population	No. Tested	% Tested	No. \geq 10 μ g/dL	% \geq 10 μ g/dL	No. Tested	Confirmed 10-19 μ g/dL	Confirmed \geq 20 μ g/dL
Pasquotank County	2006	1,074	656	61.1	16	2.4	857	4	N/A
	2007	1,118	605	54.1	12	2.0	834	7	1
	2008	1,136	590	51.9	7	1.2	836	2	1
	2009	1,151	625	54.3	6	1.0	753	5	N/A
	2010	1,102	699	63.4	6	0.9	835	3	N/A
	2011	1,059	559	52.8	4	0.7	670	N/A	1
Scotland County	2006	972	596	61.3	4	0.7	625	1	N/A
	2007	1,030	661	64.2	1	0.2	694	1	N/A
	2008	1,101	776	70.5	3	0.4	798	1	N/A
	2009	1,077	843	78.3	3	0.4	945	N/A	N/A
	2010	1,011	735	72.7	3	0.4	804	1	N/A
	2011	1,001	684	68.3	2	0.3	719	N/A	N/A
State of NC	2006	242,813	103,899	42.8	867	0.8	135,595	255	38
	2007	250,686	112,556	44.9	706	0.6	143,972	232	38
	2008	258,532	121,023	46.8	654	0.5	152,222	181	36
	2009	261,644	129,395	49.5	583	0.5	160,713	143	38
	2010	257,543	132,014	51.3	519	0.4	162,060	146	24
	2011	249,087	129,558	52	461	0.4	156,039	102	22

Source: NC DHHS, Division of Public Health, Environmental Health Section, Children's Environmental Health. NC Childhood Lead Poisoning Prevention Program (CLPPP). Resources: Surveillance Data.
<http://ehs.ncpublichealth.com/hhccehb/cehu/lead/resources.htm>.

FOOD-, WATER-, AND VECTOR-BORNE HAZARDS

Food-, Water-, and Vector-Borne Diseases

A number of human diseases and syndromes are caused or exacerbated by microbial contaminants or by animal vectors in the natural environment. Several of these conditions are among the illnesses that must be reported to health authorities. A number of food-, water-, and vector-borne diseases are of increasing importance because they are either rare but becoming more prevalent, or spreading in geographic range, or becoming more difficult to treat. Among these diseases are Shiga toxin producing *E. coli*, salmonellosis, Lyme disease, West Nile virus infection, Eastern equine encephalitis, and rabies.

The following table summarizes cases of food-, water-, and vector-borne disease statewide in the period 2009-2014.

- The most common food-, water-, and vector-borne disease statewide is salmonellosis, followed by campylobacter infection and Rocky Mountain spotted fever (spotted fever rickettsiosis).

Table 191. Food-, Water-, and Vector-Borne Diseases, North Carolina (2009-2014)

Disease/Organism	Number of Cases					
	2009	2010	2011	2012	2013	2014 ¹
Campylobacter infection	587	851	909	1,091	1,101	982
Cryptosporidiosis	160	94	115	88	126	167
E. Coli O157:H7 (or other STEC)	112	97	155	208	101	89
Ehrlichiosis	31	130	96	133	93	85
Encephalitis California Group (Lacrosse)	169	22	24	26	13	23
Hepatitis A	41	48	30	34	46	38
Listeriosis	27	22	21	14	23	30
Lyme Disease	252	89	75	124	180	171
Rocky Mountain Spotted Fever	325	292	305	594	428	500
Salmonellosis	1,806	2,352	2,516	2,208	1,926	2,115
Shigellosis	358	253	225	137	256	474

¹: 2014 data includes January - December but it is not presented in the source as a final number for the year.

Source: NC DHHS, Epidemiology Branch, Communicable Disease Section, Facts and Figures, NC Communicable Disease Reports (years as noted) <http://epi.publichealth.nc.gov/cd/figures.html>.

Vector Control

Bacterial, viral and parasitic diseases that are transmitted by mosquitoes, ticks and fleas are collectively called *vector-borne diseases* (the insects and arthropods are the *vectors* that carry the diseases). Although the term vector can also apply to other carriers of disease—such as mammals that can transmit rabies or rodents that can transmit Hantavirus—those diseases are generally called *zoonotic* (animal-borne) diseases.

The most common vector-borne diseases found in North Carolina are carried by ticks and mosquitoes. The tick-borne illnesses most often seen in the state are Rocky Mountain Spotted Fever, ehrlichiosis, Lyme disease and Southern Tick-Associated Rash Illness (STARI). The

most frequent mosquito-borne illnesses, or "arboviruses," in North Carolina include Lacrosse encephalitis, West Nile virus and Eastern equine encephalitis (89).

One way to prevent or limit the transmission of vector-borne illnesses is to control the vectors of the disease. In the case of mosquitoes, that is usually accomplished by improving cultural practices (e.g., emptying temporary water reservoirs like puddles, flowerpots and bird feeders or by people covering their skin or applying insect repellent when outdoors). In extreme cases, communities may sometimes resort to large-scale aerial spraying to destroy the insect or interfere with its reproductive cycle. Spraying initiatives can be controversial, however, since the typically broadcast application of the pesticide is non-selective and can affect humans and pets.

Rabies, a vector-borne disease, can be controlled among pets by having dogs and cats properly vaccinated. While pets can be protected that way, there is no practical way to control rabies in the wild, where it actually is more common.

The following table lists the total number of rabies cases detected in Pasquotank County (n=13) and its comparators for the period 2005-2014. First of all, rabies is not common in the region, with only 46 cases identified region-wide in 10 years. Secondly, rabies is more common in animals *other* than cats, dogs or bats. Statewide in 2013, 54% of all rabies cases were in raccoons.

Table 192. Animal Rabies Cases (2005-2014)

Location	Total Number of Animal Rabies Cases									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Pasquotank County	1	0	1	2	5	3	0	0	1	0
<i>Regional Total</i>	<i>3</i>	<i>5</i>	<i>3</i>	<i>7</i>	<i>10</i>	<i>10</i>	<i>0</i>	<i>2</i>	<i>5</i>	<i>1</i>
Scotland County	0	1	2	0	0	0	0	0	1	0
State of NC	458	521	474	452	473	397	429	431	380	352

Source: NC Division of Public Health, Epidemiology. Rabies. Facts and Figures. Rabies by County, Tables by Year. <http://epi.publichealth.nc.gov/cd/rabies/figures.html>.

Animal Control in Pasquotank County

Animal control in Pasquotank County is the responsibility of the Pasquotank County Sheriff's Department. Located in Elizabeth City, the office serves residents of the county including Elizabeth City. All dogs and cats picked up by Animal Control are taken to the SPCA of Northeastern NC, located in Elizabeth City (see below). Pasquotank County is covered by a public nuisance animal ordinance requiring owners to be responsible for their pets' actions. Additionally, all subdivisions and trailer parks have a leash law.

Elizabeth City does not allow more than three animals over the age of 6 months to be maintained on any property located in the city limits.

Any animal which bites a human that causes a break in the skin must be reported to animal control. Any animal not current on its rabies vaccination will be quarantined for 10 days at the SPCA or any veterinary facility in Pasquotank County. The owner will be responsible for all

costs of this quarantine. The animal will not be released from quarantine until it has been properly vaccinated for rabies after the quarantine period is over (90).

Animal Shelters in Pasquotank County

The SPCA of Northeastern NC, the local animal shelter for Pasquotank and Camden Counties, is located in Elizabeth City. It is open to the public Wednesday through Friday 11:00 to 6:00 and Saturday through Monday 11:00 to 3:30.

The SPCA of Northeastern NC provides a loving environment, food, shelter and temporary housing for all lost, strayed or unwanted domestic animals from Pasquotank and Camden Counties. The SPCA does all it can to prevent the spread of diseases at the shelter. Services offered by the organization include educational seminars on the importance of good pet care. The shelter promotes a spay/neuter program, including vouchers to help new owners with the cost of these procedures, since one requirement of adoption is that the adopted pet must be spayed or neutered (91).

BUILT ENVIRONMENT

The term *built environment* refers to the human-made surroundings that provide the setting for human activity, ranging in scale from buildings and parks or green space to neighborhoods and cities. As often used the term also includes supporting infrastructure for those settings, such as the water supply, or the energy grid. In recent years, public health research has expanded the definition of built environment to include healthy food access, community gardens, recreational facilities, and the ease of getting around on foot or on bicycle.

Access to Grocery Stores and Farmers' Markets

The following table presents data on the availability of grocery stores.

- The number of grocery stores in Pasquotank County decreased from twelve to seven between 2007 and 2012.
- In 2010, an estimated 667 Pasquotank County households (~4.5%) had no car and therefore low access to grocery stores.
- In 2010 an estimated 3,707 persons in Pasquotank County (~9%) had low income and low access to grocery stores.

**Table 193. Availability of Grocery Stores
(2007 and 2012; 2010)**

Location	Grocery Stores						2010			
	2007		2012		% Change (2007-2012)		Households with No Car and Low Access		Low Income & Low Access	
	#	# per 1,000 Population	#	# per 1,000 Population	#	# per 1,000 Population	#	%	#	%
Pasquotank County	12	0.30	7	0.17	-41.67	-41.34	667	4.46	3,707	9.12
<i>Regional Total</i>	39	n/a	30	n/a	n/a	n/a	2,349	n/a	6,632	n/a
<i>Regional Average</i>	6	n/a	5	n/a	n/a	n/a	336	n/a	947	n/a
Scotland County	5	0.14	6	0.17	20.00	21.11	750	5.52	2,744	7.59
State of NC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1	2	2	2	2

1 - Store Availability. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

2 - Stores. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

Low access = living more than 1 mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area

The next table presents data on the availability of farmers' markets, according to the US Department of Agriculture *Your Food Environment Atlas*:

- Despite the rural, agrarian nature of much of the ARHS region, there are very few farmers' markets anywhere in the region: two in 2009 and four in 2013, one of which was in Pasquotank County.

**Table 194. Availability of Farmers' Markets
(2009 and 2013)**

Location	Farmers' Markets					
	2009		2013		% Change (2009-2013)	
	# Markets	# Markets per 1,000 Population	# Markets	# Markets per 1,000 Population	# Markets	# Markets per 1,000 Population
Pasquotank County	1	0.020	1	0.020	0.0	2.43
<i>Regional Total</i>	2	n/a	4	n/a	100.0	n/a
Scotland County	1	0.030	1	0.030	0.0	0.55
<i>State of NC</i>	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1

1 - *Local Foods: Farmers Markets*. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

An NC Department of Agriculture source (NCFarmFresh.com) listed far more farmer's markets/publicly accessible farms in Pasquotank County in 2015 (92):

- Downtown Waterfront Market, Elizabeth City
- Pasquotank Farmers Market, Elizabeth City
- Brothers Farm Market, Elizabeth City
- Hall Farms, Elizabeth City
- Kenyon Bailey Supply, Elizabeth City
- Painted Turtle Produce, Elizabeth City
- Parker Farm, Elizabeth City
- Scott Farm Market, Elizabeth City
- The Plant Park, Elizabeth City

Access to Fast Food Restaurants

The following table presents data on the availability of fast food restaurants.

- Pasquotank County had 31 fast food restaurants in 2007 and 33 in 2012.

**Table 195. Availability of Fast Food Restaurants
(2007 and 2012)**

Location	Fast Food Restaurants					
	2007		2012		% Change (2007-2012)	
	#	# per 1,000 Population	#	# per 1,000 Population	#	# per 1,000 Population
Pasquotank County	31	0.76	33	0.81	6.5	7.05
<i>Regional Total</i>	77	n/a	86	n/a	n/a	n/a
<i>Regional Average</i>	11	0.47	12	0.51	9.0	10.79
Scotland County	20	0.55	25	0.69	25.0	26.15
<i>State of NC</i>	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1

Source: *Fast Food Restaurants*. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas/>.

Access to Recreational Facilities

The table below presents data on the availability of recreational and fitness facilities.

- There were two recreation and fitness facilities in Pasquotank County in 2007 and three in 2009. This source does not provide more recent data on recreation and fitness facilities.

**Table 196. Availability of Recreation and Fitness Facilities
(2007 and 2009)**

Location	Recreation and Fitness Facilities					
	2007		2009		% Change (2007-2009)	
	#	# per 1,000 Population	#	# per 1,000 Population	#	# per 1,000 Population
Pasquotank County	2	0.05	3	0.07	50.0	50.9
<i>Regional Total</i>	9	n/a	7	n/a	n/a	n/a
Scotland County	1	0.03	1	0.03	0	0.92
<i>State of NC</i>	n/a	n/a	n/a	n/a	n/a	n/a
Source	1	1	1	1	1	1

Source: *Physical Activity Levels and Outlets*. U.S. Department of Agriculture Economic Research Service, Your Food Environment Atlas website: <http://ers.usda.gov/FoodAtlas>.

CHAPTER SIX: COMMUNITY INPUT

SMALL GROUP DISCUSSIONS SUMMARY

The information in this section was summarized by the secondary data consultant team from a report of a primary data gathering activity facilitated by another vendor. The complete report for Camden County is appended to this document.

Methodology

ARHS partnered with Sentara Albemarle Medical Center to collect primary data by conducting ten small-group discussions throughout Pasquotank County. Discussions included listening sessions and focus groups were led by trained moderators to learn about the community's definitions and understandings of health, illness and services that affect health attitudes, beliefs and behaviors.

The Center for Survey Research at East Carolina University provided moderator trainings and an accompanying interview guide to ensure consistent and effective data collection methods.

Discussion questions were researched, selected and approved by the CHA Lead Team. Discussions were recorded and lasted around one hour. Results were then transcribed and analyzed.

A total of 100 Pasquotank County residents participated in the small-group discussions, which were composed according to detail provided in the following table.

Table 197. Participants in Pasquotank County Small-Group Discussions

Pasquotank County Small-Group Discussions	Date	Participants
Community Care Clinic	1/23/15	2 Males; 5 Females
Knobbs Creek Senior Center	1/30/15	5 Males; 3 Females
PORT Human Services	2/02/15	3 Males; 3 Females
Memorial Missionary Church	3/10/15	3 Males; 5 Females
Pasquotank/Camden EMS	3/25/15	9 Males; 9 Females
College of the Albemarle	6/18/15	23 Females
City Road Methodist	7/02/15	3 Males; 5 Females
EC Downtown Business	8/05/15	1 Male; 6 Females
Elizabeth City State University	10/01/15	11 Females
Hugh Cale Center	10/27/15	5 Females

The following list describes the demographic profile of the small group discussion participants:

- 32% Black (compared to 37% in the county)
- 59% white (compared to 58% in the county)
- 7% Hispanic (compared to 4.4% in the county)
- 26% male (compared to 49% in the county)

- 9% unemployed (compared to 7.5% unemployment rate)
- 22% with bachelor's degree or higher (compared to 19% in the county)
- 22% currently without health insurance (compared to 17% in the county)
- 24% retired
- 38% earning more than \$50,000 household income

Results

No results in the following summary are quantifiable. The source document does not include any specific numbers with the responses, and terms like “most frequently” are not used with clarity of quantity. Therefore it is difficult to draw any conclusions regarding consensus or majority in response to any particular question.

Q 1: Tell us what you think is the best thing about living in this community.

- Safe environment and sense of community
- Friendly and helpful citizens
- Climate and environment
 - Opportunities to get outdoor
 - Open landscape, lack of crowding
- Quiet, relaxed, slower paced

Q2: What do people in this community do to stay healthy?

- Physical activity (walking, running, kayaking, fishing, dancing, bowling, gardening)
- Organized recreational opportunities (team sports, fitness classes, yoga)
- Annual medical checkups
- Eating food grown in local gardens
- Monitoring salt intake, preparing foods at home, drinking plenty of water
- Utilize available health resources

Q3: In your opinion, what are the serious health-related problems in your community?

The following table lists the community health problems identified by the participants.

Table 198. Participant-Identified Community Health Problems in Camden County

Physical	Social	Mental
Diabetes	Lack of Preventative Care	Drug Abuse
Cancer	Lack of Transportation	Stress
Obesity	Lack of Financial Resources	ADHD
Poor Nutrition		Suicide
High Blood Pressure		Lack of MH providers
High Cholesterol		
COPD		
Stroke		
Allergies		
Heart Disease		
Asthma		

Q4: What keeps people in your community from being healthy?

- Poor diet
 - Cheap, unhealthy fast food
 - Fried Southern foods
 - Large portions
 - Lack of knowledge about healthy diet
 - Hormones, chemicals, antibiotics used in raising and preserving food
- Lack of healthcare resources
 - Limited number of doctors, specialists, mental health providers
 - Lack of awareness about what is available
 - Lack of transportation
- Lack of financial resources
 - Low income levels and high cost of living
 - High insurance costs
- Lack of time and motivation to be healthy

Q5: What could be done to solve these problems?

- Increased education and outreach
 - For parents and youth
 - To increase utilization of available resources
- Encourage home gardens and support of local farmers
- Increase financial literacy so money gets spent on better health and lifestyle choices
- Increase accessibility of healthcare services
 - Free community care clinics

Q6: Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?

- Lack of specialized healthcare providers
 - Illnesses go undiagnosed and untreated
 - Travel is required
 - Even those with good coverage cannot get an appointment
- Poor communication between patients and providers
 - Language barrier for non-native English speakers
 - Providers don't listen to the needs of patients
- Cost of healthcare
 - Elderly, middle class, and low-income populations struggle

Q7: Are there any home remedies you use in place of traditional healthcare and/or medicine?

The following table summarizes the predominant responses.

Table 199. Home Remedies Reported by Participants

Home Remedy	Targeted Ailment
Vinegar	High blood pressure
Garlic	High blood pressure, colds
Vanilla	Toothaches
Oatmeal	Skin health
Jalapenos	Sore throat
Honey	Cough
Whiskey	Sore throat
Salt water	Sore throat
Cranberry juice	Urinary tract infection
Coconut oil	Miscellaneous
Fish oil	Miscellaneous
Vaseline	Skin health
Epsom salt	Acne, laxative
Baking Soda	Sore throat
Moonshine	Miscellaneous
Marijuana	Miscellaneous
Vicks VapoRub	Cough
Tobacco	Stings

Q8: What are the strengths related to health in your community?

- Local health-related assistance programs
 - Free screenings
 - Hospice
 - PORT Human Services
- Local food banks and transportation services
- Health education programs

- Educational opportunities by Community Care Clinic and Elizabeth City State University
- Walking programs and fundraisers
- Large local hospital and the variety of doctors associated with it
- Availability of health food options from local food markets
- Presence of exercise facilities

Q9: Cancer and heart disease are the leading causes of death in your county. In your opinion, what makes these the leading causes of death in your county?

- Poor diet
 - Too much fast food, microwaveable food
 - Lack of cooking knowledge
- Lack of exercise
 - Lack of motivation
- Limited healthcare resources
 - Poverty, lack of education
 - Lack of health provider collaboration and preventative care options
- Environmental conditions
 - Farming practices and use of chemicals
- Genetics, stress and tendency to ignore health problems

Q10: How does living in a rural area affect health?

- Positives:
 - Less pollution than larger cities
 - Proximity to water
 - Large amounts of farmland and room to grow own food
 - Healthcare providers get to know their patients personally
 - Students at local universities encouraged to stay local to practice
 - Strong church community
- Negatives:
 - Lack of resources (specialists, pediatrics, free clinics)
 - Limited transportation options (both public transportation and things like bike lanes)
 - Limited health information
 - Fewer funding sources

CHAPTER SEVEN: PRIORITIES IDENTIFICATION

PRIORITY SELECTION PROCESS BY HEALTHY CAROLINIANS OF THE ALBEMARLE

A vital phase of the Community Health Assessment (CHA) involves reporting out to the communities being served and to those residents who participated in the data gathering process. Community health presentations were held to provide the opportunity for community residents and key stakeholders to learn about the health-related primary and secondary data from the 2016 CHA process. The data was presented by Mrs. Sheila Pfaender, Public Health Consultant, during seven presentations conducted over a one-week period, geographically dispersed throughout the Albemarle Region.

The presentations were widely promoted through email invitations, newspaper announcements, the ARHS website, social media outlets, and by partnering organizations in an effort to bring the community together and strengthen an environment where the individuals were empowered in the decisions highlighted through the prioritization process. To maximize the potential audience reached by these presentations, each was live-streamed on Facebook in real time. In addition, each streamed presentation included a link to a web-based ballot via which the viewing community could indicate their choices for health priorities. Persons attending the presentations in-person completed the prioritization ballot immediately following each presentation.

Below is the list of presentations:

Monday, August 22, 2016:

Currituck County Cooperative Extension, Currituck County Center, Barco, NC
Camden County Public Library, Camden, NC

Tuesday, August 23, 2016:

Pasquotank County Health Department, Elizabeth City, NC

Wednesday, August 24, 2016:

Merchants Millpond State Park, Gatesville, NC (Gates County)

Thursday, August 25, 2016:

Perquimans County Recreation Department, Hertford, NC
Shepard Pruden Library, Edenton, NC (Chowan County)

Friday, August 26, 2016:

Bertie County Department of Social Services, Windsor, NC

As noted above, after reviewing the CHA presentation for each county, participants were asked to list what they thought were the three most important health issues for the county while utilizing the following criteria:

- ***Magnitude of the Problem:*** The size or extent of the problem as it relates to your county
- ***Consequences of the Problem:*** How the economic, social, cultural, and political issues within your county might be influenced by addressing this issue.

- **Feasibility:** Are there enough resources in the county to address this issue and is the community ready to address this issue?
- **Duplication:** Is this issue already being addressed by other community stakeholders/programs?

A web-based ballot with the same directions was also used to gather additional input from the community. The survey was open to the public for ten days.

After the post-presentation ballot results and web-based surveys were collected, the top ten health issues were tallied. For Healthy Carolinians of the Albemarle (Camden, Currituck, Pasquotank and Perquimans Counties) those ten were, in no particular order:

- Heart disease
- Substance abuse/Mental Health access and resources
- Infant and maternal health/Smoking during pregnancy
- Lung disease
- Access to care (medical and dental)
- Obesity
- Diabetes
- Cancer
- Suicide
- Aging problems

On September 16, 2016, the Healthy Carolinians of the Albemarle (HCOTA) Partnership met to finalize the priority selections for Camden, Currituck, Pasquotank and Perquimans counties.

Members in attendance were: Amy Underhill, Pam Hurdle, Barbara Courtney, Amanda Betts, Rich Olson, Michael Barclift, Janet Jarrett, Amanda Meads, Leslie Otts, and Julie Tunney. During the HCOTA meeting, members participated in a facilitated discussion, answering the following questions:

1. To what degree does (health issue) have a significant impact on our community's health?
2. To what degree should (health issue) be a focus area for our community to address?

After discussions, participants were then asked to use the top ten list that was developed for each county to vote on their top three priority issues by placing a colored sticker next to their choices. The priority areas with the most votes were as follows:

- **Obesity**
- **Diabetes**
- **Heart Disease**

It is important to note that these three priorities have been selected for a diverse four-county coalition, so certain priorities may be more applicable to some counties than to others.

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 September 2017. 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, Camden, Currituck and Perquimans counties. Healthy Carolinians of the Albemarle Partnership members will utilize the information gathered during the Community Health Assessment process and the prioritization process to clearly define our community's health priorities, actions, and expected results. All Partnership members will be involved in completing new 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 interventions and activities. The Action Plans will be developed after carefully considering all the factors that cause and perpetuate the problem being addressed. The Action Plans will also identify how progress towards the outcome will be measured.

DISSEMINATION PLAN

Healthy Carolinians of the Albemarle plans to share results from the Community Health Assessment (CHA) during meetings with county and city governments, local civic groups, faith organizations, and business leaders and through other community outreach events. The CHA documents can be found on the Albemarle Regional Health Services website at www.arhs-nc.org. Efforts will be made with other agencies and local government, including county home pages, to provide links to the information. ARHS also plans to work with the local newspapers to provide news releases to the public about the findings made in each county. HCOTA members and the broader community will have access to the information found in the CHA to use at their discretion for activities such as seeking evidence-based strategies, developing grant proposals, and planning and implementing programs.

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APPENDICES

APPENDIX 1: CONSULTANT'S PRESENTATION

APPENDIX 2: PRIMARY DATA REPORT

APPENDIX 3: PRIORITIZATION TOOL

APPENDIX 4: COMMUNITY RESOURCE INVENTORY

2016

***PASQUOTANK COUNTY
COMMUNITY HEALTH ASSESSMENT***

***Secondary Data Summary
and Brief Primary Data Results Summary***

August, 2016

Sheila S. Pfaender, Public Health Consultant

PURPOSE OF THE COMMUNITY HEALTH ASSESSMENT

- Describe the health status of the community.
- Create a report that will serve as a resource for the Pasquotank County Health Department, local Healthy Carolinians affiliates, area hospitals, and other community organizations.
- Provide direction for the planning of disease prevention and health promotion services and activities.

CONTRIBUTING VIEWPOINTS

Secondary Data	Hospital Data	Citizen Opinion
Demographic Socioeconomic Health Environmental	Emergency department discharges Inpatient hospitalization discharges	Community listening sessions



WE TAKE SPECIAL NOTICE WHEN...

- County statistics deviate from North Carolina, Regional, or peer county statistics, or some other “norm”.
- Trend data show significant changes over time.
- There are significant age, gender, or racial/ethnic disparities.



DEFINITIONS AND SYMBOLS

○ Arrows

- Arrow up (▲) indicates an increase.
- Arrow down (▼) indicates a decrease.

○ Color

- **Red** indicates a “worse than” or negative difference
- **Green** indicates a “better than” or positive difference
- **Blue** indicates a likely unstable rate or difference based on a small number of events; figures in blue should be used with great caution.

○ Bold Type

- Indicates the higher value of a pair, or the highest value among several.



DATA CAVEATS

- Data sources are cited rudimentarily among these slides, but are thoroughly cited in the supporting Data Workbooks.
- Most secondary data originated from authoritative sources in the public domain (e.g., US Census Bureau, US EPA, NC State Center for Health Statistics).
- Most data for the target county is compared also to a peer county, the average of data for the seven counties in the ARHS Region, and to data for North Carolina as a whole.
- All secondary data were mined at a point in time in the recent past, and may not represent present circumstances. That is, numbers, entity names, program titles, etc. that appear in the data may no longer be current.



DEMOGRAPHIC DATA

Total Population, Birth Rate, Population Growth, Minority Populations, Age Groups, Elderly Population, Foreign-Born Populations, Veterans

GENERAL POPULATION CHARACTERISTICS

(2014 ESTIMATES)

- Pasquotank County has a slightly larger proportion of females than of males (51% vs. 49%).
- The overall median age of the Pasquotank County population is 0.6 years *younger* than NC average and 6.0 years *younger* than the regional average.

Location	Total Population	Total Males	Median Age Males	Total Females	Median Age Females	Overall Median Age
Pasquotank County	39,787	19,556	35.7	20,231	39.6	37.6
Regional Avg.	19,258	9,467	42.0	9,791	45.1	43.6
Scotland County	35,576	17,509	37.2	18,067	41.1	39.0
NC	9,943,964	4,844,593	36.7	5,099,371	39.7	38.2

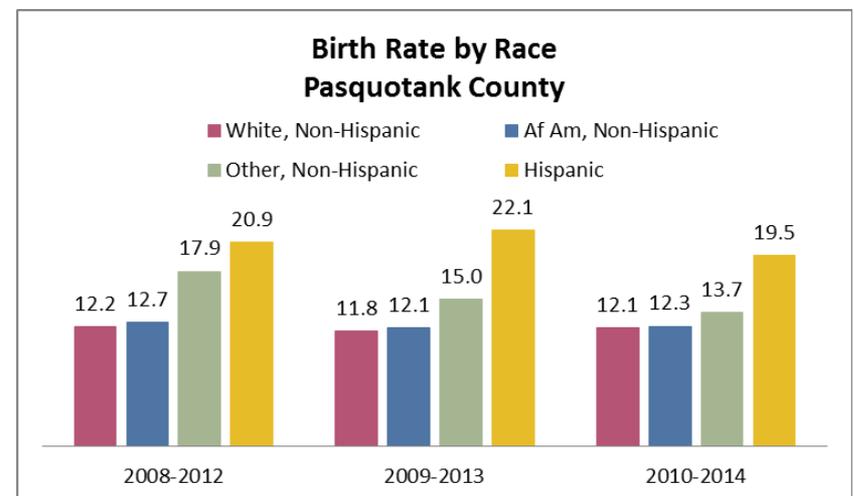
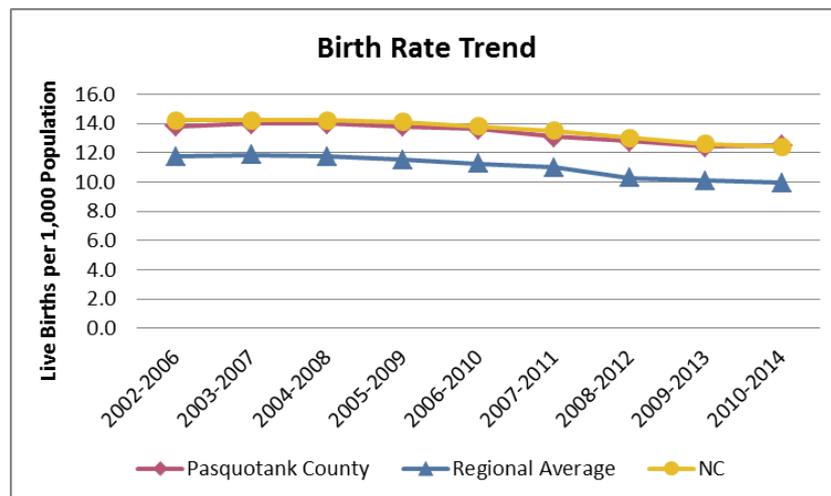
POPULATION GROWTH (PROJECTED)

- Pasquotank County's population growth is predicted to **decrease slightly** over the next 14 years.
- In 2010, the county population was 40,661, the highest in decades. By 2030 it is predicted to be 40,336.

Decade	Pasquotank County	Regional Average	Scotland County	NC
1980-1990	9.8	7.4	4.6	12.8
1990-2000	11.8	10.8	6.6	21.3
2000-2010	16.2	17.3	0.4	18.5
2010-2020	-1.0	1.3	-4.6	10.9
2020-2030	0.3	3.6	-7.7	9.8

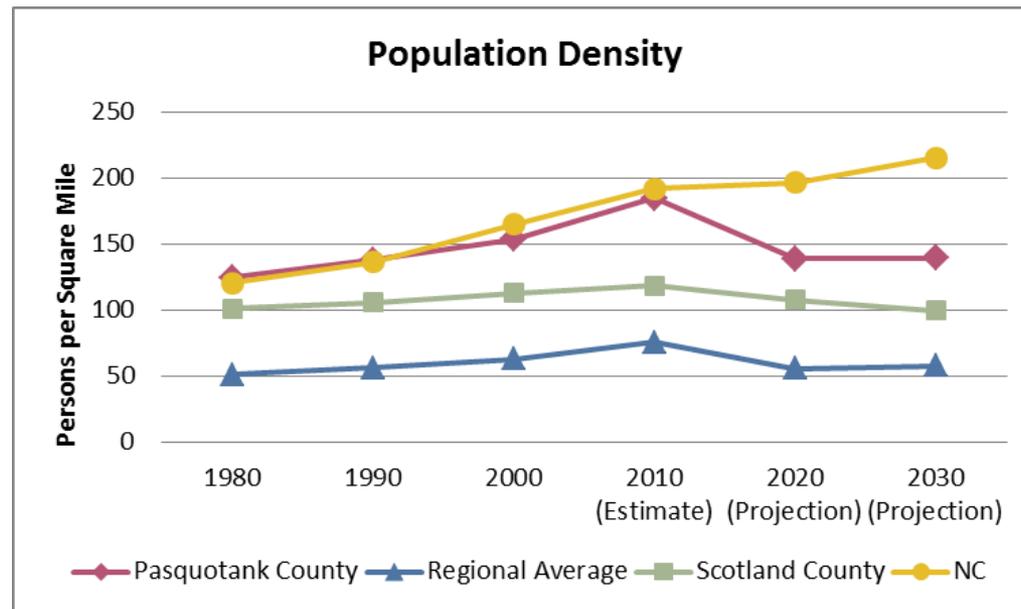
BIRTH RATE

- The Pasquotank County birth rate demonstrated an overall decline over the period presented below, with a similar trend seen at the State level.
- The birth rates among white and African American non-Hispanics and Hispanics have not demonstrated much change over the period presented. The birth rate among Other non-Hispanic women decreased in each period.
- In Pasquotank County in 2010-2014 the highest birth rate (19.5) occurred among Hispanics.



POPULATION DENSITY

- The population density of Pasquotank County has increased slightly over the period presented but remains lower than the density of the state.



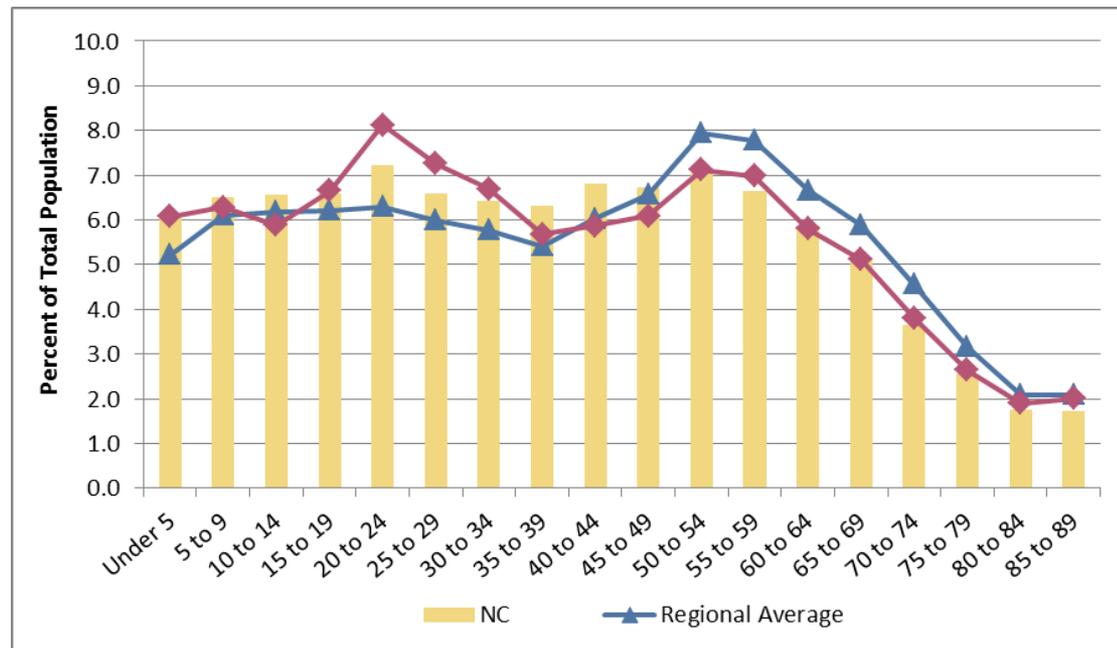
MINORITY POPULATIONS

- Pasquotank County has a higher proportion of Black/African American residents compared to the Region and the state.
- Other minority groups compose smaller proportions of the population in Pasquotank County than in most other comparator jurisdictions.
- The county has a higher proportion of Hispanic residents than the Region but a lower proportion than the State.

Location	Percent of Overall Population					
	White	Black	American Indians	Asian	Multiple Races	Hispanic
Pasquotank County	58.3	37.4	0.1	1.7	1.9	4.4
Regional Average	64.8	31.8	0.3	1.0	1.6	3.0
Scotland County	46.7	38.6	0.8	0.6	3.2	2.6
State of NC	69.6	21.5	1.2	2.4	2.3	8.7

POPULATION AGE DISTRIBUTION

- According to 2014 estimates, compared to NC as a whole Pasquotank County has higher proportions of people ages 20-34 and lower proportions of people in most other age groups.



GROWTH OF THE *ELDERLY* POPULATION

- The population in every major age group age 65 and older in Pasquotank County is projected to increase between 2000 and 2030, although by proportions smaller than for the state as a whole.
 - **Age 65-74:** by 53% (vs. **63%** in NC)
 - **Age 75-84:** by 31% (vs. **67%** in NC)
 - **Age 85+:** by 29% (vs. **75%** in NC)
 - **Overall Age 65+:** by 43% (vs. **66%** in NC)
- In 2014 there were an estimated 6,157 persons age 65 and older in Pasquotank County, representing around 15% of the total population.
- By 2030, with the total population predicted to decrease, 8,115 residents over the age of 65 will comprise 20% of the population.

CHARACTERISTICS OF THE ELDERLY POPULATION

(2014 AMERICAN COMMUNITY SURVEY ESTIMATES)

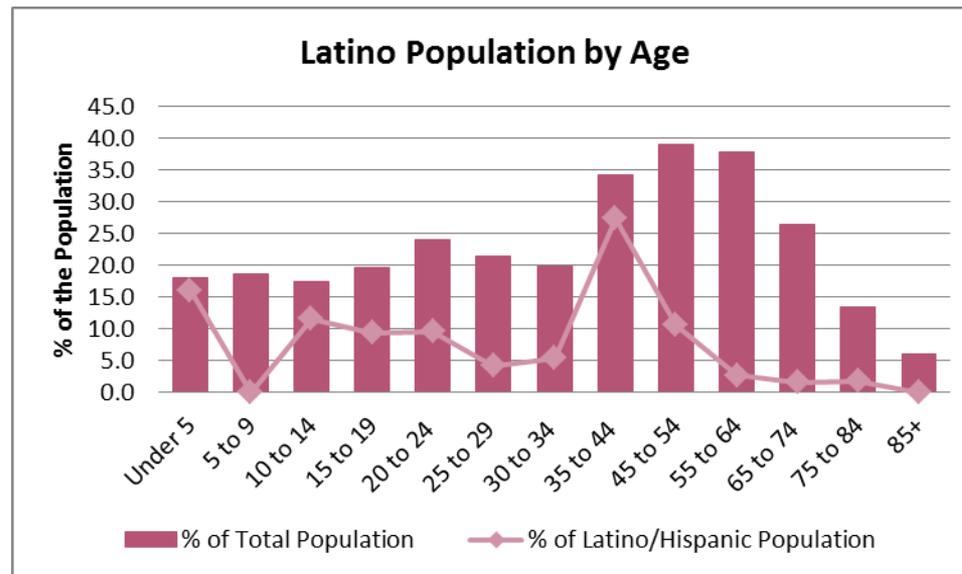
- Among the Pasquotank County population over the age of 65:
 - **28%** have less than a high school diploma (22% in NC)
 - 17% have a graduate or professional degree (**22%** in NC)
 - **12%** are below the 100% poverty level (10% in NC)
 - 24% are in the 100% to 199% poverty level (24% in NC)
 - 80% are homeowners (**82%** in NC)
 - 26% live alone (**28%** in NC)
 - **17%** are in the labor force (16% in NC)
 - Have a median household income of **\$35,603** (\$35,024 in NC)
- An estimated **41%** of Pasquotank County residents over the age of 65 have a disability (38% in NC)
 - The most common disabilities are ambulatory difficulty (27% vs. 25% in NC) and independent living difficulty (18% vs. 16% in NC).

FOREIGN-BORN POPULATION

- According to 2014 Estimates, 1,680 individuals living in Pasquotank County were born outside the US.
 - 39% entered the US before 1990.
 - 42% entered the US between 2000 and 2009.
- Spanish speakers comprise 2.5% of the total population and 50% of them speak English “less than very well”.
- Other Indo-European Language speakers comprise 1.7% of the population and 35% speak English “less than very well”.
- Asian and Pacific Island Language speakers comprise 0.8% of the total population and 11% of them speak English “less than very well”.

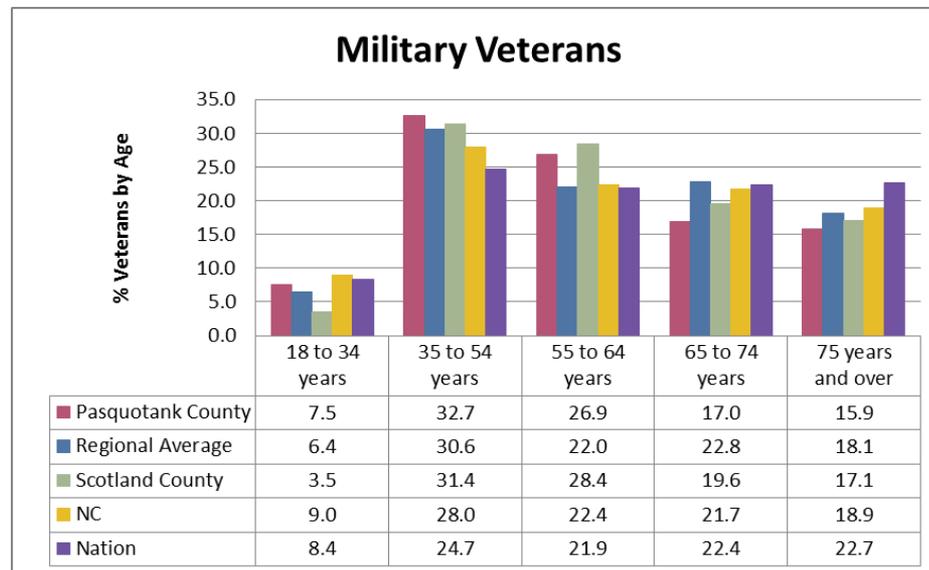
AGE DISTRIBUTION OF LATINO POPULATION

- Compared to the age distribution of the total Pasquotank County population, there are lower proportions of Latinos in every age group. The county Latino population includes very few persons age 55 and older.
- Males represent 46% of the Latino population.



MILITARY VETERANS

- Approximately **13%** of the Pasquotank County civilian population is a military veteran. [NC = 10% Region = 12%]
- Veterans over the age of 65 comprise 33% of the county's veteran population. [NC = 41% Region = 41%]
- Pasquotank County has a higher proportion of veterans in the 35-54 age group than any other jurisdiction presented.





SOCIOECONOMIC DATA

***Income, Employment, Unemployment,
Poverty, Children and Families,
Housing, Educational Attainment,
Crime and Safety***

COUNTY ECONOMICS

- Total gross monetary collections in Pasquotank County, as displayed in the table below, appears to fluctuate each year without pattern.

Location	FY2009-10	FY2010-11	FY2011-12	FY2012-13	FY2013-14	FY2014-15
Pasquotank County	19,290,971	21,161,267	19,123,519	20,833,041	18,184,638	19,293,923
<i>Regional Average</i>	6,981,295	7,998,729	7,314,849	7,651,788	7,379,530	7,730,478
<i>NC County Average</i>	50,252,290	55,679,535	49,906,563	50,164,100	52,548,980	57,312,401



INCOME (2014 ACS ESTIMATES)

In Pasquotank County:

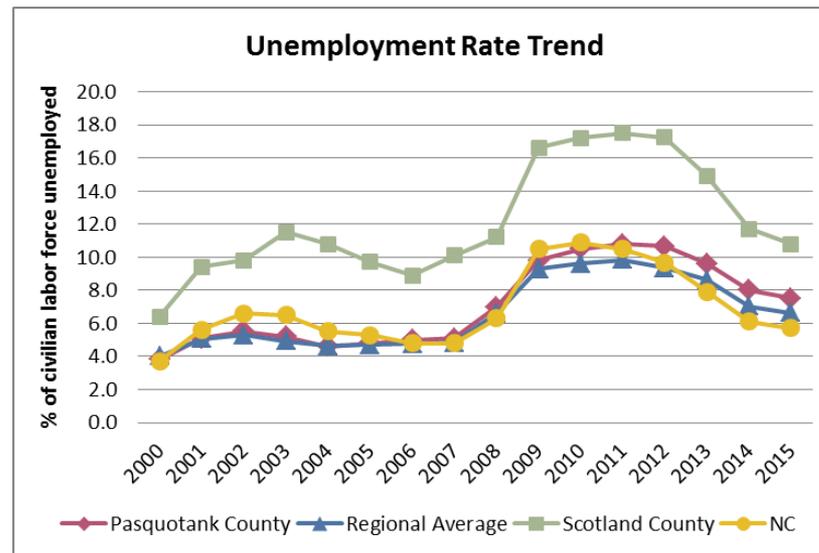
- 2014 Per Capita Income = \$22,466
 - \$3,142 **below** NC average
- 2014 Median Household Income = \$45,664
 - \$1,029 **below** NC average
- 2014 Median Family Income = \$53,942
 - \$3,386 **below** NC average
- 2014 Mean Retirement Income = \$22,305
 - \$465 **above** NC average

EMPLOYMENT (AS OF 2ND QUARTER 2015)

- The three employment sectors in Pasquotank County with the largest workforce (and their average weekly wage) were:
 - Health Care & Social Assistance: 17.7% of workforce (\$718)
 - Statewide, Health Care & Social Assistance is the largest employment sector at 14.1% and workers earn an average of \$862 a week.
 - Retail Trade: 15.7% of workforce (\$490)
 - Retail Trade is the second largest employment sector in North Carolina (11.7%) and employees earn an average \$504 a week.
 - Educational Services: 12.7% of workforce (\$673)
 - Statewide, Educational Services workers represent 9.1% of the workforce and earn \$796 a week.

ANNUAL UNEMPLOYMENT RATE

- The unemployment rate in Pasquotank County has followed a trend similar to that in the other jurisdictions presented, but was higher than the state in the period 2012-2015.
- In 2015 the unemployment rate was **7.5** in Pasquotank County, 6.6 across the ARHS Region and 5.7 in NC.



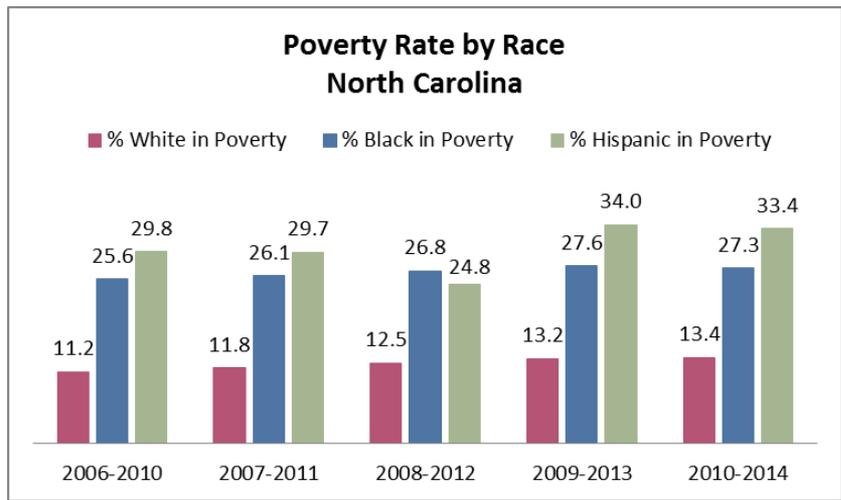
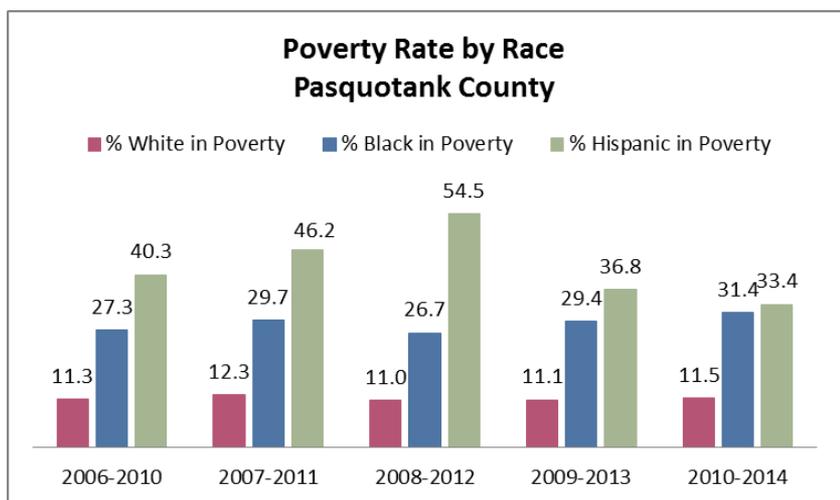
OVERALL POVERTY RATE TREND

- The overall poverty rate (describing the percentage of the total population below the Federally-defined 100% poverty level) in Pasquotank County was higher than the comparable state and Regional rates in every period cited in the table below. (The highest rates among comparators were in Scotland County.)
- The poverty rate rose in Pasquotank County in the most recent three periods.

	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Pasquotank County	18.1	19.9	18.0	18.4	19.5
Regional Average	16.4	17.5	17.3	18.1	17.7
Scotland County	29.5	29.7	30.6	32.3	31.2
State of NC	15.5	16.1	16.8	17.5	17.6

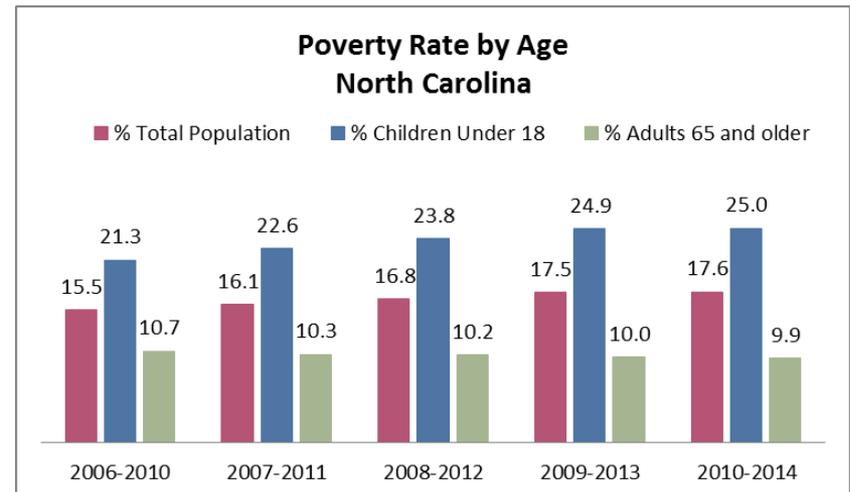
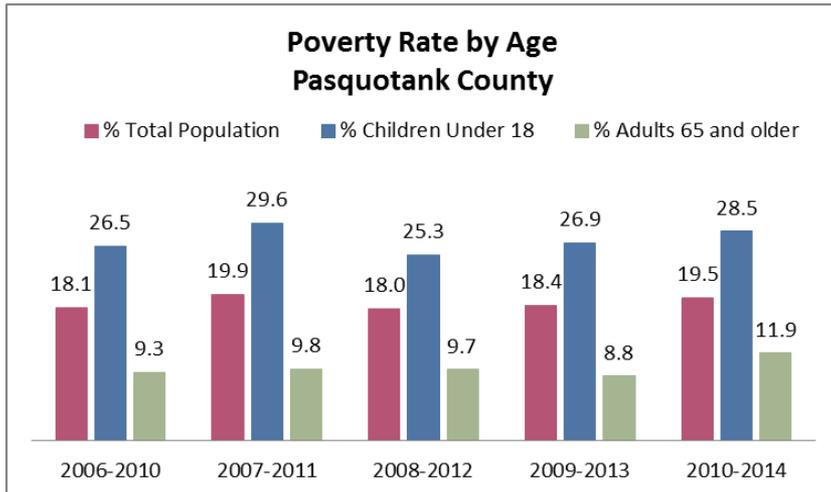
POVERTY AND RACE

- In Pasquotank County and statewide, poverty rates among minority groups are higher compared to white residents.
- In Pasquotank County over the period cited, the average poverty rate among blacks was 2.5 times the rate among white residents; the average poverty rate among Hispanic residents was 3.7 times the rate among whites.



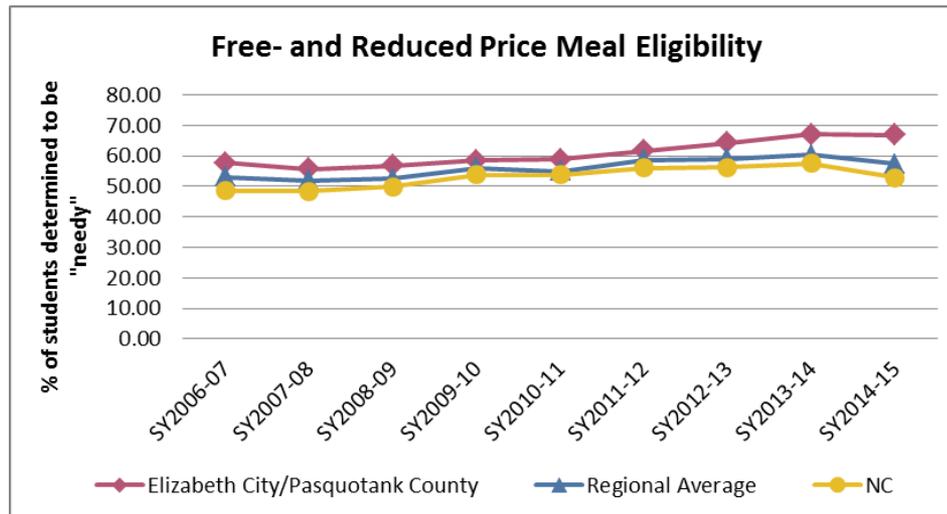
POVERTY AND AGE

- The poverty rate among children under 18 in Pasquotank County exceeded the comparable poverty rates for the other groups shown for all periods cited below.
- In every period cited the county poverty rate for minor children exceeded the comparable NC rates.



FREE- AND REDUCED-PRICE MEALS

- Another measure of poverty, particularly among families with children, is the rate of participation in the free- and reduced-price meal programs in the public school system.
- In Pasquotank County, a higher percentage of students have been identified as “needy”, compared to the State.
- For the 2014-15 school year, approximately **67%** of Pasquotank County students were identified as needy, compared to 57% in the Region and 53% across the state.



HOUSING AND HOUSING COSTS

According to 2014 ACS estimates:

- 63% of Pasquotank County housing units were owned and **37%** were rented. Statewide, **66%** of housing units were owned and 34% were rented.
- 13% of housing units in Pasquotank County were mobile homes, compared to 13.5% statewide.
- The estimated median monthly mortgage cost among Pasquotank County home owners **increased** from \$1,257 in 2005-2009 to
\$1,428 in 2010-2014, **\$156 more than the NC median**
- The estimated median gross monthly rent among Pasquotank County renters **increased** from \$697 in 2005-2009 to
\$837 in 2014, **\$47 more than the NC median**
- In 2014, the percentage of Pasquotank County mortgagees spending more than 30% of their monthly income on housing was **43%**, compared to 31% statewide.
- In 2014, the percentage of Pasquotank County renters spending more than 30% of their monthly income on housing was **54%**, compared to 51% statewide.

HOMELESSNESS

- Every January the NC Coalition to End Homelessness conducts a point-in-time count of homeless individuals.
- Pasquotank County is the only county in the ARHS region that participates in the annual count.
- An average of 40 homeless people have been counted each year since 2009. A high of 51 were counted in 2010 and a low of 26 were counted in 2015.
- An average of 13 children (in families) and 19 adults (without children) have been counted each year since 2009.
- Subpopulations to note are the chronically homeless (a high of 9 were counted in 2010) and veterans (a high of 5 were counted in 2013).

CHILDREN AND FAMILIES (2014 ESTIMATES)

- There were 10,210 households in Pasquotank County
 - 42% of households had children under 18 (NC = **43%**)
 - 70% of households were married couples (NC = **73%**)
 - 6% of households were single male householders (NC = **7%**)
 - **24%** of households were single female householders (NC = 21%)
 - 25% of households were married couples with minor children (NC = **28%**)
 - 3% of households were single males with minor children (NC = 3%)
 - **15%** of households were single females with minor children (NC = 12%)

GRANDPARENTS (2014 ESTIMATES)

- An estimated 956 Pasquotank County grandparents were living with their minor grandchildren
- **50%** were *also* financially responsible for those grandchildren
 - [NC = 48% Region = 49%]
 - 15% were over the age of 60 [NC = 35% Region = **38%**]
 - 34% were African American [NC = **36%** Region = 33%]
 - 14% were disabled [NC = **28%** Region = 22%]
 - **34%** were below the poverty level [NC = 26% Region = 29%]



EDUCATIONAL ACHIEVEMENT

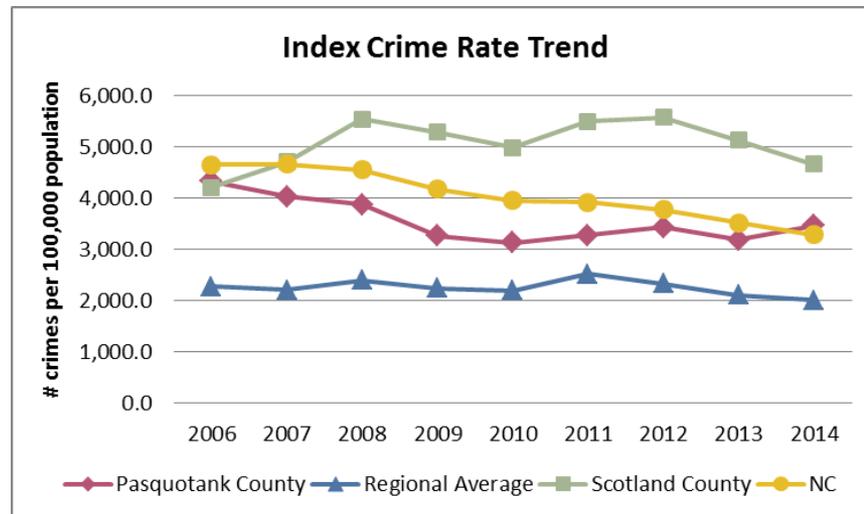
- Compared to the NC average, Pasquotank County has:
 - A **higher** proportion of residents with less than a high school education: 16% [NC = 15% Region = **17%**]
 - A **lower** proportion of residents with a bachelor's degree or higher: 19% [NC = **28%** Region = 17%]
 - **Lower** proficiency compared to the state and the region on both math and reading EOG tests among 3rd and 8th graders in SY2014-15 Fewer than 47% of 3rd and 8th grade students were grade-level proficient in reading or math (only 27% of 8th graders were grade-level proficient in math).
 - **Higher** rate of participation in the SAT and **lower** average scores.
 - **Lower** local per-pupil expenditures but **higher** state and federal funding.
 - **Lower** graduation for rates for all groups.

EDUCATIONAL SYSTEM

- The number of students enrolled in Elizabeth City-Pasquotank County Public Schools varies each year. In the 2014-15 school year 6,005 students were enrolled in Pasquotank County public schools.
- The high school drop-out rate decreased overall from 5.76 in SY2005-06 to 1.03 in SY2013-14. The county rate was higher than the state and the regional drop-out rates for much of that period.
- The high school reportable crime rate in Pasquotank County is variable. In SY2013-14 the rate was 4.1 compared to **6.8** in NC.

CRIME AND SAFETY

- The “index crime rate” is the rate of the sum of violent crime and property crime. The majority of crimes committed are property crimes.
- The **index** crime rate in Pasquotank County was **lower** than the comparable NC average in all but the most recent year cited. In 2014 the Pasquotank County index crime rate was **3,465.6** crimes committed per 100,000 population, compared to 3,287.2 in NC and 2,006.2 in the ARHS Region.
- The **violent** crime rate in Pasquotank County has demonstrated variability but was **higher** than the comparable state rate for most of the period delineated. In 2014 the Pasquotank County violent crime rate was **351.9** compared to a state rate of 333.0 and a Regional rate of 214.5.
- The **property** crime rate in Pasquotank County follows a trend much like the index crime rate: **lower** than the state rate until the most recent period. The 2014 property crime rate was **3,113.7** in Pasquotank County compared to 2,954.1 in NC and 1,808.4 in the Region.



JUVENILE CRIME

- Between 2010 and 2014 the *number* and *rate* of individuals who were subjects of complaints of **undisciplined** youth (ages 6-17) decreased each year. In 2014, 14 youths were undisciplined (rate = **2.36** compared to 1.47 in NC).
- Over the same period the *number* and *rate* of complaints of **delinquent** youth in the county fluctuated. In 2014, 196 youth were delinquent (rate = **38.93** compared to 22.52 in NC).
- 88 Pasquotank County youths were sent to secure detention between 2010 and 2014.

DOMESTIC VIOLENCE

- The number of domestic violence clients seen by local agencies fluctuates yearly but has increased overall since FY2004-05 when 342 clients were seen; 974 clients filed complaints in FY2014-15.
- 9,779 services were provided to Pasquotank County domestic violence clients in FY2014-15. The most common service was the provision of advocacy, followed by information.
- The domestic violence shelter serving Pasquotank County was full on 32 days in FY2014-2015.

SEXUAL ASSAULT

- The number of sexual assault clients seen by local agencies is variable in Pasquotank County but appears to have increased over time. In FY2004-05, 77 clients filed complaints; in FY2014-15, 187 clients filed complaints.
- The most common type of assault in FY2014-15 was adult survivor of child sexual assault, accounting for 59% of the clients.
- The most common type of offender was a relative (63%).



CHILD MALTREATMENT

- The number of children subject to abuse, neglect, or abuse and neglect in Pasquotank County fluctuates yearly.
- Neglect-only cases compose the most common type of child maltreatment over the period presented. In 2014-15, 43 of the 47 substantiated cases were neglect-only.
- In Pasquotank County in 2014-15, 47% of the substantiated cases of abuse or neglect were African American children; 51% of the victims were male, and 64% were under the age of 5.

Category	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total No. of Findings of Abuse, Neglect, Dependency	300	343	307	364	338	358	350	323	247	250	258
No. Substantiated ¹ Findings of Abuse and Neglect	4	5	1	5	1	2	8	0	3	4	4
No. Substantiated Findings of Abuse	3	5	0	3	4	1	1	0	2	0	0
No. Substantiated Findings of Neglect	62	14	18	28	29	24	42	46	20	33	43
Services Recommended	27	194	141	130	82	36	34	40	21	25	32
No. Unsubstantiated Findings	163	39	81	119	148	232	241	203	177	170	156
Services Not Recommended	35	59	37	69	69	17	18	28	20	14	20

¹ A "substantiated" report of child abuse, neglect or exploitation indicates that the investigation supports a conclusion that the subject children was/were abused, neglected, or exploited.



HEALTH RESOURCES

*Health Insurance,
Enrollment in Public Programs,
Healthcare Practitioners, Facilities*

HEALTH INSURANCE

- The percent of uninsured adults (age 19-64) in Pasquotank County appears variable but was lower than comparable state rate over the entire period shown.
- The age group 0-18 tends to have a lower percentage of uninsured than the 19-64 age group, due partly at least to coverage of children through NC Health Choice.
- As of 2014 estimates, 17% of Pasquotank County residents were without health insurance and 8% under 18 were uninsured. Thirty-five percent of county residents were insured via public programs, compared to 32% statewide.

Location	2011			2012			2013		
	0-18	19-64	0-64	0-18	19-64	0-64	0-18	19-64	0-64
Pasquotank County	7.2	21.7	17.6	7.0	23.0	18.5	6.0	21.4	17.1
Regional Average	8.2	21.0	17.4	8.0	21.2	17.6	7.4	20.7	17.1
Scotland County	7.0	25.6	20.0	7.8	25.5	20.2	6.2	23.5	18.3
State of NC	7.9	23.0	18.7	7.9	23.4	19.0	6.9	22.5	18.1

MEDICAID ELIGIBILITY

- Approximately 21% of Pasquotank County residents were eligible for Medicaid in 2014.
- The total number of people in Pasquotank County eligible for Medicaid increased over the period presented.
- As of January 2013, 92% of Pasquotank County children who were eligible for NC Health Choice were enrolled.
- As of December 2013, 91% of those eligible for Carolina ACCESS were enrolled.

Year	Number of Eligibles, as of December 31 each year													
	Aged	Blind	Disabled	AFDC	Foster Care	Pregnant Women	Family Planning Waiver	Infants & Children	Medicaid CHIP	Medicare Catastrophic	Comprehensive Medicare-Aid (MQBQ-B-E)	Refugees Aliens	BCC	Total Eligibles
2008	711	13	1,235	1,728	7	104	n/a	2,407	176	261	n/a	0	1	6,642
2009	707	11	1,300	1,735	9	109	n/a	2,568	149	261	n/a	2	3	6,854
2010	697	13	1,313	1,799	7	90	n/a	2,665	147	279	n/a	2	2	7,014
2011	683	14	1,319	1,713	9	87	n/a	2,935	174	271	n/a	4	2	7,211
2012	649	12	1,315	1,700	4	91	n/a	3,097	188	302	n/a	8	3	7,369
2013	635	11	1,363	1,844	10	109	n/a	2,869	161	297	n/a	8	2	7,309
2014	616	11	1,400	1,933	6	100	506	2,969	529	n/a	313	14	0	8,397
Oct-15	605	10	1,450	2,682	10	92	613	2,082	503	n/a	345	10	1	8,403

HEALTH CARE PRACTITIONERS

- 2012 ratios of active health professionals per 10,000 population were **higher** in Pasquotank County than in NC for:
 - MDs: **26.04** [NC=22.31 Region=8.38]
 - Primary Care MDs: **9.01** [NC=7.58 Region=3.53]
 - Registered Nurses: **109.66** [NC=98.56 Region=53.15]
 - Pharmacists: **10.52** [NC=10.06 Region=4.19]
- The 2012 ratio of active health professionals per 10,000 population was **lower** in Pasquotank County than in NC for:
 - Dentists: 2.75 [NC=**4.51** Region=1.72]

HEALTH CARE PRACTITIONERS

- As of 2012, there were 36 primary care physician (no General Practice physicians) and 68 specialists in Pasquotank County.
- In 2012, 11 dentists and 11 hygienists were practicing in Pasquotank County.
- The 2012 count of 438 nurses in the county included 13 nurse practitioners and 3 certified nurse midwives. An additional 148 LPNs were located in Pasquotank County.
- The only practicing podiatrist in the ARHS Region is located in Pasquotank County.

OTHER HEALTHCARE PROVIDERS

- As of February 2016, there were 3 dental providers in Pasquotank County who participate in Medicaid or Health Choice; 1 of them is not accepting new Health Choice clients.
- As of September 2015, there were 52 mental health providers accepting Medicaid/NC Health Choice clients.
- As of February 2016 there were 16 mental health facilities in Pasquotank County offering a range of services.
- The student to school nurse ratio has decreased since SY2009-10, from 987 to 949 students per nurse. The recommended ratio is 1 nurse for every 750 students.

OTHER HEALTHCARE FACILITIES

- Sentara Albemarle Medical Center is located in Elizabeth City
 - 182 General beds
 - 2 operating rooms for C-sections, 8 shared inpatient/ambulatory surgery operating rooms, and 3 endoscopy rooms
- There is one dialysis facility in Pasquotank County; it has 24 hemodialysis stations and does not offer shifts after 5pm.
- As of February 2016 there were no licensed ambulatory care facilities or nursing pools in the county. There was 1 cardiac rehabilitation facility.

LONG-TERM CARE FACILITIES (AS OF FEBRUARY 2016)

- The number of beds in NC-licensed long-term care facilities in Pasquotank County are:
 - Adult Care Homes/Homes for the Aged (3 facilities): 266 beds
 - Family Care Homes (2 facilities): 12
 - Nursing Homes/Homes for the Aged (2 facilities): 266 beds
- Total = 544 beds, or 1 bed for every 11 persons age 65 and older in Pasquotank County (6,157 persons \geq 65 in 2014)

HOSPITAL UTILIZATION SUMMARY: EMERGENCY DEPARTMENT

Below is the overall gender and age-group profile of ED utilization at the five hospitals in the study region seeing more than 20 Pasquotank County ED patients over two years.

No. ED Discharges by Gender and Age Group						
Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Females	Males	< 18	18-64	≥ 65	
2013	16,053	10,532	5,420	17,871	3,294	26,585
2014	16,068	10,526	5,583	17,844	3,168	26,595
Total	32,121	21,058	11,003	35,715	6,462	53,180

HOSPITAL UTILIZATION SUMMARY: EMERGENCY DEPARTMENT

Below is the overall racial and ethnic profile of ED utilization at the five hospitals in the study region seeing more than 20 Pasquotank County ED patients over two years.

Fiscal Year	No. ED Discharges by Racial/Ethnic Group							Total No. Discharges
	Am. Indian/Alaskan	Asian	Black	Hispanic	Other	Unknown	White	
2013	13	60	13,630	529	127	45	12,181	26,585
2014	28	53	13,954	533	111	73	11,843	26,595
Total	41	113	27,584	1,062	238	118	24,024	53,180

HOSPITAL UTILIZATION SUMMARY: EMERGENCY DEPARTMENT

Below is the overall payor profile of ED utilization at the five hospitals in the study region seeing more than 20 Pasquotank County ED patients over two years.

Fiscal Year	No. ED Discharges by Payor Group								Total No. Discharges
	Commercial	Medicaid	Medicaid Managed Care	Medicare	Medicare Managed Care	Self-Pay	Military	Other	
2013	3,955	1,114	6,660	4,475	1	7,417	1,767	1,196	26,585
2014	4,568	1,566	6,381	4,337	63	6,955	1,685	1,040	26,595
Total	8,523	2,680	13,041	8,812	64	14,372	3,452	2,236	53,180
Group % of Total	16.0	5.0	24.5	16.6	0.1	27.0	6.5	4.2	100%

HOSPITAL UTILIZATION SUMMARY:

INPATIENT HOSPITALIZATIONS

Below is the overall gender and age-group profile of IP utilization at the four hospitals in the study region seeing more than 20 Pasquotank County IP patients over two years.

No. IP Discharges by Gender and Age Group						
Fiscal Year	No. by Gender		No. by Age Group			Total No. Discharges
	Females	Males	< 18	18-64	≥ 65	
2013	1,930	1,331	443	1,357	1,461	3,261
2014	2,007	1,334	438	1,508	1,395	3,341
Total	3,937	2,665	881	2,865	2,856	6,602

HOSPITAL UTILIZATION SUMMARY:

INPATIENT HOSPITALIZATIONS

Below is the overall racial and ethnic profile of IP utilization at the four hospitals in the study region seeing more than 20 Pasquotank County IP patients over two years.

Fiscal Year	No. IP Discharges by Racial/Ethnic Group							Total No. Discharges
	Am. Indian/Alaskan	Asian	Black	Hispanic	Other	Unknown	White	
2013	1	9	1,323	76	16	26	1,810	3,261
2014	1	8	1,417	44	19	20	1,832	3,341
Total	2	17	2,740	120	35	46	3,642	6,602

HOSPITAL UTILIZATION SUMMARY:

INPATIENT HOSPITALIZATIONS

Below is the overall payor profile of IP utilization at the four hospitals in the study region seeing more than 20 Pasquotank County IP patients over two years.

Fiscal Year	No. IP Discharges by Payor Group								Total No. Discharges
	Commercial	Medicaid	Medicaid Managed Care	Medicare	Medicare Managed Care	Self-Pay	Military	Other	
2013	427	358	266	1,594	1	323	155	137	3,261
2014	459	447	244	1,557	33	290	184	127	3,341
Total	886	805	510	3,151	34	613	339	264	6,602
Group % of Total	13.4	12.2	7.7	47.7	0.5	9.3	5.1	4.0	100%



HEALTH STATISTICS

Health Rankings

HEALTH RANKINGS

- According to *America's Health Rankings* (2014)
 - NC ranked 37th overall out of 50 (where 1 is “best”)
- According to *County Health Rankings* (2015) for NC, Pasquotank County was ranked:
 - 43rd overall out of 100 (where 1 is best) for **health outcomes**
 - 40th in length of life
 - 51st for quality of life
 - 68th overall out of 100 for **health factors**
 - 96th for health behaviors
 - 11th for clinical care
 - 66th for social and economic factors
 - 23rd for physical environment



MATERNAL AND INFANT HEALTH

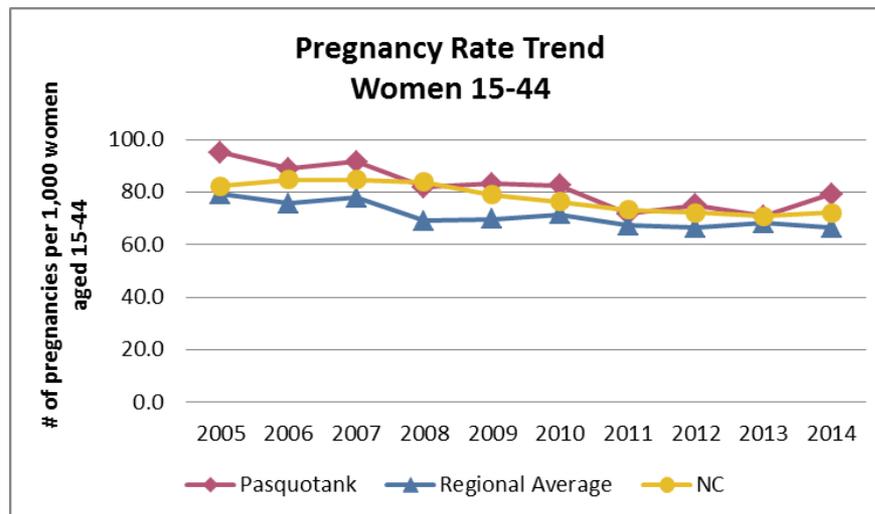
***Pregnancy Rate, Risk Factors,
Outcomes, Infant Mortality***

**All data from the NC State Center for Health Statistics
unless otherwise cited.**

PREGNANCY RATE: WOMEN 15-44

Pregnancies per 1,000 Women Age 15-44

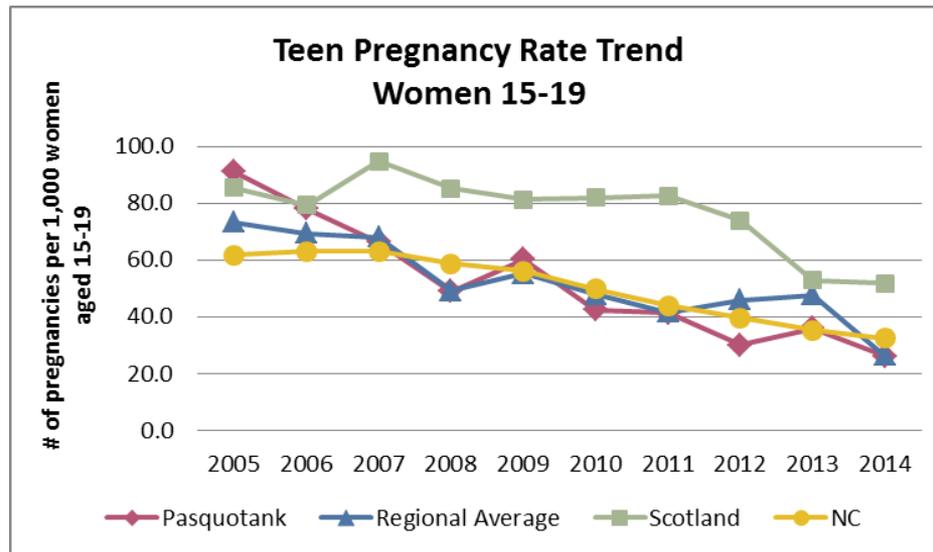
- The total pregnancy rate in Pasquotank County fluctuates on a yearly basis, but declined overall between 2005 and 2013.
- Total pregnancy rates in the ARHS Region and NC have fallen overall since 2007.
- The 2014 pregnancy rate was **79.1** in Pasquotank County, compared to 66.3 in the Region and 72.1 in NC.



PREGNANCY RATE: WOMEN 15-19

Pregnancies per 1,000 women Age 15-19 (Teens)

- The teen pregnancy rate in Pasquotank County has decreased since 2005, though it varies from year to year.
- In 2014 the teen pregnancy rate was 26.2 in Pasquotank County, compared to 26.4 for the Region and **32.3** for the state.



PREGNANCY RATE: BY RACE/ETHNICITY

- Pregnancy rates among minority groups in Pasquotank County for women aged 15-44 do not present a clear trend or pattern. In 2014, the pregnancy rate among white non-Hispanic residents was **83.4** compared to 81.0 among African American non-Hispanics and 56.0 among Hispanics.
- Among women aged 15-19, there were too few pregnancies in most racial groups to generate stable rates. In 2013, the pregnancy rate among white non-Hispanic teens was **37.7** compared to 34.2 among African American non-Hispanic teens.

TEEN AND ADOLESCENT PREGNANCIES

- Between 2003 and 2013 the average annual *number* of teen (ages 15-19) pregnancies in Pasquotank County was 84. There were 43 teen pregnancies in 2012 and 51 in 2013.
- Between 2003 and 2013 there was a total of 17 pregnancies among Pasquotank County adolescent girls (age 14 and younger). There have been no adolescent pregnancies in the county since 2010.

ABORTION TREND

- The Pasquotank County abortion rate among women aged 15-44 fluctuates each year but has decreased overall between 2005 and 2014.
 - In 2014, the Pasquotank County rate was 10.4 compared to **10.7** in the Region and **10.7** in NC.
- Among teenage women the abortion rate fluctuates widely, though rates were stable until 2011. The teen abortion rate has decreased overall between 2005 and 2014.
 - In 2011 (the last year for which rates are available) the Pasquotank County rate was **13.5**, compared to 9.7 across the Region and 8.7 for NC.

PREGNANCY RISK FACTORS: SMOKING DURING PREGNANCY

- The percentage of Pasquotank County women who smoked during pregnancy increased from 6.5% in 2012 to 11.0% in 2014 and was higher than the state percentage in the most recent period.

Location	Percent of Births to Mothers Who Smoked While Pregnant			
	2011	2012	2013	2014
Pasquotank County	11.2	6.5	9.7	11.0
Regional Average	11.3	10.4	10.6	13.6
Scotland County	18.8	18.7	21.4	21.8
State of NC	10.9	10.6	10.3	9.8

PREGNANCY RISK FACTORS: INADEQUATE PRENATAL CARE

- The percentage of women receiving early prenatal care was lower in Pasquotank County compared to the State for the entire period presented below.
- The percentage of Pasquotank County women receiving prenatal care in the first trimester increased in each period.
- It is worth noting that in 2011-2013, the answer to this question was “Not Stated” for 27%-41% of Pasquotank County births. In 2014, only 3% of the answers were “Not Stated”. Gates and Currituck counties saw even higher “not stated” proportions; most other ARHS counties had less than 11% “Not Stated”. So the low rates of prenatal care could be more a matter of this question not being answered than a matter of women not getting the recommended care.

County	Percent of Pregnancies Receiving Prenatal Care in 1 st Trimester			
	2011	2012	2013	2014
Pasquotank County	58.1	59.3	61.9	67.0
Regional Average	53.3	49.0	55.6	70.5
Scotland County	68.1	75.1	81.3	70.5
State of NC	71.2	71.3	70.3	68.2

PREGNANCY OUTCOMES:

LOW WEIGHT BIRTHS

○ **Low Weight Births (≤ 2500 grams/5.5 lbs.)**

- Overall Pasquotank = **9.6%** [NC = 9.0% Region = 9.4%]
- The rate increased between 2001-2005 and 2006-2010 but has since decreased
- Highest stable rate is among African American non-Hispanics (12.7%).

○ **Very Low Weight Births (≤ 1500 grams/3.3 lbs.)**

- Overall Pasquotank = 1.6% [NC = 1.7% Region = **1.8%**]
- The variable rate has increased between 2001-2005 and 2006-2010 but has since decreased.
- Highest rate is among African American non-Hispanics (2.8%).

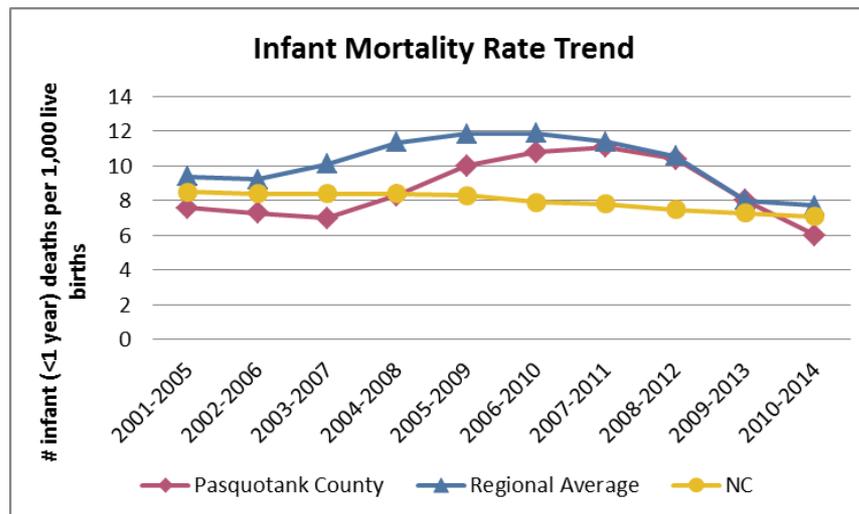
PREGNANCY OUTCOMES: HOSPITAL DISCHARGES FOR NEWBORNS AND NEONATES WITH CONDITIONS ORIGINATING IN THE PERINATAL PERIOD

According to data from the four hospitals in the study region seeing more than 20 Pasquotank County inpatients over two years, the number of discharges associated with newborns or neonates with prematurity or some kind of problem originating in the perinatal period totaled 26% of all newborns over the period cited.

Year	Number of Hospital Discharges by DRG (Diagnosis Related Group) Diagnosis					
	Normal Newborns	Extreme Immaturity or Respiratory Distress	Prematurity with Major Problems	Prematurity without Major Problems	Full-Term Neonate with Major Problems	Neonate with Other Significant Problems
2013	314	1	0	28	6	61
2014	301	0	2	30	6	82
Total	615	1	2	58	12	143

PREGNANCY OUTCOMES: INFANT MORTALITY

- Some of the Pasquotank County infant mortality rates are unstable, so the trend presented should be interpreted with caution.
- The Pasquotank County infant mortality rate rose between 2003-2007 and 2007-2011 but has since decreased to below the state and regional rates.
- In 2010-2014 the Pasquotank County infant mortality rate was 6.0 compared to 7.1 in NC and 7.7 in the Region.
- Note that according to the CDC the 2013 infant mortality rate in NC was the 10th highest in the nation.



PREGNANCY OUTCOMES: INFANT MORTALITY BY RACE

- Very few stable minority infant mortality rates are available for any racial group in Pasquotank County; all minority rates were suppressed after 2008-2012.
- In 2008-2012, the last year for which a rate is available, the infant mortality rate among white non-Hispanics was 6.2 compared to 18.2 among African American non-Hispanics.
- Of the 15 infant deaths that occurred in Pasquotank County in 2010-2014, 10 were among African American non-Hispanics.



MORTALITY

***Life Expectancy, Leading Causes of Death,
Hospital Utilization by Cause, Trend Data,
Gender and Racial Disparities***

LIFE EXPECTANCY

Life Expectancy for persons born in 2012-2014

- Life expectancy has improved over time among all groups presented.
- Compared to NC, Pasquotank County residents have shorter life expectancy overall and for females and whites.

Location	Life Expectancy in Years									
	Person Born in 1990-1992					Person Born in 2012-2014				
	Overall	Male	Female	White	African-American	Overall	Male	Female	White	African-American
Pasquotank County	74.1	69.6	78.4	75.5	71.8	77.5	76.0	78.9	78.4	75.9
<i>Regional Average</i>	<i>73.7</i>	<i>69.8</i>	<i>77.7</i>	<i>75.1</i>	<i>70.3</i>	<i>78.3</i>	<i>75.8</i>	<i>81.0</i>	<i>79.0</i>	<i>76.5</i>
Scotland County	72.5	68.5	76.0	74.9	69.7	74.8	72.1	77.3	75.2	74.6
<i>State of NC</i>	<i>74.9</i>	<i>71.0</i>	<i>78.7</i>	<i>76.4</i>	<i>69.8</i>	<i>78.3</i>	<i>75.8</i>	<i>80.7</i>	<i>79.1</i>	<i>75.9</i>



LEADING CAUSES OF DEATH: OVERALL

Age-Adjusted Rates (2010-2014)	Pasquotank County No. of Deaths	Pasquotank County Mortality Rate	Pasquotank Rate Difference from NC
1. Diseases of the Heart	521	226.3	+36.4%
2. Total Cancer	464	201.2	+17.1%
3. Chronic Lower Respiratory Disease	109	47.8	+3.9%
4. Cerebrovascular Disease	101	44.6	+3.7%
5. Alzheimer's Disease	72	30.4	+4.1%
6. All Other Unintentional Injuries	51	23.2	-21.6%
7. Diabetes Mellitus	49	21.2	-4.1%
8. Pneumonia and Influenza	44	18.8	+6.8%
9. Septicemia	31	13.9	+6.9%
10. Nephritis, Nephrotic Syndrome, and Nephrosis	27	11.7	-31.2%
11. Chronic Liver Disease and Cirrhosis	26	11.5	+18.6%
12. Unintentional Motor Vehicle Injuries	22	10.6	-21.5%
13. Suicide	17	7.8	-37.1%
14. Homicide	13	6.2	+8.8%
15. Acquired Immune Deficiency Syndrome	6	2.5	-3.8%

HOSPITAL ACTIVITY ASSOCIATED WITH LEADING CAUSES OF DEATH (LCD)

- Below is data on *emergency department* discharges from the five hospitals in the study region seeing more than 20 Pasquotank County patients in the ED over the two years cited. The diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death (LCD).
- The largest number of ED discharges in the table below are associated with injury and poisoning, followed by COPD.

Year	Number of Emergency Department Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Alzheimer's Disease	Injury and Poisoning	Diabetes	Pneumonia/ Influenza
2013	157	27	733	38	2	5,152	138	113/152
2014	160	26	656	50	5	4,858	129	138/97
Total	317	53	1,389	88	7	10,010	267	251/249

HOSPITAL ACTIVITY ASSOCIATED WITH LEADING CAUSES OF DEATH (LCD)

- Below is data on *inpatient hospitalization* discharges from the four hospitals in the study region seeing more than 20 Pasquotank County inpatients over the two years cited. The diagnoses referenced match the NC State Center for Health Statistics' ICD-9 case definitions for several Leading Causes of Death.
- The largest number of IP discharges in the table below are associated with heart disease, followed by injury and poisoning.

Year	Number of Inpatient Hospitalization Discharges (by SCHS ICD-9 Case Definitions for LCD)							
	Heart Disease	Total Cancer	COPD (Bronchitis & Emphysema)	Stroke	Alzheimer's Disease	Injury and Poisoning	Diabetes	Pneumonia/ Influenza
2013	413	84	109	115	2	128	72	99/3
2014	439	99	107	78	1	156	78	87/2
Total	852	183	216	193	3	284	150	186/5

LEADING CAUSES OF DEATH: GENDER COMPARISON

Pasquotank County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rank Among Males	Rank Among Females	% Male Rate Difference from Females
1. Diseases of the Heart	1	1	+34%
2. Total Cancer	2	2	+37%
3. Chronic Lower Respiratory Disease	3	4	+47%
4. Cerebrovascular Disease	4	3	+9%
5. Alzheimer's Disease	5	5	-23%
6. All Other Unintentional Injuries	2	n/a	n/a
7. Diabetes Mellitus	n/a	6	n/a
8. Pneumonia and Influenza	n/a	7	n/a
9. Septicemia	n/a	n/a	n/a
10. Nephritis, Nephrotic Syndrome, and Nephrosis	n/a	n/a	n/a
11. Chronic Liver Disease and Cirrhosis	n/a	n/a	n/a
12. Unintentional Motor Vehicle Injuries	n/a	n/a	n/a
13. Suicide	n/a	n/a	n/a
14. Homicide	n/a	n/a	n/a
15. Acquired Immune Deficiency Syndrome	n/a	n/a	n/a

LEADING CAUSES OF DEATH: RACE COMPARISON

Pasquotank County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rank Among White Non-Hispanic	Rank Among Black non- Hispanic	% Blacks Rate Difference from Whites
1. Diseases of the Heart	1	1	+14%
2. Total Cancer	2	2	-12%
3. Chronic Lower Respiratory Disease	3	n/a	n/a
4. Cerebrovascular Disease	4	3	+52%
5. Alzheimer's Disease	5	5	-3%
6. All Other Unintentional Injuries	6	n/a	n/a
7. Diabetes Mellitus	8	4	+144%
8. Pneumonia and Influenza	7	n/a	n/a
9. Septicemia	9	n/a	n/a
10. Nephritis, Nephrotic Syndrome, and Nephrosis	n/a	n/a	n/a
11. Chronic Liver Disease and Cirrhosis	n/a	n/a	n/a
12. Unintentional Motor Vehicle Injuries	n/a	n/a	n/a
13. Suicide	n/a	n/a	n/a
14. Homicide	n/a	n/a	n/a
15. Acquired Immune Deficiency Syndrome	n/a	n/a	n/a

LEADING CAUSES OF DEATH – BY AGE

Age Group	Rank	Cause of Death in Pasquotank County (2010-2014)
00-19	1	Conditions originating in the perinatal period
	2	Other unintentional injuries
	3	Motor vehicle injuries
20-39	1	Motor vehicle injuries
	2	Cancer (all sites)
		Diseases of the heart
	3	Homicide Other unintentional injuries
40-64	1	Cancer (all sites)
	2	Diseases of the heart
	3	Other unintentional injuries
65-84	1	Cancer (all sites)
	2	Diseases of the heart
	3	Chronic lower respiratory diseases
85+	1	Diseases of the heart
	2	Cancer (all sites)
	3	Alzheimer's disease



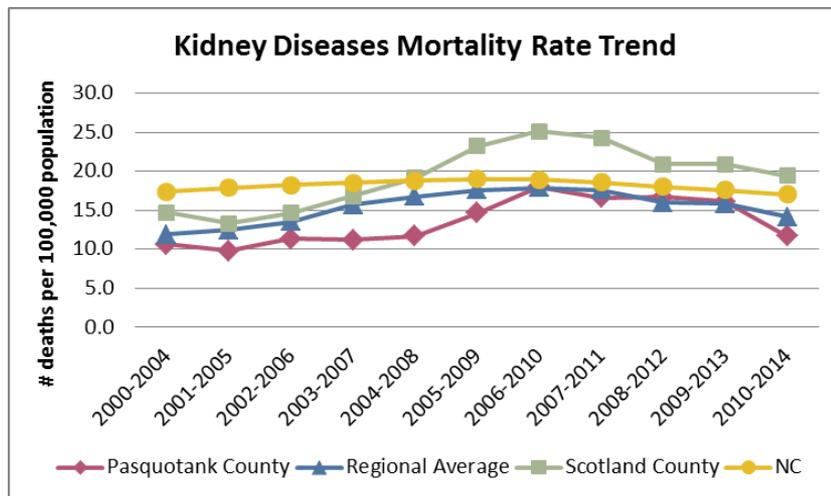
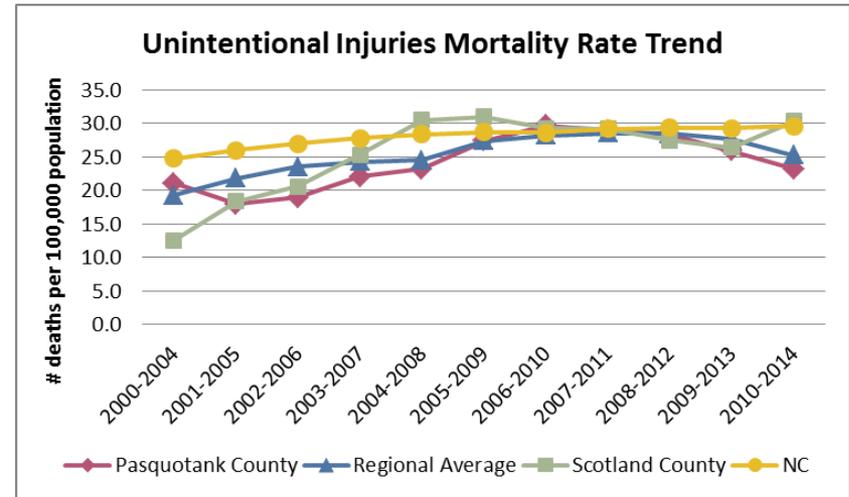
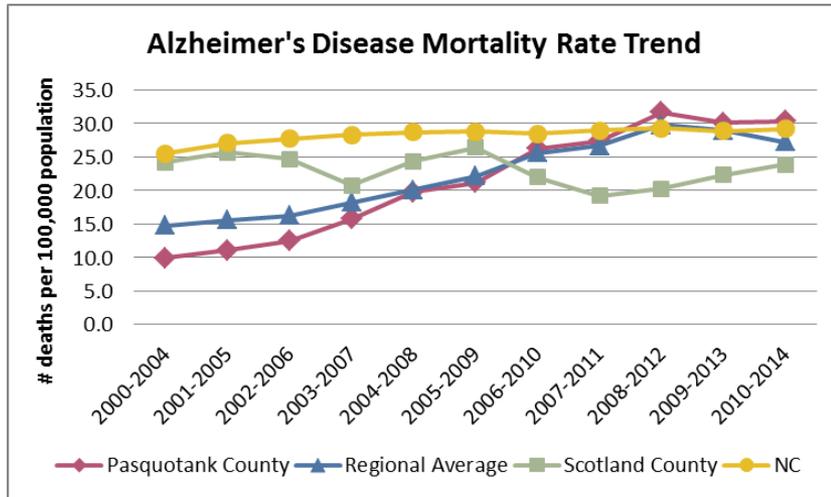
OVERALL SHORT-TERM MORTALITY RATE TRENDS: 2007-2011 AND 2010-2014

Pasquotank County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Rate in 2007-2011	Rate in 2010-2014	Percent Difference
1. Diseases of the Heart	204.3	226.3	+10.8%
2. Total Cancer	199.8	201.2	+0.7%
3. Chronic Lower Respiratory Disease	44.4	47.8	+7.7%
4. Cerebrovascular Disease	49.1	44.6	-9.2%
5. Alzheimer's Disease	27.4	30.4	+10.9%
6. All Other Unintentional Injuries	29.0	23.2	-20.0%
7. Diabetes Mellitus	18.9	21.2	+12.2%
8. Pneumonia and Influenza	23.0	18.8	-18.3%
9. Septicemia	9.7	13.9	+43.3%
10. Nephritis, Nephrotic Syndrome, and Nephrosis	16.6	11.7	-29.5%
11. Chronic Liver Disease and Cirrhosis	8.5	11.5	+35.3%
12. Unintentional Motor Vehicle Injuries	10.6	10.6	No change
13. Suicide	8.1	7.8	-3.7%
14. Homicide	3.5	6.2	+77.1%
15. Acquired Immune Deficiency Syndrome	4.2	2.5	-40.5%

OVERALL LONG-TERM MORTALITY RATE TRENDS: 2000-2004 TO 2010-2014

Pasquotank County Rank by Descending Overall Age-Adjusted Rate (2010-2014)	Overall Trend Direction <i>(determined by Excel trendline)</i>
1. Diseases of the Heart	Little change
2. Total Cancer	Little change
3. Chronic Lower Respiratory Disease	▼
4. Cerebrovascular Disease	▼
5. Alzheimer's Disease	▲
6. All Other Unintentional Injuries	▲
7. Diabetes Mellitus	▼
8. Pneumonia and Influenza	▼
9. Septicemia	Little change
10. Nephritis, Nephrotic Syndrome, and Nephrosis	▲
11. Chronic Liver Disease and Cirrhosis	▲
12. Unintentional Motor Vehicle Injuries	▼
13. Suicide	▲
14. Homicide	Little change
15. Acquired Immune Deficiency Syndrome	▼

MORTALITY RATE TRENDS OF CONCERN: INCREASING COUNTY RATES



TRENDS IN RACIAL DISPARITIES IN HOSPITAL DISCHARGES FOR INJURIES AND POISONING

- Although the current unintentional injury mortality rate in Pasquotank County is lower than the NC rate and the short-term mortality rate trend shows a decrease, the long-term mortality rate trend shows an increase, so it may be illustrative to examine hospital discharges for injuries and poisoning (ICD-9 Codes 800-999xx). The data are from Sentara Albemarle Medical Center.
- The total number of ED discharges for blacks represented 44% of all ED discharges under these codes, and the total number of IP discharges for blacks represented 30% of all IP discharges under these codes. Blacks compose 37% of the county population.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	2,192	2,736	5,047	36	95	124
2014	2,113	2,521	4,776	46	96	146
Total	4,305	5,257	9,823	82	181	270

TRENDS IN GENDER DISPARITIES IN HOSPITAL DISCHARGES FOR INJURIES AND POISONING

- These data are for ICD-9 Codes 800-999xx. The data are from Sentara Albemarle Medical Center.
- The number of ED discharges under this code for females exceeded the comparable number for males, but the discharge proportions approximated the proportions of each gender in the general population.
- The number of IP discharges among females was 61% of the total, higher than the proportion of females in the general population.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Female	Male	Total	Female	Male	Total
2013	2,671	2376	5,047	83	41	124
2014	2,481	2295	4,776	83	63	146
Total	5,152	4,671	9,823	166	104	270

TRENDS IN RACIAL DISPARITIES IN HOSPITAL DISCHARGES FOR DIABETES

- Although the current diabetes mortality rate in Pasquotank County is lower than the NC rate, and the long-term mortality rate trend shows a decrease, the short-term trend shows an increase and the diabetes mortality rate among blacks is significantly higher than the rate among whites. Therefore it may be illustrative to examine hospital discharges for diabetes (ICD-9 Code 250xx). The data are from Sentara Albemarle Medical Center.
- The number of ED discharges under these codes among blacks was 1.8 times the number of discharges among whites.
- The number of IP discharges for blacks was 2.3 times the number for whites.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	82	48	130	50	21	72
2014	82	41	127	53	23	78
Total	164	89	257	103	44	150

TRENDS IN GENDER DISPARITIES IN HOSPITAL DISCHARGES FOR DIABETES

- These data are for ICD-9 Code 250xx. The data are from Sentara Albemarle Medical Center.
- The number of ED discharges under this code for females significantly exceeded the number for males.
- The number of IP discharges for females and males were almost the same.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Female	Male	Total	Female	Male	Total
2013	76	54	130	36	36	72
2014	78	49	127	41	37	78
Total	154	103	257	77	73	150

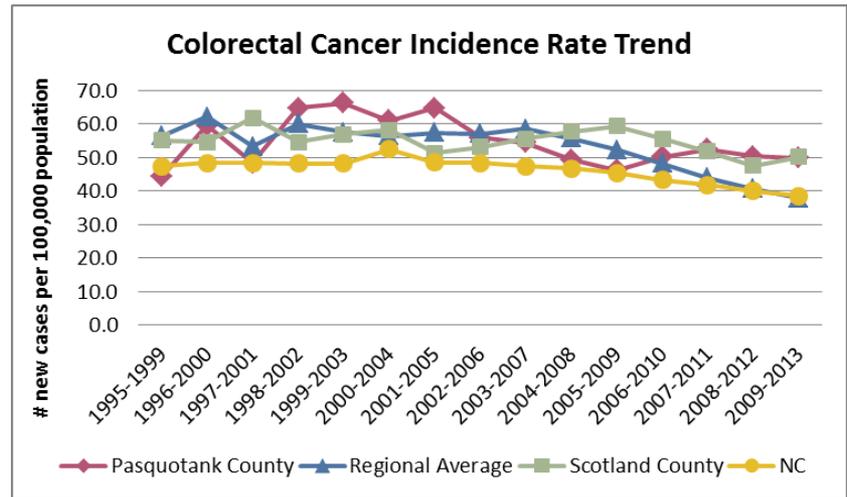
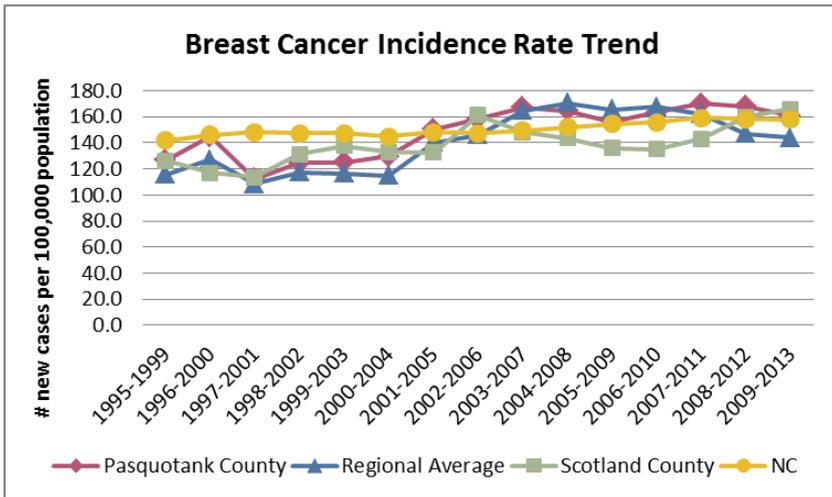
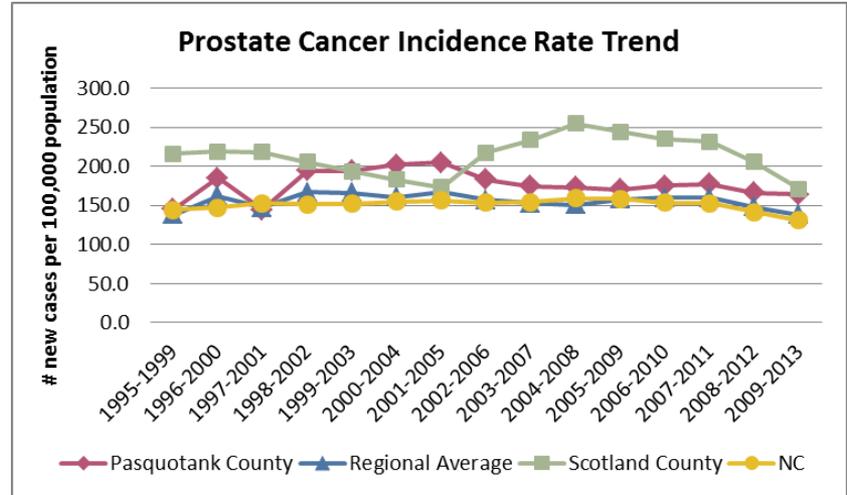
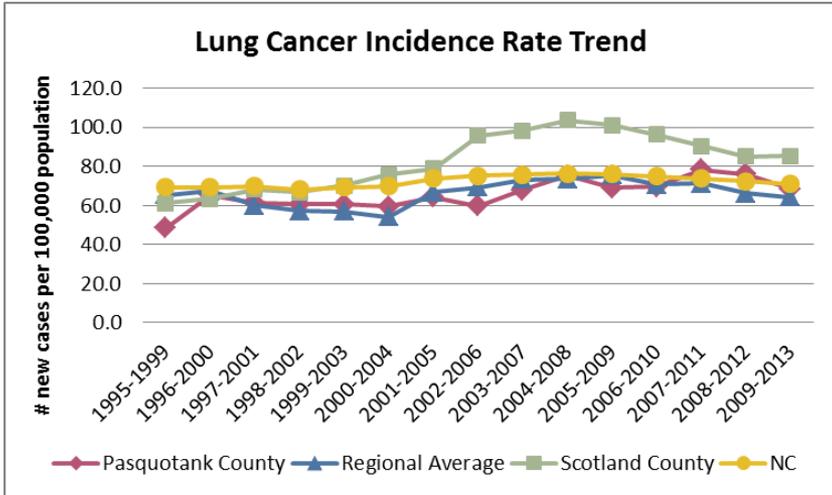
SITE-SPECIFIC CANCER TRENDS: INCIDENCE AND MORTALITY RATES

Incidence: 1995-1999 to 2009-2013

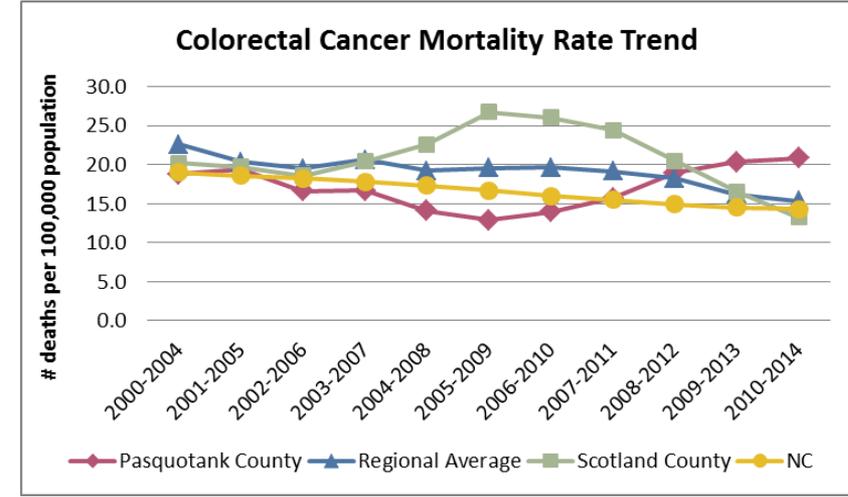
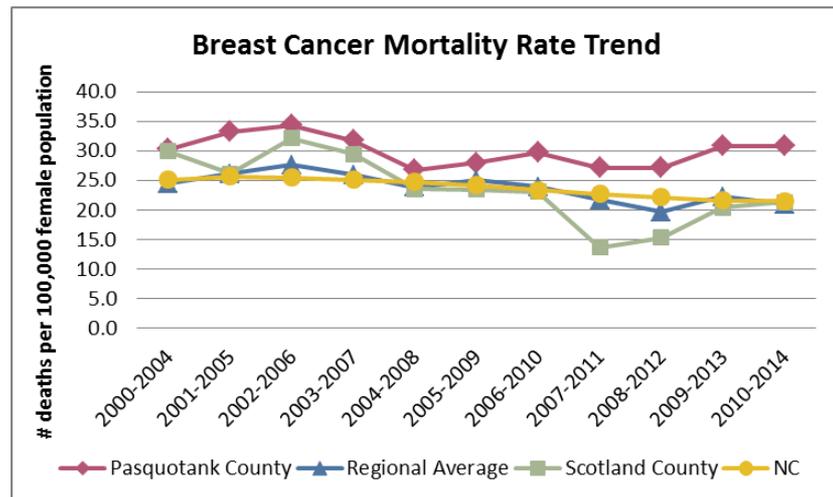
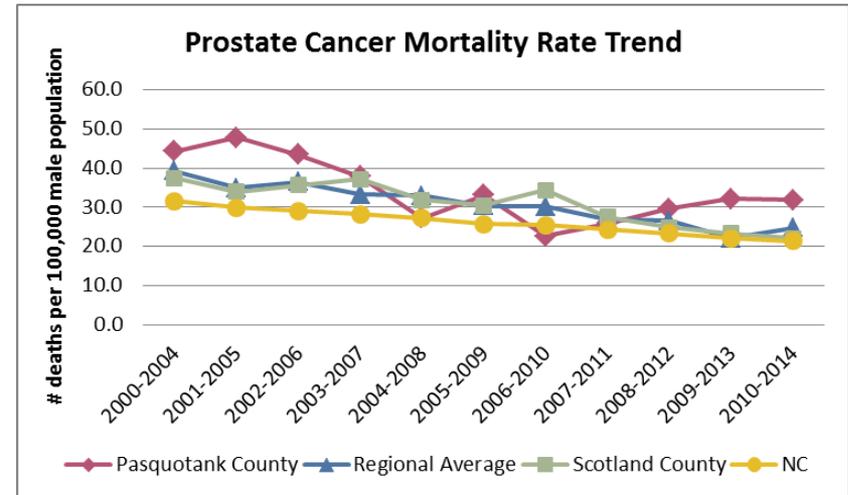
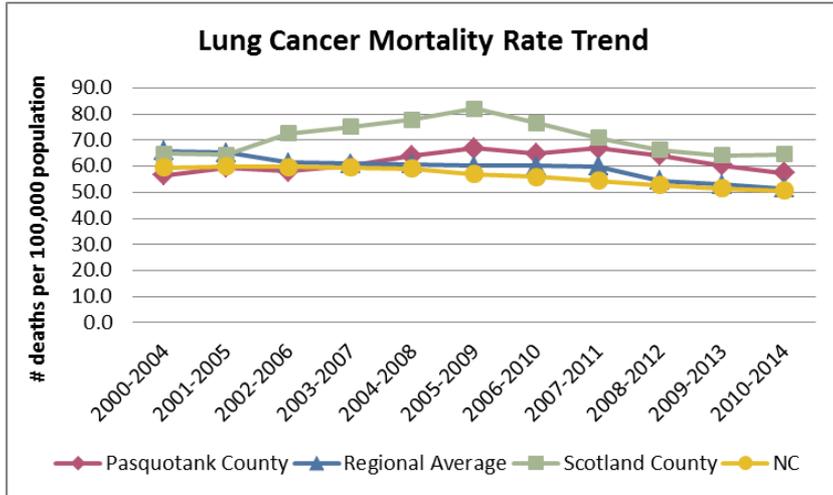
Mortality: 2000-2004 to 2010-2014

Cancer Site	Parameter	Overall Trend Direction
Total Cancer	Incidence Mortality	▲ Little change
Lung Cancer	Incidence Mortality	▲ ▲
Prostate Cancer	Incidence Mortality	Little change ▼
Breast Cancer	Incidence Mortality	▲ ▼
Colorectal Cancer	Incidence Mortality	▼ ▲

SITE-SPECIFIC CANCER INCIDENCE RATES



SITE-SPECIFIC CANCER MORTALITY RATES



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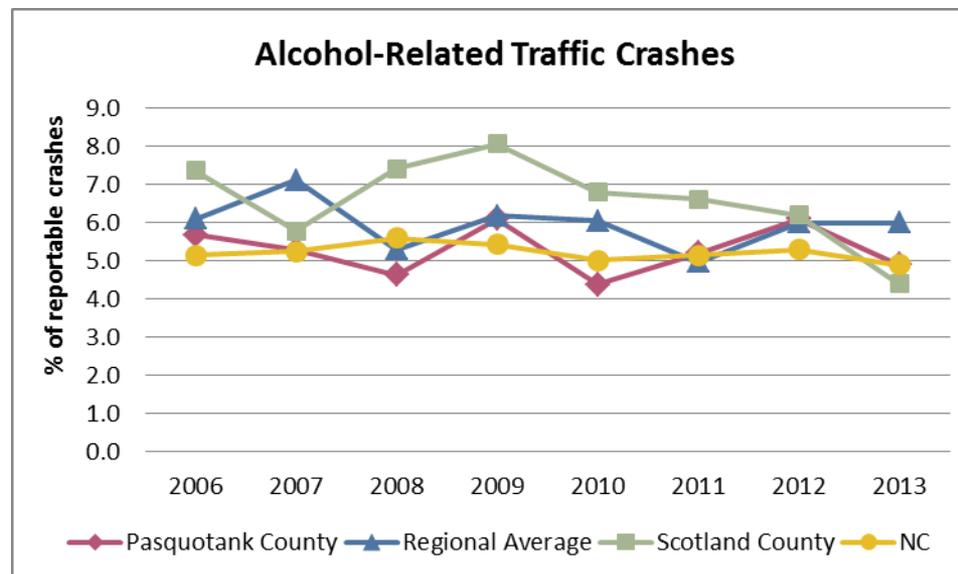
MORBIDITY

***Sexually Transmitted Infections, Diabetes,
Obesity, Mental Health***

VEHICULAR INJURY

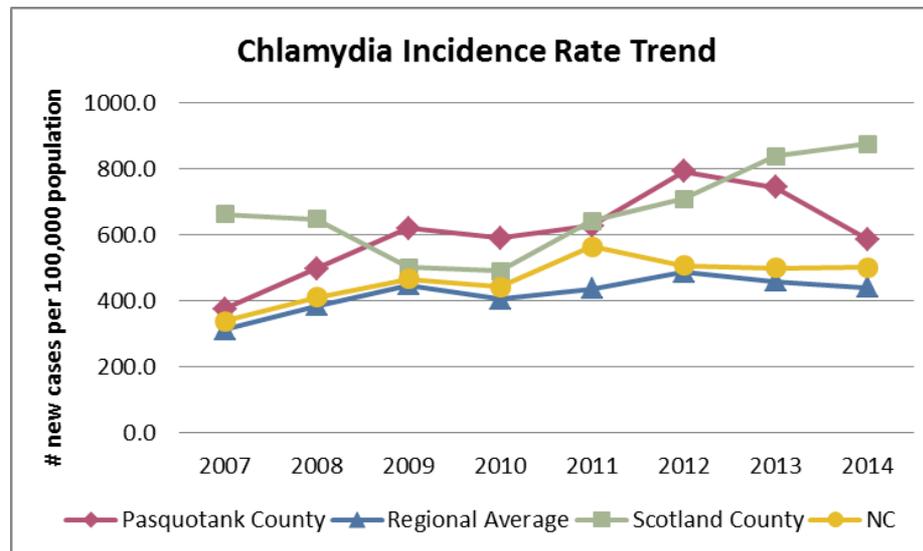
ALCOHOL-RELATED MOTOR VEHICLE CRASHES

- According to the NC Highway Safety Research Center, over the period from 2006 through 2013 an annual average of 5.3% of all traffic crashes in Pasquotank County were alcohol-related. Statewide the comparable figure was 5.2% and it was 6.0% across the ARHS Region.



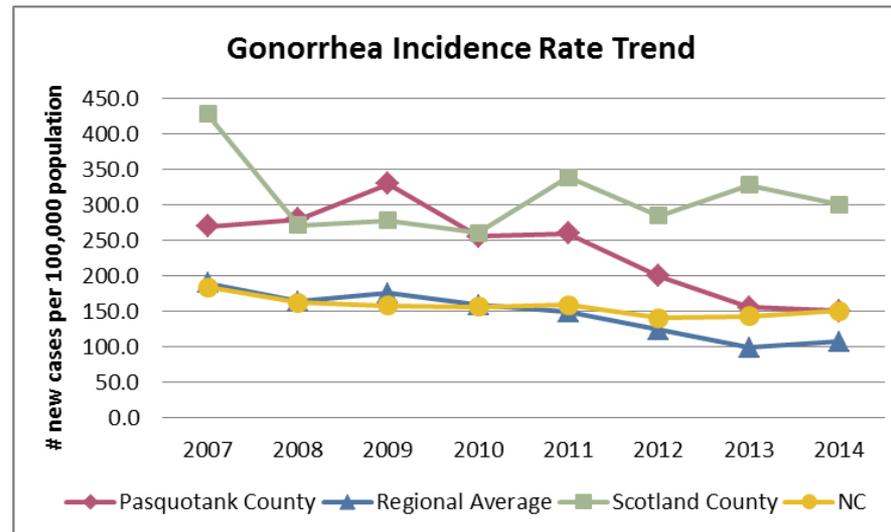
SEXUALLY TRANSMITTED INFECTIONS: CHLAMYDIA

- The chlamydia infection rate in Pasquotank County increased overall since 2007 and was higher than the state for the entire period shown.
- In 2014, there were 233 new cases of chlamydia in Pasquotank County, calculating to a rate of **585.6** compared to 501.9 statewide.



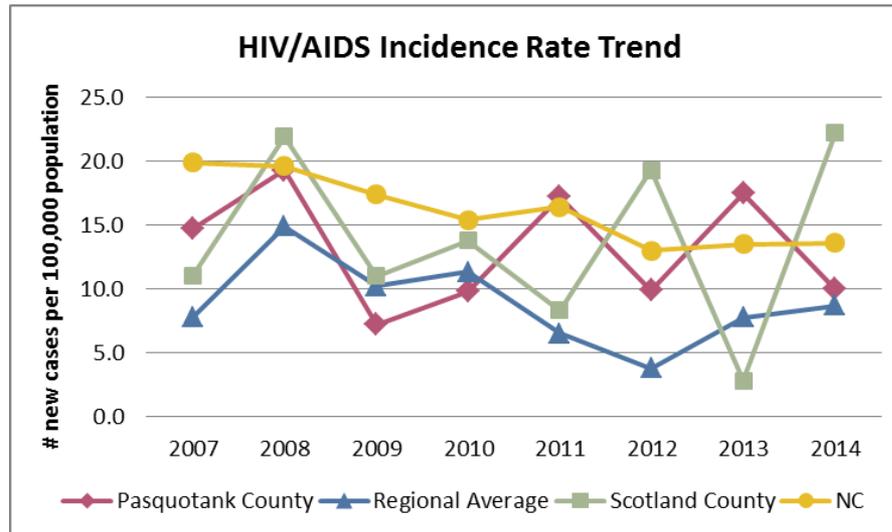
SEXUALLY TRANSMITTED INFECTIONS: GONORRHEA

- The gonorrhea infection rate in Pasquotank County decreased steadily after 2009 but was higher than the comparable rates in the state and the Region for the entire period cited.
- In 2014, there were 60 new cases of gonorrhea in Pasquotank County, calculating to a rate of **150.8**, compared to the state rate of 150.4.
- The gonorrhea rate was highest among African Americans in 2006-2010 (the last year for which stratified data is available): **623.8** compared to 286.2 overall.



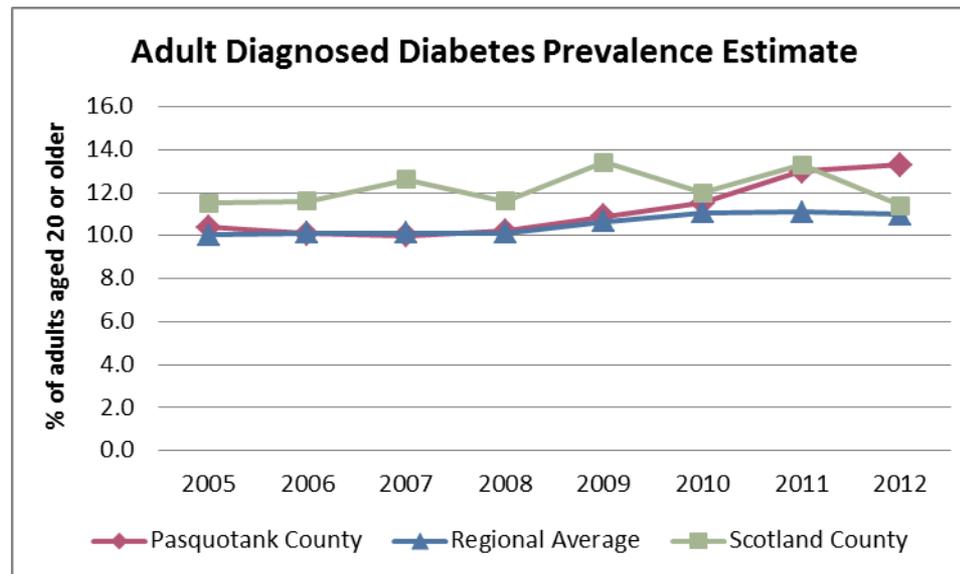
SEXUALLY TRANSMITTED INFECTIONS: HIV/AIDS

- The numbers of new HIV cases are too low to yield stable rates in Pasquotank County. Between 2007 and 2014, a total of 43 new cases were diagnosed (averaging 5 each year).
- At the end of 2014, 92 people in Pasquotank County were living with HIV.



ADULT DIABETES

- The annual estimated prevalence of diabetes among Pasquotank County adults has increased over time and was higher than the Region for much of the period shown [State data is not available].
- Over the 8-year period cited, the average annual estimated prevalence of adult diabetes in Pasquotank County was **11.2%**, compared to 10.5% Region-wide.



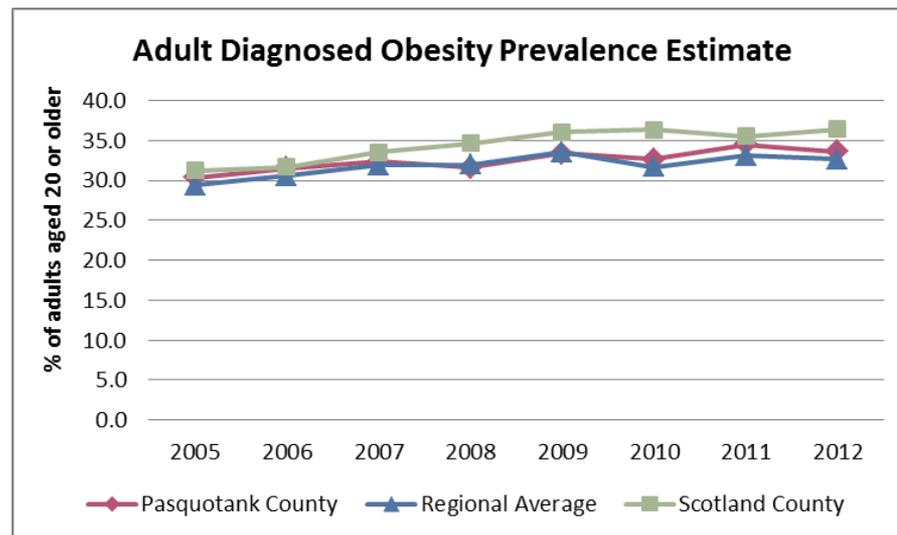
TRENDS IN RACIAL DISPARITIES IN HOSPITAL DISCHARGES FOR DIABETES

- Because the prevalence of diabetes in Pasquotank County recently has been higher than the prevalence in NC as a whole, it may be illustrative to examine hospital discharges for diabetes (ICD-9 Code 250xx). This analysis was provided in previous slides.



ADULT OBESITY

- The average annual estimated prevalence of adult obesity in Pasquotank County was **32.5%** in the period from 2005 through 2012, compared to 31.8% in the Region [State data is not available].
- Over the period cited the annual estimated prevalence of adult obesity in Pasquotank County increased overall.

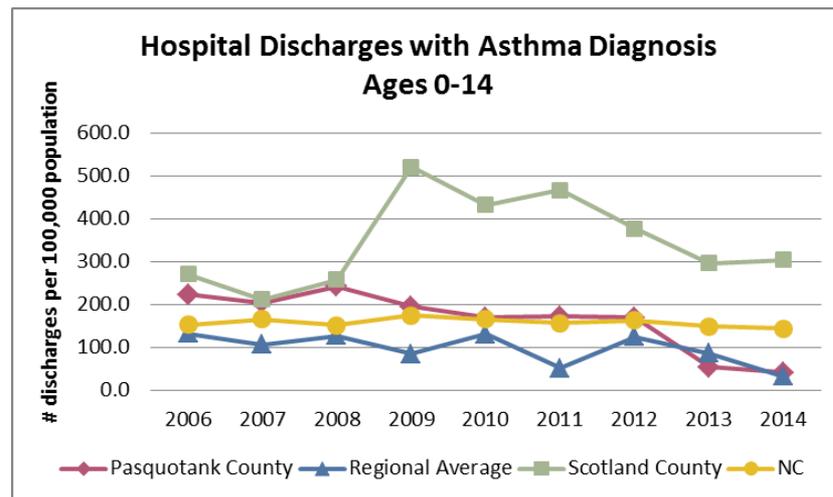
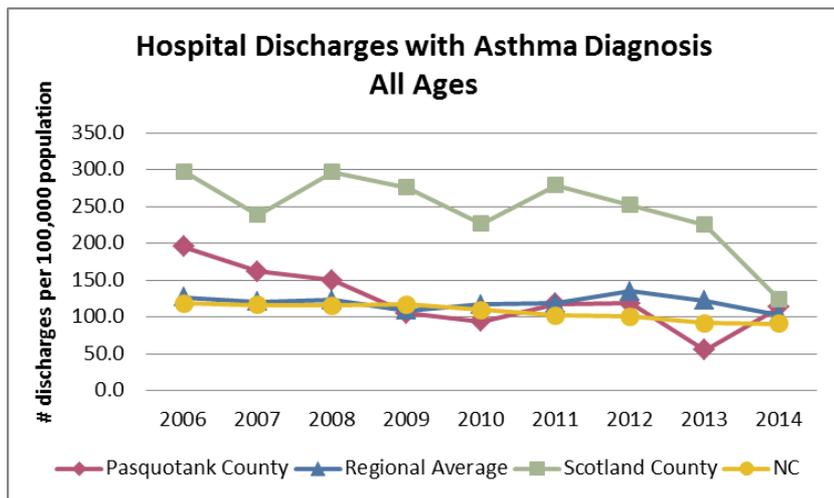


CHILD OBESITY (AGES 2-4)

- There is limited data on the prevalence of childhood obesity in Pasquotank County. NC NPASS data is cataloged for three age groups (2-4, 5-11, 12-18) and covers only children seen in health department WIC and child health clinics and certain other facilities and programs. The most recent data available is for 2012.
- According to this NC-NPASS data, in Pasquotank County in 2012
 - 13.3% of the participating children age 2-4 were “overweight” and 15.9% were “obese” (total = 29.2%)
 - For this period NC = 14.9% overweight and 14.5% obese (total = **29.4%**)

ASTHMA

- The Pasquotank County rate of hospital discharges with a primary diagnoses of asthma has decreased overall since 2006, but in 2014 was higher than the NC rate. In 2014 the Pasquotank County asthma discharge rate was **113.1** compared to 90.9 in NC.
- Among children aged 0-14, the asthma discharge rate has declined overall since 2006 and fell below the state rate in 2013. In 2014 the (unstable) discharge rate was **41.3** compared to **144.6** statewide.



TRENDS AND RACIAL DISPARITIES IN HOSPITAL DISCHARGES FOR ASTHMA

- Because, according to NC SCHS, the hospital discharge rate for asthma in Pasquotank County frequently has been higher than the comparable state rate, it may be illustrative to examine local hospital discharge data for asthma (ICD-9 Code 493xx). The data are from Sentara Albemarle Medical Center.
- The total number of ED discharges under this code for blacks was more than 3 times the comparable figure for whites.
- The total number of IP discharges under this code for blacks was almost 2 times the comparable figure for whites.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Black	White	Total	Black	White	Total
2013	411	135	565	20	4	24
2014	369	114	497	24	19	43
Total	780	249	1,062	44	23	67

TRENDS AND AGE DISPARITIES IN HOSPITAL DISCHARGES FOR ASTHMA

- Because, according to NC SCHS, the hospital discharge rate for asthma among children in Pasquotank County previously has been higher than the comparable state rate, it may be illustrative to examine hospital discharges for asthma (ICD-9 Code 493xx) by age. The data are from Sentara Albemarle Medical Center.
- The percentage of ED discharges for children age 14 and younger totaled 41% of all ED discharges under this code; this age group composes 18% of the Pasquotank County population.
- There were only 8 IP discharges among children age 14 and younger over the period cited.

Fiscal Year	No. ED Discharges			No. IP Discharges		
	Age 0-14	Age > 14	Total	Age 0-14	Age > 14	Total
2013	220	345	565	5	19	24
2014	216	281	497	3	40	43
Total	436	626	1,062	8	59	67

MENTAL HEALTH

- The number of Pasquotank County residents served by the **Area Mental Health Program** decreased overall from 2005 to 2014. An average of 1,526 people were served annually.
- Over the same 10-year period the number of Pasquotank County residents served by **State Psychiatric Hospitals** *decreased* significantly. In 2005 119 individuals were served; in 2014, 11 people were served.
- During the same 10-year period, a total of **343** Pasquotank County residents were served by **NC State Alcohol and Drug Abuse Treatment Centers (ADATCs)**, with the number varying from year to year (and averaging 34 each year).

TRENDS IN HOSPITAL DISCHARGES FOR MENTAL HEALTH DIAGNOSES

According to data from the ARHS Region hospitals seeing more than 20 Pasquotank County patients in the two years cited:

- ED discharges related to all Mental, Behavioral and Neurological Disorder diagnoses compose an average of 2.3% of *all* ED discharges over the period cited; IP discharges for mental health diagnoses compose an average of 2.9% of all IP discharges.
- Note that these diagnoses (ICD-9 290-319xx) include psychotic and non-psychotic disorders, and conditions associated with alcohol and drug abuse.

Year	No. Emergency Department Discharges	No. In-Patient Hospitalization Discharges
2013	602 (2.3% of all ED discharges)	112 (3.4% of all IP discharges)
2014	583 (2.2%)	77 (2.3%)

PASQUOTANK COUNTY HEALTH PROBLEM

“WATCH LIST”

- **Heart disease** – the current county mortality rate is 36% higher than the NC rate, the short-term mortality rate trend has increased, and the long-term mortality rate trend has changed little; the current mortality rate is higher among males than females, and is higher among blacks than among whites.
- **Cancer** – the current county mortality rate for total cancer is higher than NC rate, the short-term mortality rate trend has increased slightly and the long-term mortality rate trend has changed little; long term mortality rate trends for lung cancer and breast cancer show an increase, and long-term incidence rate trends show an increase for lung cancer and breast cancer.
- **Alzheimer’s disease** – county mortality rate is slightly higher than NC rate and short- and long-term mortality rate trends show an increase

PASQUOTANK COUNTY HEALTH PROBLEM

“WATCH LIST”

- **All other unintentional injuries** – the long-term mortality rate trend shows an increase
- **Diabetes** – the county mortality rate has increased since the last CHA, prevalence has increased over time and has been higher than prevalence region-wide; the diabetes mortality rate among blacks is more than twice the comparable rate among whites, and hospital discharges among blacks is higher than among whites.
- **Asthma** – especially among African Americans and children younger than 15
- **Overweight and obesity** – the prevalence of overweight and obesity among both adults and children are unacceptably high.

POPULATIONS “AT RISK” FOR POOR HEALTH OUTCOMES IN PASQUOTANK COUNTY

- The uninsured and under-insured; people without a medical home
- Persons living in poverty
- Minorities
- Males, who generally have poorer health outcomes than female
- Persons with poor access to transportation
- The elderly, because healthcare services may not be sufficient to accommodate their needs as their population grows





PRIMARY DATA

SUMMARY

Small-Group Discussions
Conducted in 10 locations in 2015
100 participants

METHODOLOGY

- ARHS partnered with Sentara Albemarle Medical Center to collect primary data by conducting ten small-group discussions throughout Pasquotank County. Discussions included listening sessions and focus groups were led by trained moderators to learn about the community's definitions and understandings of health, illness and services that affect health attitudes, beliefs and behaviors.
- The Center for Survey Research at East Carolina University provided moderator trainings and an accompanying interview guide to ensure consistent and effective data collection methods.
- Discussion questions were researched, selected and approved by the CHA Lead Team. Discussions were recorded and lasted around one hour. Results were then transcribed and analyzed. **A total of 100 Pasquotank County residents participated in the small-group discussions.**

SMALL GROUP DISCUSSIONS

Pasquotank County Small-Group Discussions	Date	Participants
Community Care Clinic	1/23/15	2 Males; 5 Females
Knobbs Creek Senior Center	1/30/15	5 Males; 3 Females
PORT Human Services	2/02/15	3 Males; 3 Females
Memorial Missionary Church	3/10/15	3 Males; 5 Females
Pasquotank/Camden EMS	3/25/15	9 Males; 9 Females
College of the Albemarle	6/18/15	23 Females
City Road Methodist	7/02/15	3 Males; 5 Females
EC Downtown Business	8/05/15	1 Male; 6 Females
Elizabeth City State University	10/01/15	11 Females
Hugh Cale Center	10/27/15	5 Females



PARTICIPANT DEMOGRAPHICS

- 32% Black (compared to 37% in the county)
- 59% white (compared to 58% in the county)
- 7% Hispanic (compared to 4.4% in the county)
- 26% male (compared to 49% in the county)
- 9% unemployed (compared to 7.5% unemployment rate)
- 22% with bachelor's degree or higher (compared to 19% in the county)
- 22% currently without health insurance (compared to 17% in the county)
- 24% retired
- 38% earning more than \$50,000 household income

Q1: TELL US WHAT YOU THINK IS THE BEST THING ABOUT LIVING IN THIS COMMUNITY.

- Safe environment and sense of community
- Friendly and helpful citizens
- Climate and environment
 - Opportunities to get outdoor
 - Open landscape, lack of crowding
- Quiet, relaxed, slower paced



Q2: WHAT DO PEOPLE IN THIS COMMUNITY DO TO STAY HEALTHY?

- Physical activity (walking, running, kayaking, fishing, dancing, bowling, gardening)
- Organized recreational opportunities (team sports, fitness classes, yoga)
- Annual medical checkups
- Eating food grown in local gardens
- Monitoring salt intake, preparing foods at home, drinking plenty of water
- Utilize available health resources



Q3: IN YOUR OPINION, WHAT ARE THE SERIOUS HEALTH-RELATED PROBLEMS IN YOUR COMMUNITY?

Physical	Social	Mental
Diabetes	Lack of Preventative Care	Drug Abuse
Cancer	Lack of Transportation	Stress
Obesity	Lack of Financial Resources	ADHD
Poor Nutrition		Suicide
High Blood Pressure		Lack of MH providers
High Cholesterol		
COPD		
Stroke		
Allergies		
Heart Disease		
Asthma		



Q4: WHAT KEEPS PEOPLE IN YOUR COMMUNITY FROM BEING HEALTHY?

- Poor diet
 - Cheap, unhealthy fast food
 - fried Southern foods
 - Large portions
 - Lack of knowledge about healthy diet
 - Hormones, chemicals, antibiotics used in raising and preserving food
- Lack of healthcare resources
 - Limited number of doctors, specialists, mental health providers
 - Lack of awareness about what is available
 - Lack of transportation
- Lack of financial resources
 - Low income levels and high cost of living
 - High insurance costs
- Lack of time and motivation to be healthy

Q5: WHAT COULD BE DONE TO SOLVE THESE PROBLEMS?

- Increased education and outreach
 - For parents and youth
 - To increase utilization of available resources
- Encourage home gardens and support of local farmers
- Increase financial literacy so money gets spent on better health and lifestyle choices
- Increase accessibility of healthcare services
 - Free community care clinics



Q6: HAVE YOU OR SOMEONE CLOSE TO YOU EVER EXPERIENCED ANY CHALLENGES IN TRYING TO GET HEALTHCARE SERVICES? IF SO, WHAT HAPPENED?

- Lack of specialized healthcare providers
 - Illnesses go undiagnosed and untreated
 - Travel is required
 - Even those with good coverage cannot get an appointment
- Poor communication between patients and providers
 - Language barrier for non-native English speakers
 - Providers don't listen to the needs of patients
- Cost of healthcare
 - Elderly, middle class, and low-income populations struggle



Q7: ARE THERE ANY HOME REMEDIES YOU USE IN PLACE OF TRADITIONAL HEALTHCARE AND/OR MEDICINE?

Home Remedy	Targeted Ailment
Vinegar	High blood pressure
Garlic	High blood pressure, colds
Vanilla	Toothaches
Oatmeal	Skin health
Jalapenos	Sore throat
Honey	Cough
Whiskey	Sore throat
Salt water	Sore throat
Cranberry juice	Urinary tract infection
Coconut oil	Miscellaneous
Fish oil	Miscellaneous
Vaseline	Skin health
Epsom salt	Acne, laxative
Baking Soda	Sore throat
Moonshine	Miscellaneous
Marijuana	Miscellaneous
Vicks VapoRub	Cough
Tobacco	Stings

Q8: WHAT ARE THE STRENGTHS RELATED TO HEALTH IN YOUR COMMUNITY?

- Local health-related assistance programs
 - Free screenings
 - Hospice
 - PORT Human Services
 - Local food banks and transportation services
- Health education programs
 - Educational opportunities by Community Care Clinic and Elizabeth City State University
 - Walking programs and fundraisers
- Large local hospital and the variety of doctors associated with it
- Availability of health food options from local food markets
- Presence of exercise facilities

Q9: CANCER AND HEART DISEASE ARE THE LEADING CAUSES OF DEATH IN YOUR COUNTY. IN YOUR OPINION, WHAT MAKES THESE THE LEADING CAUSES OF DEATH IN YOUR COUNTY?

- Poor diet
 - Too much fast food, microwaveable food
 - Lack of cooking knowledge
- Lack of exercise
 - Lack of motivation
- Limited healthcare resources
 - Poverty, lack of education
 - Lack of health provider collaboration and preventative care options
- Environmental conditions
 - Farming practices and use of chemicals
- Genetics, stress and tendency to ignore health problems

Q10: HOW DOES LIVING IN A RURAL AREA AFFECT HEALTH?

○ Positives:

- Less pollution than larger cities
- Proximity to water
- Large amounts of farmland and room to grow own food
- Healthcare providers get to know their patients personally
- Students at local universities encouraged to stay local to practice
- Strong church community

○ Negatives:

- Lack of resources (specialists, pediatrics, free clinics)
- Limited transportation options (both public transportation and things like bike lanes)
- Limited health information
- Fewer funding sources

2016

Pasquotank County Primary Data Report



2016 CHA PRIMARY DATA COLLECTION PROCESS

Process Overview

ARHS partnered with Sentara Albemarle Medical Center to collect primary data for the 2016 CHA process for Pasquotank County. Data that are collected firsthand are known as primary data. For past CHA processes, surveys were conducted to collect primary data. However, the CHA Lead Team elected to collect primary data by conducting ten small-group discussions throughout Pasquotank County for the 2016 CHA. Small-group discussions including listening sessions and focus groups were led by trained moderators to learn more about the community's definitions and understandings of health, illness, and services that affect health attitudes, beliefs, and behaviors. The CHA Lead Team collected data directly from county residents to better understand their health status, needs, and county resources. Data was collected from a wide variety of county residents to assure that the data represent all parts of the county population.

ARHS contracted with the Center for Survey Research at East Carolina University to provide two moderator trainings, and to conduct, transcribe, and analyze a portion of the discussions. The training sessions were conducted using a curriculum developed and approved by the CHA Lead Team. The training sessions and accompanying interview guide were provided to ensure moderators and assistant moderators used effective and consistent data collection methods. The CHA Lead Team assigned responsibility for completing discussions to each partnering agency according to their geographical area of service. Each partner designated staff to facilitate each discussion. Partners were also responsible for ensuring that their discussions were conducted and transcribed within established timelines. A complete list of team members from the Center for Survey Research is presented below.

Mandee F. Lancaster, MA
Randy Knebel

Justin M. Raines, MA
Tiffany Pires

Methods

The CHA Lead Team met in October 2014 for a Road Mapping Session led by Leah Mayo Acheson, MPH, and trained as a Strategic Planning Facilitator to (a) identify groups and organizations to participate in the discussions, (b) identify suitable locations for the discussions, and (c) set deadlines for the data collection process. Road Mapping Sessions are strategic, outcome-focused stakeholder meetings and provide a month-to-month agenda, basis for meeting planning, calendar for all partners, and helps maintain focus and pace.

A formal letter of invitation was prepared and distributed via e-mail and led by Healthy Carolinians Coordinators to participate in a discussion. Demographic characteristics of participants were considered to ensure that results portrayed an accurate representation of Pasquotank County as a whole.

Discussion questions were researched and selected by the CHA Lead and approved by the CHA Lead Team. After the questions were established, ten small-group discussions with community members were scheduled at various locations throughout Pasquotank County (see Table 1). At least two moderators facilitated each session by asking the predetermined series of questions (see Appendix A). Discussions were recorded and lasted approximately one hour. Results were then transcribed and analyzed.

Table 1. Small-Group Discussion Summary Table

Pasquotank County Small-Group Discussions	Date	Participants
Community Care Clinic	1/23/15	2 Males; 5 Females
Knobbs Creek Senior Center	1/30/15	5 Males; 3 Females
PORT Human Services	2/02/15	3 Males; 3 Females
Memorial Missionary Church	3/10/15	3 Males; 5 Females
Pasquotank/Camden EMS	3/25/15	9 Males; 9 Females
College of the Albemarle	6/18/15	23 Females
City Road Methodist	7/02/15	3 Males; 5 Females
EC Downtown Business	8/05/15	1 Male; 6 Females
Elizabeth City State University	10/01/15	11 Females
Hugh Cale Center	10/27/15	5 Females

Primary Data Demographics and Results

Demographics

Discussion participants completed a demographic form at the beginning of each session. As shown in Table 2, the majority of participants were female (74 percent), White (59 percent), and married (47 percent). Furthermore, the majority of participants had at least some college education (70 percent).

Table 2. Pasquotank County Demographics

Race/Ethnicity	N	Percent
Asian	0	0
Black	32	32
Hispanic	7	7
Native American	1	1
Other	1	1
White	60	59

Gender/Sex	N	Percent
Male	26	26
Female	75	74

Marital Status	N	Percent
Divorced	5	5
Married	47	47
Never Married	32	31
No Response	6	6
Other	3	3
Separated	2	2
Widowed	6	6

Education	N	Percent
< 9 th Grade	3	3
High School – No Diploma	3	3
High School – Diploma	22	22
College – No Degree	31	30
Associate Degree	18	18
Bachelor’s Degree	12	12
Graduate or Professional Degree	10	10
No Response or Other	2	2

Most participants reported that they are a student (32 percent), work full-time (26 percent), or work part-time (27 percent; see Table 3). Moreover, annual household income was relatively split, with a large portion of participants (likely students) who reported an annual household income of \$20,000 or less (18 percent) and another large portion of participants who reported an annual household income between \$50,000 and \$100,000 (34 percent). Additionally, the majority of participants reported that they currently possess health insurance (83 percent); however, a select portion of participants reported that they have spent time without insurance in the past 12 months (22 percent). Finally, nearly all participants reported that they have access to the Internet (90 percent).

Table 3. Pasquotank County Demographics

Employment Status	N	Percent
Disabled; Unable to Work	4	4
Full-Time	26	26
Homemaker	5	5
Part-Time	27	27
No Response	0	0
Retired	24	24
Student	32	32
Unemployed	9	9

Household Income	N	Percent
< \$20,000	18	18
\$20,000 - \$29,999	6	6
\$30,000 - \$49,999	13	13
\$50,000 - \$74,999	17	17
\$75,000 - \$100,000	17	17
> \$100,000	4	4
Don't Know	12	12
No Response	13	13

Health Insurance/Health Coverage	N	Percent
Yes	83	83
No	17	17

Time Without Insurance (past 12 months)	N	Percent
Yes	22	22
No	77	77
Don't Know	1	1

Internet Access	N	Percent
Yes	90	90
No	8	8
No Response	2	2

Results

An aggregated report of results from Pasquotank County discussions is presented below. As these data may be limited in various ways, results only aim to portray a snapshot of community perceptions.

What is the best thing about living in this community?

Participants were first asked to discuss the positive aspects of their community by reporting what they believe is the best thing about living in Pasquotank County. Overall, participants viewed the county's safe environment and sense of community as the best things about living in the area. Participants also expressed that they appreciate the friendliness and helpfulness of fellow community members.

"The quality of life and the safeness of the community are the best parts. Also, community involvement...people are always willing to help others."

"Overall, our community is pretty safe – especially when compared to what we have in areas not too far from here."

Participants also stated that they enjoy the county's climate and environment. For example, participants stated that they enjoy living in the area because they are able to easily access local waterways. Moreover, participants expressed that accessible waterways afford community members the opportunity to take part in water-based activities, such as boating, fishing, and swimming.

"It's a good place to live; it's flat. It has hot summers and cold winters, and it's nice to have seasons. There's plenty of water around for boating, fishing, and swimming. I appreciate the opportunity to get outdoors."

Additionally, participants stated that they enjoy the open landscape. In particular, participants expressed that the landscape and lack of overcrowding contributes to a quiet, relaxed, and slower-paced atmosphere.

"It's quiet and very relaxed. It's got a small town feel and not congested - a much slower pace than where I come from."

A word cloud of responses is shown in Figure 1. Larger words represent words stated more frequently in small-group discussions. For example, participants frequently discussed the beach, the helpfulness of their neighbors, and the tight-knit aspects of their community.

Figure 1. The best things about living in this community



What are the serious health-related problems in your community?

When asked to list the serious health-related problems in Pasquotank County, the most frequently cited health problems were *diabetes, cancer, obesity, and poor nutrition*.

Overall, participants discussed problems related to physical health; however, problems associated with mental health and social issues were also reported. When discussing physical health, participants cited the aforementioned conditions, as well as *high blood pressure, high cholesterol, COPD, stroke, allergies, heart disease* and *asthma* as serious health-related problems in Pasquotank County. Participants also discussed several behavioral factors that may lead to the health-related problems in the county, such as eating too much fast food and smoking.

“Poor diet heavily affects health.”

“I would say that because there is a college here, fast food [is a serious health-related problem]. A lot of students go for convenience instead of home cooked meals that are more healthy.”

“Smoking is also a problem. It is different here than in other places. I’ve never been anywhere where you can smoke at the gas station.”

Additionally, participants cited social health-related issues that accompany the physical health-related issues in the county. For example, participants stated a lack of *preventative care, transportation, and financial resources* that contributes to the serious health-related problems in the county.

“A lot of it is money. Everything is so expensive. Sometimes it’s pay your light bill or buy your medicine.”

Participants also cited a variety of mental health issues that are believed to be a concern within the community. The most frequently cited mental health-related problems were *drug abuse, stress, ADHD, and suicide*. Furthermore, participants stated that there is a lack of *mental health counseling* to provide community members with the necessary support.

Physical	Social	Mental
Diabetes	Lack of Preventative Care	Drug Abuse
Cancer	Lack of Transportation	Stress
Obesity	Lack of Financial Resources	ADHD
Poor Nutrition		Suicide
High Blood Pressure		
High Cholesterol		
COPD		
Stroke		
Allergies		
Heart Disease		
Asthma		

What keeps people in your community from being healthy?

Next, participants were asked to describe barriers that prevent community members from being healthy. Participants frequently discussed community members' poor diet as the primary barrier to health in the community. Specifically, participants stated that community health is negatively affected by decisions to eat cheap, unhealthy fast foods or fried Southern foods. Participants also stated that community members frequently eat food in large portions. Furthermore, participants expressed that there is an overabundance of fast food restaurants in the area and that the convenience and low-cost of fast food options encourage community members to make poor dietary choices. Participants also stated that many community members lack the knowledge required to eat a nutritious diet. Lastly, participants believed that hormones, chemicals, and antibiotics injected into cheaper food options also prevent community members from being healthy.

"It's a lot easier and cheaper to go to a fast food restaurant and get something off the dollar menu than it is to eat healthy."

"A lot of times ease and convenience supersedes a healthy lifestyle focus."

"People just don't even realize how bad some foods are for you."

Participants also believed that a lack of healthcare resources in the county acts as a barrier to community health. In particular, participants stated that there are a limited number of doctors, specialty providers, and mental health specialists in Pasquotank County. Furthermore, participants expressed that community members lack knowledge and awareness about the healthcare resources that are available to the community. Participants also mentioned that limited transportation services in the area make accessing care difficult.

"The resources are here but people do not know about them."

"Publicity could be increased. There are opportunities...people just need to know about them."

Next, participants stated that a lack of financial resources and insurance prevents many community members from being healthy. In particular, participants felt that low income levels and high costs of living in the county make it difficult for community members to afford healthcare services, such as insurance, specialty care, and gym memberships. Furthermore, participants stated that insurance costs prevent community members from affording necessary medications.

"A lot of people would take better care of themselves but do not have health insurance."

"I can't afford medications I need because I don't have insurance."

Finally, participants discussed a lack of time and motivation as barriers to health in Pasquotank County. Specifically, participants believed that many community members lack the motivation and support to lead a healthy lifestyle. Moreover, participants stated that community members often feel that they lack the time to exercise and engage in other healthy activities, such as preparing healthy meals.

What could be done to solve these problems?

In addition to describing barriers to health, participants also provided potential solutions to the serious health-related problems in the county. Many of the proposed solutions focused on education and community outreach. For example, participants stated that community members would benefit from health education programs that target both parents and youth community members.

“We need to reach out to parents about their children’s health.”

“We should provide education to everyone – particularly the younger generations.”

Moreover, participants stated that the county would be healthier if community members utilized the health-related resources and services that are available in the community.

“Some people need to use food drives and accept support from churches.”

Participants also stated that Pasquotank County would be healthier if community members grew their own fresh produce and supported local farmers. Moreover, participants expressed concern about the lack of healthy food options; as such barriers make it difficult for community members to select healthy choices.

“You could grow your own food and help people learn what and how to grow fresh vegetables.”

“I think the health department needs to endorse our farmers, and every restaurant in the city needs to buy local produce from our farmers.”

“If we had another food option, maybe we would pick that.”

Also, participants discussed the importance of making responsible financial decisions – suggesting that parents should manage their money in a manner that contributes to the health of their families.

“Parents shouldn’t be buying \$250 tennis shoes or spending \$600 on an Xbox. It’s all about choices. People should spend that money on healthy foods and gardens.”

Finally, participants suggested that the county should provide more opportunities for accessible healthcare services. For example, participants stated that the community would benefit from free community care clinics.

“You should provide community care clinics. People that can’t afford to go to the doctor can go and get treated and educated. There is a group of people in the United States that just falls through the cracks.”

Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?

Participants were then asked to report any challenges they have experienced when accessing healthcare services in Pasquotank County. Participants cited a variety of concerns and provided personal examples of challenges that they have experienced. The majority of responses included challenges associated with a *lack of specialized healthcare providers, poor communication between patients and providers, and the costs associated with healthcare services*. Furthermore, participants identified several groups of community members who experience greater challenges than others.

First, a large portion of participants discussed the challenges associated with a limited number of healthcare providers in the area. Specifically, participants stated that there are a limited number of medical specialists (e.g., dentists, dermatologists) in Pasquotank County. Moreover, participants believed that the lack of specialists in the county often results in community members' illnesses going undiagnosed and/or untreated. Consequently, participants reported that many community members must travel long distances when seeking specialized healthcare services.

"I need a dermatologist – don't have one, couldn't afford it if we did. You just live with the problems. If it is melanoma, then oh well."

"My mother in-law is at the point in her life where she needs to start seeing a specialist. We don't have a lot of options around here."

"I have the best healthcare [coverage] and retired from the federal government. I could not even get [an appointment with] a general practitioner and that is not acceptable."

Participants also cited challenges associated with communication between healthcare providers and community members. For example, participants stated that some community members have a native language other than English, making it difficult for patients and providers to communicate. Moreover, participants reported that community members often struggle to find healthcare providers that are committed to listening and understanding patients' needs.

"[Healthcare providers] treat you the way they see you. You do not get the same services because of the language barrier."

"Finding a doctor that listens. My doctor now just walks in and out and does not listen to what I have to say."

Furthermore, participants stated that many community members find it difficult to afford healthcare services. For example, participants proposed that the elderly, middle-class, and low-income populations experience challenges with paying for healthcare services. Lastly, participants discussed that some community members may have limited health insurance or no health insurance at all, which prevents them from accessing most types of healthcare services at an affordable price.

"The elderly really struggle to get the support they need to cover medical expenses and prescription costs. Medications are so expensive you have to cut off an arm and a leg to get help."

Are there any home remedies you use in place of traditional healthcare and medicine?

Participants were also asked about alternative practices they utilize in place of traditional healthcare. Overall, participants were supportive of the use of home remedies and listed a large number of products that they use in place of conventional healthcare and medicine. Furthermore, participants stated that they learn about home remedies using sources such as the Internet and television shows.

"Without resources, such as doctors, people in the community use the Internet and television shows like Dr. Oz to get remedies for their symptoms."

Participants frequently listed a variety of food products that are used as home remedies. For example, participants stated that they use products such as vinegar, honey, garlic, coconut oil, and lemon juice for conditions such as high blood pressure, sore throat, colds, and coughs. Participants also listed techniques such as gargling warm salt water or drinking alcohol (e.g. whiskey) to help reduce the discomfort of a sore throat.

In addition to the above-mentioned home remedies, participants also stated that they use over-the-counter (OTC) medications such as Vicks VapoRub and Vaseline for conditions such as cough and colds. However, some participants expressed concern regarding the use of OTC medications, suggesting that some community members may overuse products such as Tylenol.

Lastly, participants listed a number of natural products that are used in place of traditional medication. For example, participants stated that they use tobacco for bee stings, mint leaves for headaches, and aloe for burns. Participants also stated that some community members utilize illegal products, such as marijuana and moonshine, to self-medicate.

Table 4. Home Remedies and Targeted Ailments

Home Remedy	Targeted Ailment
Vinegar	High blood pressure
Garlic	High blood pressure, colds
Vanilla	Toothaches
Oatmeal	Skin health
Jalapenos	Sore throat
Honey	Cough
Whiskey	Sore throat
Salt water	Sore throat
Cranberry juice	Urinary tract infection
Coconut oil	Miscellaneous
Fish oil	Miscellaneous
Vaseline	Skin health
Epsom salt	Acne, laxative
Baking Soda	Sore throat
Moonshine	Miscellaneous
Marijuana	Miscellaneous
Vicks VapoRub	Cough
Tobacco	Stings

What are the strengths related to health in your community?

Next, participants were asked to discuss the strengths related to health in the community. Participants discussed a variety of community strengths, including local assistance programs, emergency services, and health-related facilities.

Specifically, participants stated that the county has a variety of health-related assistance programs that are available to community members. For example, participants discussed the support provided by free screenings that are occasionally offered throughout the county. Additionally, participants suggested that the hospice and PORT Human Services programs are strengths of the community. Participants also discussed the assistance provided by local food banks and transportation services in the county; however, participants believed that such resources could be better utilized if there was increased community member awareness of the programs.

“Occasionally we have free clinics and prostate screenings. We also have dental screenings at the beach.

“The transportation van is a great thing in this community, and the emergency medical services are good, too.”

“There are a lot of good strengths in this town. Many people just don’t know – we need to let them know about all the resources.”

Additionally, participants stated that the community has many health-related education programs. Specifically, participants discussed educational opportunities provided by the Community Care Clinic and Elizabeth City State University. Participants also discussed walking programs and fundraisers hosted by the community and endorsed by local employers as community strengths.

Next, participants discussed the health-related benefits provided by having a large hospital in the area. In particular, participants stated that the medical specialization provided by a large, local hospital is vital to establishing and maintaining a healthy community. Moreover, participants viewed the availability of cardiologists, nephrologists, endocrinologists, surgeons, and gynecologists as health-related strengths of Pasquotank County.

“I’m glad to have such a big hospital brand here. They are able to integrate with doctors all over.”

Lastly, participants discussed the availability of healthy food options, such as produce from local organic food markets. Participants viewed the availability of nutritional food choices and the presence of exercise facilities as important health-related strengths of the community.

Cancer and heart disease are the leading causes of death in your county. In your opinion, what makes these the leading causes of death in your county?

Next, participants were asked to provide potential explanations for why cancer and heart disease are the leading causes of death in Pasquotank County. Participants provided a variety of explanations. In particular, participants suggested that factors such as *poor diet, a lack of exercise, limited healthcare resources*, and *environmental conditions* contribute to the leading causes of death in the county.

Specifically, participants stated that community members' poor diets may contribute to the prevalence and mortality of cancer and heart disease. Participants expressed that community members make bad nutritional choices and consume too much fast food and microwaveable food. Moreover, participants suggested that community members do not know how to cook healthy foods. Participants also expressed that many community members do not exercise and display a lack of motivation to be healthy.

"Nutrition is the key to all of our health issues."

"I do not see many people being active around here. I see the parks and playgrounds and no one using them."

Participants also stated that community members are unable to get the treatment necessary to detect and treat cancer and heart disease. Specific reasons stated by participants regarding why community members are unable to get such treatment include *poverty*, as well as a lack of *education, health provider collaboration, preventative care options*, and *support in the community*.

"So many people don't have the means to provide for themselves the way they should. They don't have the finances to shop healthy."

"Education is the problem. People know what to do when you hand them a box of macaroni and cheese, but they don't know what to do when you hand them a bucket of squash."

"We need cancer advocates."

Additionally, participants suggested that certain environmental conditions may contribute to the leading causes of death in Pasquotank County. For example, participants expressed concern with a lack of environmental policies that regulate farming practices, such as crop dusting, spraying foods with pesticides, and using chemicals in food processing.

Finally, participants discussed a variety of other factors that may contribute to cancer and heart disease. Such factors include genetics, misdiagnosis, stress, and community members' tendency to ignore health problems.

"The lifestyle that people have and stress with bills [contribute to the leading causes of death in the county]. We work hard."

"Ignoring symptoms or not being aware of what symptoms mean...women don't always recognize the symptoms of a heart attack."

How does living in a rural area affect health?

In the final question, participants were asked to discuss how living in a rural area affects health. Participants listed multiple positive and negative features associated with living in a rural area. Overall, participants expressed mixed opinions regarding whether rural or urban living was more beneficial to community health.

“There are pros and cons about every place you go.”

Regarding the benefits of rural living, participants stated that, environmentally, Pasquotank County has less pollution than larger cities, is close to the water, and has large amounts of farmland. In turn, participants stated that community members in rural communities have a closer proximity to healthy foods and can grow their own food if desired.

“We don’t have large companies that produce smoke and chemicals in the air and we don’t have a lot of cars to create pollution like in larger cities.”

Furthermore, participants stated that many healthcare providers in rural communities are residents of the county and can get to know their patients personally. Additionally, participants stated that medical students at local universities are encouraged to remain in the area to practice, and that community members have closer access to physicians who practice in small communities. Finally, participants discussed the presence of a strong church community in rural areas that has a large, positive impact on community members’ health.

In contrast, participants stated that rural living is also associated with negative characteristics, such as a lack of resources, limited transportation options, and limited amounts of health information. In particular, participants believed that living in a rural area is associated with limited healthcare resources, including specialty care providers, pediatric services, and free healthcare clinics. Moreover, participants stated that rural areas typically have less funding sources in comparison to larger urban areas.

“Lack of resources affects everything.”

“Rural areas aren’t going to have all the resources that you may want, because they’re small towns.”

“Because we don’t have a large community, we do not receive the funding to do more prevention.”

Additionally, participants discussed transportation difficulties that are present in rural communities. For example, participants stated that rural communities lack both public transportation options, as well as alternative transportation resources, such as bike lanes. Finally, participants expressed that rural living is associated with a lack of access to healthcare information, which results in a lack of awareness of resources and a limited understanding of what defines a healthy lifestyle.

Summary and Next Steps

There were many common, identifiable themes among the Pasquotank County small-group discussions. When asked to discuss the **best things about living in the county**, participants frequently spoke about the *safe, friendly environment* and *strong sense of community* within Pasquotank County. Furthermore, when speaking about the **health-related strengths of the community**, participants discussed local *healthcare facilities, emergency services, and assistance programs*. Moreover, participants discussed the many *health-related education programs* offered throughout the county at local organizations and universities.

When asked about **health-related weaknesses of the community**, participants discussed a variety of **serious health-related problems** in Pasquotank County. The most frequently cited health problems were *diabetes, cancer, obesity, and poor nutrition*. Participants also discussed **barriers to health** in Pasquotank County and frequently cited community members' *poor diet* as the primary barrier to health in the community. Specifically, participants stated that community health is negatively affected by decisions to consume *cheap, unhealthy fast foods* or *Southern foods* that are fried. Participants also believed that a *lack of healthcare resources* in the county acts as a **barrier to community health**.

In turn, participants provided a variety of **solutions to the serious health-related problems** in Pasquotank County. For example, many of the proposed solutions focused on *education* and *community outreach*. Participants stated that community members would benefit from *health education programs*, which address healthy lifestyle habits and promote available community resources.

At the conclusion of each discussion, the moderators explained the CHA would be available on ARHS's website in March 2017 and the website address was given, as well as the contact information for the CHA Lead.

Appendix A: Focus Group Script

GUIDELINES:

1. All cell phones need to be on silent or vibrate.
2. Be respectful to each other. Do not talk over each other or be dismissive of others' opinions.
3. Be open and honest in your responses.
4. Ask for clarification of questions if needed.
5. Share your opinion. Every participant brings a unique perspective and we want to hear from each person.
6. Refrain from using individual's names when sharing information during the session.
7. Refrain from sharing confidential information that may be discussed during the session.
8. Use appropriate language.

QUESTIONS:

1. Introduce yourself and tell us what you think is the best thing about living in this community.
2. What do people in this community do to stay healthy?
3. In your opinion, what are the serious health-related problems in your community?
4. What keeps people in your community from being healthy?
5. What could be done to solve these problems?
6. Have you or someone close to you ever experienced any challenges in trying to get healthcare services? If so, what happened?
7. Are there any home remedies you use in place of traditional healthcare and/or medicine?
8. What are the strengths related to health in your community?
9. Cancer and heart disease are the leading causes of death in your county. In your opinion, what makes these the leading causes of death in your county?
10. How does living in a rural area affect health?

CONTACT INFORMATION:

Dana Hamill
Albemarle Regional CHA Lead
Email: dhamill@arhs-nc.org; Phone: 426-2115

2016 Community Health Assessment

Priority Selection Worksheet

County: _____

After reviewing the CHA Presentation, please tell us what you think are the three most important health issues for your county.

When choosing these issues, please consider the following:

- **Magnitude of the Problem:** The size or extent of the problem as it relates to your county
- **Consequences of the Problem:** How the economic, social, cultural, and political issues within your county might be influenced by addressing this issue
- **Feasibility:** Are there enough resources in the county to address this issue and is the community ready to address this issue?
- **Duplication:** Is this issue already being addressed by other community stakeholders/programs?

Top Health Issues	
1.	
2.	
3.	



Pasquotank County Community Resource Inventory

Elizabeth City Chamber of Commerce

Categorized lists of businesses, services, organizations and things to do in Pasquotank County/Elizabeth City. Search banner heading tabs: Business Directory, Visit, and Live and Work. Portal - <http://www.elizabethcitychamber.org/>

Pasquotank County Government Directory of Services

Lists of live links to services provided by the county. Portal:
<http://www.co.pasquotank.nc.us/>

Albemarle Smart Start Partnership Community Resource Guide

Searchable on-line directory of programs and services available throughout the Albemarle Region. Currently catalogs annotated listings for 125 local and regional agencies and organizations. Portal - <http://www.albemarlessp.org/resource-guide>. Also available as a printable version at:
<http://www.albemarlessp.org/sites/default/files/community-resource-guide.pdf>

North Carolina Arts Council The NC Arts Council

Maintains a resource list of cultural, arts, and civic organizations that is searchable by county. Currently catalogs 33 regional resources. Portal:
<http://www.ncarts.org/county.cfm?county=Pasquotank>

Fire Stations

Fire Station 1 South Gate Station

902 Halstead Blvd.
Elizabeth City, NC 27909
252-335-5398

Fire Station 2

410 Harney Street
Elizabeth City, NC 27909
252-333-1045

Pasquotank-Camden Emergency Medical Service

1144 N. Road St.
P.O. Box 469
Elizabeth City, NC 27907
252-335-1524
Fax: 252-335-2560
Website: <http://www.co.pasquotank.nc.us/Departments/ems/>

Pasquotank County Sheriff's Office

200 East Colonial Ave.
Elizabeth City, NC 27909
252-338-2191
Fax: 252-338-1667
Website: <http://www.co.pasquotank.nc.us/Departments/sheriff/index.html>

Elizabeth City Police Department

302 E. Colonial Ave.
Elizabeth City, NC 27909
252-335-4321
Fax: 252-338-0128
Website: http://www.cityofec.com/index.asp?SEC=5B9153FA-8605-4CBB-AFA0-BAB1260CB448&Type=B_BASIC

Pasquotank County NC Cooperative Extension

1209 Mcpherson St
Elizabeth City, NC 27909
Website: <https://pasquotank.ces.ncsu.edu/>

The Elizabeth City Area Chamber of Commerce

502 East Ehringhaus Street
Elizabeth City, NC 27909
252-335-4365
Fax: 252-335-5732
Website: <http://www.elizabethcitychamber.org/>

SPCA of Northeastern Carolina

100 Wilson Street
Elizabeth City, NC 27909
252-338-5222

Partnerships to Improve Community Health (PICH)

This project focuses on addressing risk factors for chronic disease with coalitions compiled of representatives from health departments, faith-based institutions, local governments, community colleges, health and human service agencies, and community organizations which will implement strategies to reduce secondhand smoke exposure and improving nutrition
Website: <http://healthync.org/>

Farmers Markets, Farmstands, and Roadside Stands**Bright's Delight Produce**

1156 Us Hwy 17 South
Elizabeth City, NC 27909

252-338-6421

Downtown Waterfront Market

Water St.
Elizabeth City, NC 27909
Mariner's Wharf Park
252-267-8329

Brothers Farm Market

154 Perkins Lane
Elizabeth City, NC 27909
252-619-3920

Halls Creek Blueberry Farm

583 Old Halls Creek Road
Elizabeth City, NC 27909
252-333-7332

Meadstown Produce

636 Meadstown Rd.
Elizabeth City, NC 27909
252-331-9253

Hall Farms

707 Bayside Rd.
Elizabeth City, NC
252-562-3396

Albemarle Smart Start Partnership

Mission: To improve children's lives in Bertie, Camden, Currituck, Gates, and Pasquotank Counties.
Goals: To make sure children enter school healthy and ready to learn. To provide programs for young children and caregivers to improve quality of child care and funds child care scholarships and programs designed to support families.

1403 Parkview Drive
Elizabeth City, NC 27909
Phone: 252-333-1233
Fax: 252-333-1201
Email: smartstart@albemarlessp.org
Website: <http://www.albemarlessp.org/>

Public Transportation in Pasquotank County

Public transportation in Pasquotank County is provided by the Inter-County Public Transportation Authority (ICPTA), operated by Albemarle Regional Health Services,

which serves the five-county area of Camden, Chowan, Currituck, Pasquotank and Perquimans counties.

Childcare

Central Elementary ASEP

1059 US 17 HWY South
Elizabeth City, NC 27909

Emmanuel Baptist Church Day Care Center

109 Chadburn Avenue
Elizabeth City, NC 27909
252-335-1617

JC Sawyer Elementary ASEP

1007 Park Street
Elizabeth City, NC 27909

Pasquotank Elementary ASEP

1407 Peartree Road
Elizabeth City, NC 27909

Sheep Harney Elementary ASEP

200 W. Elizabeth Street
Elizabeth City, NC 27909
980-343-5567

Sheep Harney Elementary Pre-K

285 Elvin Drive
Elizabeth City, NC 27909

Weeksville Elementary ASEP

1170 Salem Church Road
Elizabeth City, NC 27909
980-343-5567

ALC Albemarle Learning Center

1400 North Road Street
Elizabeth City, NC 27909
252-335-5229

Creative Kids Childcare Center

116 Corporate Drive
Elizabeth City, NC 27909
252-333-1021

Girls Incorporated of the Albemarle

304 S. Road Street
Elizabeth City, NC 27909
252-335-736

Jackie's Tender Loving Care

311 C South Hughes Boulevard
Elizabeth City, NC 27909
252-338-5683

Northside Elementary ASEP

1062 Northside Road
Elizabeth City, NC 27909

PW Moore Elementary ASEP

606 Roanoke Avenue
Elizabeth City, NC 27909

Rehoboth Learning Academy

1000 Maple St.
Elizabeth City, NC 27909
252-331-2811

Dot's Angels

702 Beech Street
Elizabeth City, NC 27909
252-331-3126

Public Schools**Central Elementary School**

1059 U.S. Hwy 17 South
Elizabeth City, Nc 27909
252-335-4305
Fax: 252-337-6601
Website: http://www.edline.net/pages/Central_E_S

Elizabeth City Middle School

1066 Northside Road
Elizabeth City, NC 27909
252-335-2974
Fax: 252-335-1751
Website: http://www.edline.net/pages/Elizabeth_City_Middle_School

H.L. Trigg Community School

1004 Parkview Drive
Elizabeth City, NC 27909
252-335-1765
Fax: 252-337-6740
Website: http://www.edline.net/pages/H_L_Trigg_Community_School

J.C. Sawyer Elementary School

1007 Park Street
Elizabeth City, NC 27909
252-338-1012
Fax: 252-338-2388
Website: <http://www.edline.net/pages/JCS>

Northeastern High School

963 Oak Stump Rd.
Elizabeth City, NC 27909
252-335-2932
Fax: 252-335-1005
Website: http://www.edline.net/pages/Northeastern_High_School

Northside Elementary School

1062 Northside Rd.
Elizabeth City, NC 27909
252-335-2033
Fax: 252-331-1332
Website: http://www.edline.net/pages/Northside_E_S

P.W. Moore Elementary School

606 Roanoke Ave.
Elizabeth City, NC 27909
252-338-5000
Fax: 252-338-6554
Website: http://www.edline.net/pages/PWMoore_ES

Pasquotank County High

1064 Northside Rd.
Elizabeth City, NC 27909
252-337-6880
Fax: 252-337-6890
Website: <http://www.edline.net/pages/PCHS>

Pasquotank Elementary School

1407 Peartree Rd.
Elizabeth City, NC
252-335-4205

Fax: 252-335-4966
Website: http://www.edline.net/pages/Pasquotank_ES

River Road Middle School
1701 River Rd.
Elizabeth City, NC 27909
252-333-1454
Fax: 252-331-1339
Website: http://www.edline.net/pages/River_Road_Middle_School

Sheep-Harney Elementary School
200 W. Elizabeth St.
Elizabeth City, NC 27909
252-335-4303
Fax: 252-335-4738
Website: http://www.edline.net/pages/Sheep-Harney_ES

Weeksville Elementary School
1170 Salem Church Rd.
Elizabeth City, NC 27909
252-330-2606
Fax: 252-330-5700
Website: http://www.edline.net/pages/Weeksville_ES

Private Schools

Albemarle School
1210 US Highway 17 South
Elizabeth City, NC 27909
252-338-0883

Elizabeth City Seventh-Day Adventist School
117 US Highway 17 South
Elizabeth City, NC 27909
252-335-0343

Foreshadow Academy
1456 Weeksville Rd.
Elizabeth City, NC 27909
252-330-4130

School Works (Methodist)
911 Park St.
Elizabeth City, NC 27909
252-334-9852

St. Stephen Missionary Baptist Church Child Care

513 W. Cypress St.
Elizabeth City, NC 27909
252-835-5003

Victory Christian School

684 Old Hertford Hwy
Elizabeth City, NC 27909
252-264-2011

New Life Academy

1958 N. Road St.
Elizabeth City, NC 27909
252-335-5812

Institutions of Higher Education

Chowan University

One University Dr.
Murfreesboro, NC 27855
Phone: 252-398-6436
Toll-Free: 1-888-4-CHOWAN
Fax: 252-398-1190
Website: <https://www.chowan.edu/>

Martin Community College - Bertie Campus

409 West Granville St.
Windsor, NC 27983
Phone: 252-794-4861
Website: <http://www.martincc.edu/>

Martin Community College - Williamston Campus

1161 Kehukee Park Rd.
Williamston, NC 27892
Phone: 252-792-1521
Fax: 252-792-0826
Website: <http://www.martincc.edu/>

Mid-Atlantic Christian University

715 N. Poindexter St.
Elizabeth City, NC 27909
252-334-2070
Website: <http://www.macuniversity.edu/>

Commented [PR1]: College of the Albemarle

Elizabeth City Campus
1208 N. Road St
PO Box 2327
Elizabeth City, NC 27909
P: 252-335-0821
F: 252-335-2011

Dare County Campus

132 Russell Twiford Road
Manteo, NC 27954
P: 252-473-2264
F: 252-473-5497

Roanoke Island Campus

205 Highway 64 S.
Manteo, NC 27954
F: 252-473-6002

Edenton-Chowan Campus

800 N. Oakum St
Edenton, NC 27932
P: 252-482-7900
F: 252-482-7999

Regional Aviation & Technical Training Center

107 College Way
Barco, NC 27917
P: 252-453-3035
F: 252-453-3215

<http://www.albemarle.edu/>

Roanoke Chowan Community College

109 Community College Rd.
Ahoskie, NC 27910
Phone: 252-862-1200
Website: <https://www.roanokechowan.edu/>

Elizabeth City State University

1704 Weeksville Rd.
Elizabeth City, NC 27909
252-335-3400
Website: <http://www.ecsu.edu/>

College of the Albemarle - Elizabeth City Campus

1208 N. Road St
PO Box 2327
Elizabeth City, NC 27909
Phone: 252-335-0821
Fax: 252-335-2011
Website: <http://www.albemarle.edu/about-coa/elizabeth-city-campus>

College of the Albemarle - Dare County Campus

132 Russell Twiford Road
Manteo, NC 27954
Phone: 252-473-2264
Fax: 252-473-5497
Website: <http://www.albemarle.edu/about-coa/dare-campus>

College of the Albemarle - Roanoke Island Campus

205 Highway 64 S.
Manteo, NC 27954
Fax: 252-473-6002
Website: <http://www.albemarle.edu/>

College of the Albemarle - Edenton-Chowan Campus

800 N. Oakum St
Edenton, NC 27932
Phone: 252-482-7900
Fax: 252-482-7999
Website: <http://www.albemarle.edu/about-coa/edenton-chowan-campus>

Regional Aviation & Technical Training Center

107 College Way
Barco, NC 27917
Phone: 252-453-3035
Fax: 252-453-3215
Website: <http://www.albemarle.edu/currituck>

Commented [PR2]: East Carolina University
East Fifth Street
Greenville, NC 27858
Phone: 252-328-6131
<http://www.ecu.edu/>

East Carolina University

East Fifth Street
Greenville, NC 27858
Phone: 252-328-6131
Website: <http://www.ecu.edu/>

Albemarle Hopeline, Inc.

Albemarle Hopeline, a private, non-profit organization founded in 1981, is the only program of its kind in the Albemarle region, with outreach through four satellite offices (Chowan, Currituck, Gates and Perquimans counties), a shelter/direct service facility, and a thrift store. The agency is guided by the mission of "providing comprehensive direct and preventive services to victims of family violence, sexual assault and teen dating violence" in the counties of Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans.

Services include: 24-hour crisis line; emergency Hope House shelter; food, clothing and transportation; crisis intervention; court advocacy; individual and group counseling for adults and children; Displaced Homemaker Program; information and referral; outreach; and prevention through awareness and education to school, church and civic groups and the community-at-large. Since the opening of an enlarged 14,200 square foot Hope House facility in 2006, Hopeline has been able to consolidate services to both residential and non-residential victims, and improve coordination and effectiveness. All services are designed to meet basic safety needs of victims of domestic and sexual violence, empowering them to establish and maintain healthy, violence-free lives (36).

Phone: 252-338-5338
24-hour crisis line: 252-338-3011
Fax: 252-338-2952
Mailing address: PO Box 2064, Elizabeth City, NC 27906-2064
Website: www.albemarlehopeline.org

Pasquotank County Department of Social Services

709 Roanoke Ave.
Elizabeth City, NC 27909
252-338-2126
Website: <http://www.co.pasquotank.nc.us/>

Hospital**Sentara Albemarle Medical Center**

1144 N. Road St.
Elizabeth City, NC 27909
252-335-0531
Website: <http://www.sentara.com/albemarle-north-carolina/hospitalslocations/locations/new-sentara-albemarle-medical-center.aspx>

Health Department

Albemarle Regional Health Services

Albemarle Regional Health Services (ARHS) is a regional Public Health agency in rural, northeastern NC serving the seven counties of Bertie, Camden, Chowan, Currituck, Gates, Pasquotank and Perquimans. ARHS has provided over 70 years of service to the Albemarle Region.

The regional Public Health agency provides the following healthcare services: immunizations, diabetes care and management, women's preventive health, maternal health, including high-risk perinatal services, child health, WIC and nutrition counseling, pediatric asthma management, services for people with communicable diseases including STDs, adult day health care, children's developmental services, Public Health preparedness and response, public information, interpreter assistance, home health care, and hospice.

Albemarle Regional Health Services also administers the following programs: Environmental Health, Regional Landfill, Solid Waste Authority and Recycling, LifeQuest Worksite Wellness, and the Inter-County Public Transportation Authority. The more than 29 ARHS operational sites are completely networked by technology to increase the efficiency and effectiveness of service delivery across the agency.

Pasquotank County Health Department

711 Roanoke Avenue
Elizabeth City, NC 27909
252-338-4400

Community Care of North Carolina/Carolina ACCESS

Phone: 252-847-6430

Mental Health Resources

Trillium Healthcare Resources

Manages mental health, substance use, and intellectual/development disability services in a 24-county area. Trillium partners with agencies and licensed therapists to offer services and support to people in need within their community.

Crisis Care & Service Enrollment: 1-877-685-2415

Email: info@trilliumnc.org

Website: <http://www.trilliumhealthresources.org/>

Trillium Access Point

Anonymous, evidence-based, self-conducted screenings online 24hrs a day for depression, bipolar disorder, post-traumatic stress disorder, eating disorders, and alcohol use disorders.

Available in English and Spanish, provides local referral information, and includes learning and resource section.

Website: <http://www.trilliumhealthresources.org/en/Community-Partnerships/Trillium-Initiatives/Access-Point/>

Quitline NC

Free, confidential, one-on-one support and in addition to new extended hours of 6am-3am, nicotine replacement therapy - patch, gum and lozenge - is now available for every person who enrolls.

1-800-QUIT-NOW

YouthBuild River City Community Development Corporation

303 West Ehringhaus Street
Elizabeth City, NC 27909
252-331-6312

Migrant and Seasonal Farmworker Program – Gateway Community Health Centers

510 S. Martin Luther King Dr.
Elizabeth City, NC 27909
252-384-2651

Albemarle Resource Center

400 East Elizabeth Street
Elizabeth City, NC 27909
252-333-1202

Food Bank of the Albemarle

109 Tidewater Way
Elizabeth City, NC 27909
252-335-4035

New Beginnings Homeless Shelter

112 Herrington Road
Elizabeth City, NC 27909
252-334-9801

Albemarle Pregnancy Resource Center

201 E. Ehringhaus Street
Elizabeth City, NC 27909

252-338-1655

Community Care Clinic of Pasquotank County

918 Greenleaf Street
Elizabeth City, NC 27909
252-384-4733

Albemarle Home Care

311 Cedar Street
Elizabeth City, NC 27909
252-338-4066

Elizabeth City Housing Authority

440 Hariot Drive
Elizabeth City, NC 27909
252-335-5411

River City Community Development Corporation

501 E. Main
Elizabeth City, NC 27909
252-331-2925

Port Human Services Elizabeth City Outpatient Clinic

1141 N. Road St.
Suite L
Elizabeth City, NC 27909
252-335-0803

Guardian Ad Litem

1305 – D McPherson St.
Elizabeth City, NC 27909
252-331-4755

Pasquotank County Veterans Service Office

NC Division of VA
1023 US 17 South, Suite 2
Elizabeth City, NC 27909
252-331-4741

Albemarle Teen Challenge

504 East Elizabeth Street, Suite 7
Elizabeth City, NC 27909
252-338-8263

Kids First, Inc. Child Abuse Treatment Center

808 West Ehringhaus Street
Elizabeth City, NC 27909
252-338-5658

Girls Incorporated of the Albemarle

304 South Road Street
Elizabeth City, NC 27909
252-335-7346

Resources for the Elderly and Disabled

Elizabeth City-Pasquotank County Senior Center

200 East Ward Street
Elizabeth City, NC 27909
252-337-6661

Kindred Transitional Care and Rehabilitation

901 Halstead Blvd.
Elizabeth City, NC 27909
252-338-0137

Brookdale

401 Hastings Lane
Elizabeth City, NC 27909
252-558-1070

Heritage Care

100 Timmerman Drive
Elizabeth City, NC 27909
252-338-2816

W.R. Winslow Memorial Home

1075 US Highway 17 South
Elizabeth City, NC 27909

Brian Center Health & Rehab

1300 Don Juan Road
Hertford, NC 27944

Sentara Nursing Center

3907 Caratoke Highway
Barco, NC 27917

Dentists

Alison L. Boone, DDS
905 Halstead Blvd. #4
252-331-2050

Complete Dental Care
407 S. Road St.
252-335-0548

Robert T. Gillam PA
508 E. Main St #322
252-335-4545

Wuertz Karen M, DDS
408 E. Colonial Ave.
252-335-4341

Morris & Taylor Ltd
416 E. Colonial Ave.
252-338-0143

Dr. Jason A Banks
103 Tanglewood Pkwy S.
252-331-2304

Dr. Johnny E. Haynes, DDS
303 E. Main St. #7
252-338-8995

Dandar Regis A, DDS
217 S. Poindexter St.
252-335-4421

Turner Harold L, DDS
215 N. McMorrine St.
252-335-2801

Pearson P Z DDS
1141 N. Rd St.
252-335-9303

Blanchard Periodontics
200 N. Water St.
252-335-4332

Carolina Coast Pediatric Dentistry

416 E. Colonial Ave
843-790-9299

Dr. Lee B. Kreger, DDS

1161 N. Road St.
252-737-7250

Van Belois H J DDS

416 E. Colonial Ave.
252-338-8077

Dr. Bald and Associates

1221 Carolina Ave.
252-338-8077

Coastal Endodontics

200 N. Water St.
252-331-5777

Physicians**Albemarle Health Physician Directory**

Albemarle Health provides on its website a list, searchable by name or specialty, of the more than 100 physicians on its staff representing nearly 30 specialties. Search results are returned in a printable format. Portal: <http://www.albemarlehealth.org/find-a-physician/>

Roanoke Primary Care

902 Roanoke Ave.
Elizabeth City, NC 27909
252-384-0154

Albemarle Family Practice

1141 N. Road St.
Elizabeth City, NC 27909
252-335-5424

Sentara Pediatric Physicians

1141 N. Road St.
Elizabeth City, NC 27909
252-384-2590

Sentara Family & Internal Medicine Physicians

1507 N. Road St. Suite 2

Elizabeth City, NC 27909
252-333-1149

Comprehensive Rehabilitation

135 E. Rich Blvd
Elizabeth City, NC 27909
252-333-1277

Community Family Practice

107 Medical Dr.
Elizabeth City, NC 27909
252-335-0503

Northeastern Family Medicine

206 S. Rd St.
Elizabeth City, NC 27909
252-335-2355

Sentara Orthopedic & Sports Medicine Specialists

1134 N. Road St.
Elizabeth City, NC 27909
252-384-2360