



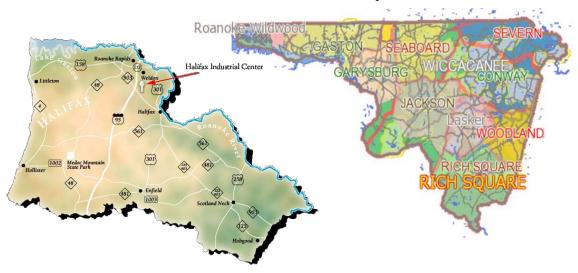
# Community Health Needs Assessment 2013

# **Table of Contents**

Introduction to the Community Health Assessment Process	4
Executive Summary	5
Primary Data	5
Secondary Data	5
Overweight/Obesity	5
Community Health Assessment Team	7
Prioritization of Community Health Needs	7
Halifax Regional Board of Directors	8
Community Health Care Initiative	9
Halifax County Board of Health	12
Northampton County Board of Health	12
Halifax County Board of Commissioners	13
Northampton County Board of Commissioners	13
Halifax Regional Overview	14
Halifax and Northampton County Historical Overview	17
Halifax	17
Northampton	17
Attractions	17
Population Demographics	18
Education and Employment	20
Income and Economic Status	22
Poverty and Race/Ethnicity	24
Unemployment Rates	26
Access to Health Care	28
Health Professional Shortage Areas	28
Primary Care Physicians	31
Hospitals	31
Healthcare Insurance	32
Medicare & Medicaid	34
Population Health	36

Leading Causes of Death	36
Hospitalization Data	41
Rates of Preventable Hospitalization	44
Risk Factor Behaviors and Conditions related to the Top 10 Causes of Death	46
Child Health	50
Infectious Diseases	52
Natural Environment	55
Social Environment	56
Violent Crime Rates	56
Child Abuse Rate	57
Housing Affordability	58
Community Survey	59
References	61
Table of In-Text Figures	63
Table of In-Text Tables	65
CHNA PRIORITIZATION RESULTS	66

# **Our Community:**



# **Introduction to the Community Health Assessment Process**

#### **Purpose**

The purpose of this Community Health Needs Assessment is to improve and promote the health of community members served by Halifax Regional. The Patient Protection and Affordable Care Act of 2010 mandates that tax-exempt hospitals conduct a Community Health Needs Assessment every three years. Halifax Regional embraces this opportunity to be a leader in the Community Health Needs Assessment process by identifying and addressing the current health status of the community. For the purpose of this Community Health Needs Assessment, Halifax Regional defines its community as the residents of Halifax and Northampton County.

This Community Health Needs Assessment has been conducted in collaboration with Halifax and Northampton County Health Departments, the Community Health Initiative, Halifax Regional Board of Directors, as well as residents of Halifax and Northampton Counties.

The Community Health Needs Assessment team is comprised of the Community Health Initiative members and Halifax Regional's Board of Directors. A subgroup consisting of Karen Daniels, Vanessa Wolgemuth, and Shannon Hicks (volunteer) collected and analyzed the secondary data. Primary data was obtained from Halifax and Northampton County Community Health Assessments. Weekly meetings were held to review the guidelines and discuss the process. Primary and secondary data findings were analyzed and compared in a presentation to the Community Health Initiative and Halifax Regional Board of Directors. The Community Health Needs Assessment Team analyzed both primary and secondary data to identify the issues and health concerns of the community.

#### **Executive Summary**

The 2012 Halifax Regional Community Health Needs Assessment contains both quantitative and qualitative data that has been analyzed for the purpose of prioritizing health needs of the community. Halifax/Northampton County Primary and Secondary data was compared to Nash County and the State of North Carolina as well as trends, national benchmarks, and historical data. This report was finalized on October 12, 2012.

#### **Primary Data**

The primary data results were obtained from community-wide health surveys conducted by Halifax and Northampton County Health Departments from April to September of 2010. The survey tool was provided by the Office of Healthy Carolinians and the NC Department of Public Health. The self-administered surveys included questions about the quality of life, economy, education, environment, health, housing, leisure activities, safety, social issues, transportation, emergency preparedness, and elder issues. In an effort to include opinions that are representative of the population at large, surveys were strategically distributed across the counties. The final analysis included 659 surveys from Halifax County and 511 surveys from Northampton County.

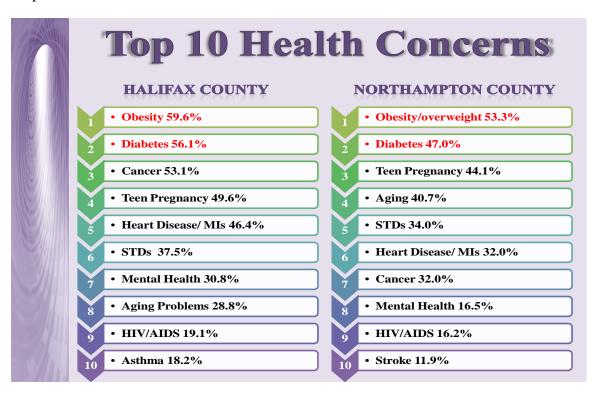
#### Secondary Data

Secondary data results were collected from local, county, state, and federal agencies from January to July 2012. Assessment and understanding of this information was essential in the needs assessment process. Careful review and exam of all the data along with community feedback led to the identification of key risk factors that contribute to the leading causes of death. These risk factors were among the health concerns and unhealthy behaviors identified by the community's primary data. The risk factors identified were: Overweight/Obesity, Diet, Physical Inactivity, High Blood Cholesterol/Hypertension, Smoking/Alcohol, and Stress. The Community Health Needs Assessment team prioritized these risk factors with Overweight/Obesity being the top priority. The Community Health Needs Assessment team reviewed the results and made the following determination: implementing strategies to target the overweight/obesity risk factor in our community would have an impact on diet, inactivity, and high blood cholesterol/hypertension risk factors.

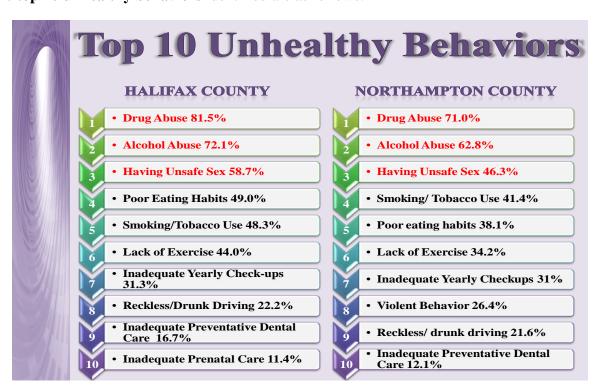
#### Overweight/Obesity

Overweight and obesity increases a person's risk of developing heart disease, respiratory disease, Type 2 diabetes, cancer, osteoarthritis, hypertension, stroke, liver and gallbladder disease. Obesity and being overweight increases health care costs and can contribute towards lost earnings. Halifax County has the third highest obesity rate in the state with Northampton County coming in twentieth at 34%. Adult obesity in Halifax County increased from 34% in 2010 to 39% in 2012 with childhood obesity increasing from 19.1% in 2007 to 21.7% in 2009. (2012 County Health Rankings/2009 NC-NPASS) Implementing strategies to reduce the rate of obesity would help prevent many diseases and decrease health care costs in our community.

The top 10 health concerns indentified are as follows:



The **top 10 unhealthy behaviors** identified are as follows:



# **Community Health Assessment Team**

Halifax Regional Board of Directors

The Community Health Initiative

Subgroup: Karen Daniels, CNO; Vanessa Wolgemuth, RN; Shannon Hicks, MPH (Volunteer)

# **Prioritization of Community Health Needs**

The Community Health Needs Assessment Team indentified modifiable risk factors as some of the major issues and health concerns. These risk factors include: obesity/overweight, diet, physical inactivity, hypertension/high cholesterol, stress, smoking and alcohol. These risk factors are associated with the top four leading causes of death for Halifax and Northampton Counties. During the spring of 2012, the Halifax Regional Board of Directors and the Community Health Care Initiative participated in rating the top six modifiable risk factors using a Prioritization Worksheet based on the following criteria: the magnitude or size of the problem, the seriousness of the consequences, and the feasibility of correcting the problem. See Prioritization Addendum.

The results of the Prioritization Worksheet revealed obesity as the top risk factor to be addressed in the implementation strategy of the Community Health Needs Assessment. The Community Health Needs Assessment Team recognizes that modifying lifestyles to improve the obesity rate will help make positive changes in other modifiable risk factors such as: diet, inactivity level, hypertension and cholesterol.

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Business Technical Manager-Kapstone

James Pierce, Secretary

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Natarajan Rajan, M.D., Chief of Staff

SAI Urology

William Mahone V, President & CEO

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Gerardo Maradiaga, M.D.

Past Chief of Staff, Halifax Medical Specialists

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## Senior Management

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Karen Daniels, Vice President of Nursing

Sherry Jensen, Vice President of Finance

# **Community Health Care Initiative**

#### Health Departments:

Sue Gay, Health Director Virginia McClary, Health Educator Megan Warren, Health Educator Northampton County Health Department

Barbara Harris-Ellis, Health Director Laura Ellis, Health Educator Brenda Hudson, Healthy Halifax Partners/Community Health Assessment Team Member Halifax County Health Department

#### Home Health:

Lori Dill, Home Health Director Home Health and Hospice of Halifax

Anneke Revelle, Home Health Director *Northampton County Home Health* 

#### Hospitals and Nursing Homes:

Tom Majure, Administrator

#### Our Community Hospital and Long Term Care

#### NC Cooperative Extension Services:

Caroline Brown, Program Director Ann Lawrence, Program Assistant Northampton County 4H Program

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#### Rural Health Group:

Dr. Jane McCaleb, Director of Clinical Services Lakisha Long-Washington, RHG Case Manager Kesha Rooks, Director of Case Management Brian Harris, CEO Glenda Branch, FNP BC School Based Health Rural Health Group of North Carolina

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Northampton County Healthy Carolinian Advisory Board

Magda Baligh, Chairperson, Director\*

Halifax County Healthy Carolinian Advisory Board

Halifax-Warren Smart Start\*

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Amy Joseph Darlene Wolgemuth

Audrey Hardy Karen Garris

Cathy Dickens Jackie Cieslinski

# **Halifax County Board of Health**

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Fanny P. Greene

## **Halifax Regional Overview**

Our hospital began with just ten beds located in a home on Hamilton Street and later moved to the corner of Roanoke Avenue and 7<sup>th</sup> street in 1912. For 100 years, Halifax Regional has carried a proud history of care and commitment to our community. In 1972, a 151-bed public hospital was constructed and opened in its current location with the capability of providing many new services. Since that time, Halifax Regional has reached five new milestones in expansion projects. The first project, completed in 1975, included the construction of an additional floor to bring the hospital's licensed bed capacity to 190 beds. The second, undertaking in 1979, included the expansion of the emergency department. An ambulatory surgery unit with added surgical space was completed in 1987. During that same year, a replacement laboratory and radiology department was constructed. The fourth project undertaken was the addition of a tower that increased the licensed bed capacity to 204 in 1992. The current project includes an exciting renovation, expansion, and modernization of our outpatient services. The focus of this project will be to improve outpatient surgery services which will benefit our community. The project includes a surgical suite expansion, a larger recovery area, and will provide a place for surgeons to meet in private with family members as well as enhanced privacy for patient registration. In addition, more space will be available for surgery preparation, equipment, and supplies. More than 50 new parking spaces will be added for patient convenience.

We are fully accredited by the Joint Commission on Accreditation of Healthcare Organizations. Our hospital is licensed for 204 beds including psychiatric and nursery beds. We offer an array of medical and surgical services, including 24-hour emergency care backed by the latest technology. We strive to create a compassionate environment where our approximately 883 employees can deliver the best care every hour of every day.

#### Our Mission (Mission Statement):

Halifax Regional places patients first by providing excellent and compassionate healthcare.

#### Our Vision (Vision Statement):

Halifax Regional will be a leading partner in a healthier community.

#### Halifax Regional 2010 Quick Facts/Utilization:

Employees – 883

Active medical staff - 60

Licensed beds – 204

Average Daily Census – 98

Admissions -7,441

Births -674

Annual Outpatient Visits – 39, 083

Annual Visits to the Emergency Care Center – 39, 792

Surgical Cases – 4,193

Total Net Revenues – \$104 million

Our financial situation is challenging. In 2011, we experienced a loss of \$265,838 primarily due to a \$2.7 million increase in bad debt, totaling \$6,587,539. As a not-for-profit organization, we provide care to patients regardless of their ability to pay. This means we are exempt from certain taxes and in return we provide benefits to the community. Major elements of our community benefits program include charity care, unreimbursed costs for treating Medicare and Medicaid patients, community health improvement services, and cash and in-kind contributions to community groups. For the year ending on September 30, 2011, our Community Benefits had cumulatively totaled \$7, 242,637 in all, in addition to charges for bad debt during the same year. For the fiscal year of 2011, the payer mix (percent of charges) is as follows:

#### **Inpatient:**

Medicare – 65%

Medicaid - 18%

Blue Cross - 7%

Commercial – 4%

Self-Pay – 4%

Other – 2% (Champus/ State and Local/ Workers' Compensation)

#### **Outpatient:**

Medicare - 42%

Medicaid - 21%

Blue Cross – 15%

Commercial – 9%

Self-Pay -11%

Other – 2% (Champus/ State and Local/ Workers' Compensation)

Despite financial pressures that continue to challenge community hospitals in rural areas like our own, we have moved forward with some marked achievements in 2011. During 2011, we:

- Began a \$6.5 million renovation and expansion of outpatient services
- Began the 2011 Healthcare Initiative to raise funds for digital mammography
- Became the 11<sup>th</sup> hospital in North Carolina to require employees to have flu shots
- Completed a \$750,000 investment in technology, expanding both hardware and software to ensure privacy for patients, rapid communications for employees, and to position the Medical Center for healthcare reform
- Installed Electronic Medical Records in the Emergency Care Center
- Named a "Red Apple" hospital for our commitment to developing and promoting a healthy food environment
- Acquired new equipment for the Sleep Center
- Recruited Rory O'Conner M.D., a board certified gastroenterologist, developed new GI services in a renovated space in the medical center and branded it the Digestive Health
   Center
- Recruited Chris Sorensen, M.D., a board certified family physician who is practicing in Roanoke and Wildwood Clinics
- Welcomed two board certified obstetrician/ gynecologists, Frank R. LaBarbera, M.D., at Women's Health Specialists, and Robert A. Brown, M.D., at Smith Church Obstetrics & Gynecology.

As a hospital we value our commitment to bring health to our community. Our hospital and our community must depend on each other and work together to strengthen one another. A healthy community begins with a healthy hospital, and here at Halifax Regional, this is what we strive to attain.

## Halifax and Northampton County Historical Overview

#### <u>Halifax</u>

Halifax County has a total land area of 724 square miles and was named for second Earl of Halifax and president of the British Board of Trade and Plantations, George Montagu-Dunk. It was created in 1758, having been a part of Edgecombe County. The county seat located in the town of Halifax was established in 1757 on the Roanoke River. The town of Halifax was the site of the Fourth Provincial Congress in the spring of 1776. It is the birthplace of the "Halifax Resolves"; a declaration calling for independence from Great Britain which led to the Declaration of Independence.

### **Northampton**

Northampton County has a total land area of 537 square miles and was named for James Crompton, Earl of Northampton, an English nobleman. It was created in 1741, having been a part of Bertie County. Northampton's county seat is located in the town of Jackson and was incorporated in 1823.

#### **Attractions**

Lake Gaston has over 350 miles of shoreline and provides many hours of water activities such as fishing and boating.

The Roanoke River which separates Halifax and Northampton County extends from Virginia to the Albemarle Sound. The town of Weldon located on the river in Halifax County is considered the Rockfish Capital of the World; attracting many fishermen from various parts of the country.

Other Attractions: Roanoke Rapids Lake, The Roanoke Canal Museum and Roanoke Trail, Historic Halifax, Medoc Mountain State Park, Sylvan Heights Water Fowl Park & Eco System.

## **Population Demographics**

The U.S. Census Bureau reports that since 2000, the total population of the state increased by 18.5% reaching 9,535,483 in 2010 (2012). According to the same source, the total population of Halifax and Northampton Counties were 54, 691 (75.5 persons per square mile) and 22, 099 (41.2 persons per square mile) respectively, while Nash County's population for the same year was reported to be 95, 840 (2010). The percent change of each county's population is compared to that of the state in Figure 1 below.

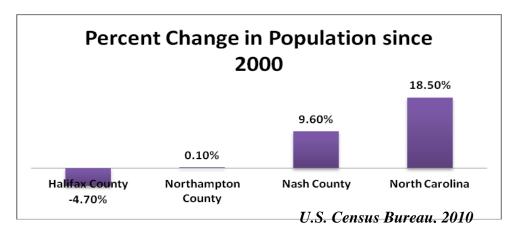


Figure 1 Percent Increase in Halifax, Northampton, Nash, and NC Population Since 2000

The largest groups by race/ethnicity in both Halifax and Northampton Counties are African Americans, followed by Caucasian Americans and American Indians (U.S. Census Bureau, 2010). This trend, however, is not evident in Nash County and North Carolina, where Caucasian Americans represent the largest race. The breakdown of the races in Halifax, Northampton, and Nash County can be found in the table below.

Table 1 County & State Racial Makeup, 2010

Race*	Halifax	Northampton	Nash	North Carolina
African American	53.2%	58.4%	37.2%	21.5%
White	40.0%	39.2%	55.9%	68.5%
Hispanic	2.1%	1.4%	6.3%	8.4%
American Indian/ Alaskan Native	3.8%	0.5%	0.7%	1.3%
Asian/ Pacific Islander	0.7%	0.2%	0.8%	2.2%
Other	1.1%	0.8%	3.8%	4.3%

Source: U.S Census Bureau, 2010

Women comprise more than half of the populations of each county, a trend that is consistent with that of the state of North Carolina. The male population figures follow closely behind in each county and the state. (U.S. Census Bureau, 2010) See Figures 2 and 3.

# 2010 Female Population Percentages

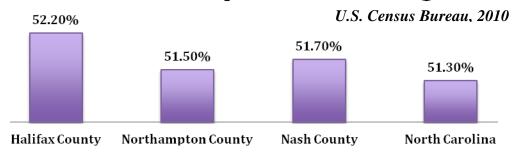


Figure 2 County & State Female Population, 2010

# 2010 Male Population Percentages

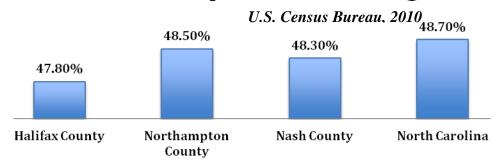


Figure 3 County & State Male Population, 2010

The largest population age groups in Halifax County and Northampton County are residents who fall into the baby boomers generation. Unlike Nash County and North Carolina, which have younger age groups as their largest population, Halifax and Northampton County have more people who are approaching the age of retirement. See Table 2 for details.

The median ages of Halifax, Northampton, and Nash Counties are 41.7, 45.5, and 39.9 respectively. Halifax and Northampton counties have a much higher median age when compared to Nash County, and North Carolina especially, where the median age is only 37.4. This trend can be seen in Table 2.

Table 2 County and State Age Distribution, 2010

2010 Age*	Halifax	Northampton	Nash	North Carolina
	54,691	22,099	95,840	9,535,483
0-19	14,092	5,126	25,429	2,558,680
	25.8%	23.2%	26.5%	26.8%
20-44	15,622	5,780	29,214	3,235,317
	28.7%	26.2%	30.5%	33.9%
45-64 Baby Boomers (48-66)	16,141 29.5%	6,857 31.1%	27,804 29.1%	2,507,407 26.2%
65 or older	8,836	4,336	13,393	1,234,079
	16.2%	19.5%	14.0%	12.8%
Median Age	41.7	45.5	39.9	37.4

Source: U.S. Census Bureau, 2010

#### **Education and Employment**

In Northampton County, there are 15, 549 over 25, and of that segment of the population, 35.8%, had a high school diploma or the equivalent, representing the largest grouping for educational attainment (U.S. Census Bureau, 2010). Of that same segment, 18.7% had some high school and no diploma while 14.9% had some college with no degree. 6.5% had an Associate's Degree, 7.5% have a Bachelor's Degree, and 4.5% have a Graduate or professional degree (U.S. Census Bureau, 2010).

In Halifax County, there are 37,436 individuals over the age of 25, of which 35.2% have high school diplomas or the equivalent, representing the largest grouping for educational attainment in the county. The second largest group for educational attainment at 19.0% represents individuals who have some college but no degree. 16.9% have some high school education but no diploma. Of those within the population who have degrees, the majority hold

either an Associate's or a Bachelor's degree at 7.7% and 7.4%, respectively. 4.0% possess a Graduate or professional degree. (U.S. Census Bureau, 2010)

The breakdown of education attainment in Nash County is comparable to that of Northampton and Halifax Counties. Individuals with at least a high school diploma or the equivalent represent the largest group for educational attainment, much like Northampton and Nash. The next largest grouping includes those with some college with no degree at 21.0%. When compared to Northampton and Halifax County, a larger percentage of the population over 25 in Nash County have a Bachelor's Degree (13.9%) or a Graduate or Professional degree (5.2%). (U.S. Census Bureau, 2010)

The percentages of Nash County as they pertain to educational levels are most similar to that of state than those of Halifax and Northampton Counties. However, the trend remains the same where high school graduates or the equivalent represent the majority, and graduate/professional program graduates represent the minority of the population over 25. The reports purport that there are 6,121,611 people over 25 in North Carolina. Of that population, 28.2% are high school graduates (or the equivalent), 20.9% have some college with no degree, 10.3% have some high school education with no diploma, 8.3% have an Associate's degree, 17.4% have a Bachelor's degree, and 8.7% have a Graduate or professional degree. (U.S. Census Bureau, 2010) Figures 4-6 compare educational level percentages to those of North Carolina.

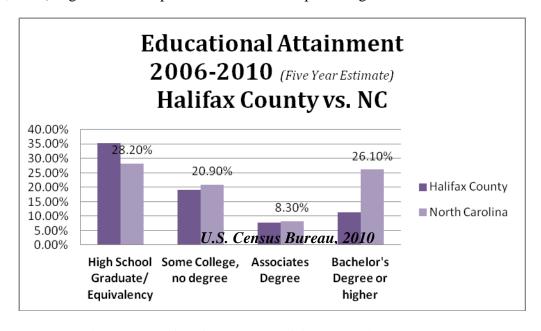


Figure 4 Halifax County vs. NC in Education 2006-2010

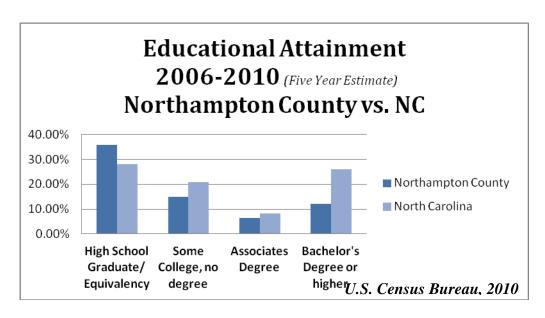


Figure 5 Northampton County vs. NC in Education, 2006-2010

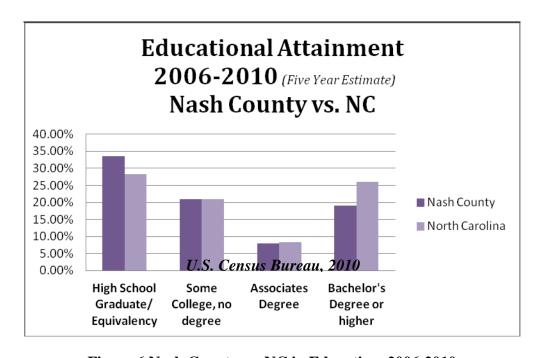


Figure 6 Nash County vs. NC in Education, 2006-2010

#### **Income and Economic Status**

The per capita income of Halifax County according to the U.S. Census Bureau between 2006 and 2010 was \$17, 223, while that of Northampton County was \$17,128. Both of these five year estimates were significantly lower than those of Nash County and North Carolina, which were \$23,909 and \$24,745, respectively. The median incomes of Halifax County and

Northampton County follow the same trends. They too are comparatively lower than that of both Nash County and the state of North Carolina as a whole. See Figure 7 below.

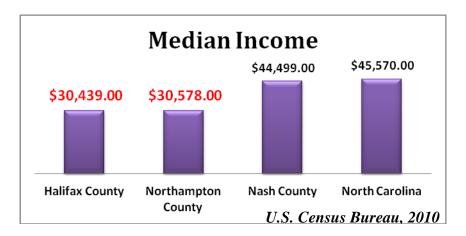


Figure 7 County & State Median Incomes, 2006-2010

The percentage of the total population in poverty in Halifax County far exceeds that of the state. At 23.8%, this figure representing poverty in Halifax County is almost 54% greater than that of the state of North Carolina, which has a poverty percentage of 15.5%. See Figure 8 below.

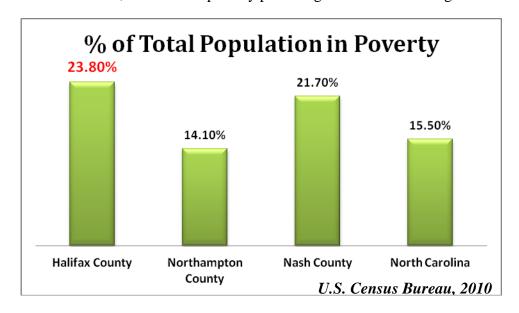


Figure 8 County & State % Poverty, 2006-2010

Also, according to the U.S. Census Bureau, the trend of increased poverty in Halifax County is similar across the board for all age groups. Not only is poverty higher among the total population in Halifax County when compared to the state, but it is also higher among adults over 18 and children under 18. However, the highest percentage of poverty among children under 18 is found in Northampton County at 37.6%, as highlighted in Figure 8.

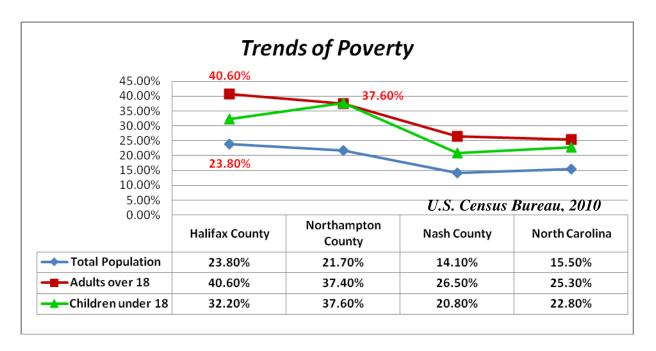


Figure 9 County & State Poverty Trends, 2010

#### Poverty and Race/Ethnicity

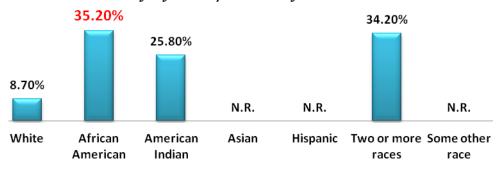
According to the U.S. Census Bureau, from 2008-2010, **35.2%** of the individuals in poverty were African American in Halifax County. In Northampton and Nash Counties, these figures were **35.7% and 21.9%** respectively. Of the races/ethnicities reported for poverty, African Americans were the largest groups in poverty throughout Halifax, Northampton, and Nash Counties, and were the fourth largest in the state of North Carolina at **26.1%**. In the state of North Carolina, the largest groups in poverty were those considered some other race at **36.7%**, Hispanic at **32.2%**, and American Indians at **29.1%**.

In Halifax County, African Americans represent 53.2% of the county population, and are the largest group in poverty. However, those who considered themselves to be of two or more races combined represented **only 1.2%** of the entire population of Halifax County, yet they comprised the second largest group in poverty **at 34.2%**. Likewise, American Indians represented **only 3.8%** of the county population, yet they make up **25.8%** of all individuals who are impoverished. Similar trends were found in North Carolina, where Hispanics, American Indians, and those who considered themselves to be of some other race were the smallest groups represented in the population of the state as a whole, yet were the largest groups in poverty. See figures 10-13.

It must be taken into account that for Halifax, Northampton, and Nash Counties, a number of sample cases were too small to report for some races/ethnicities, so the available data cannot provide a complete picture of the impoverished populations in these counties. On the contrary, numbers were reported for all races/ethnicities in the State of North Carolina.

# **Halifax County**

Poverty by Race/Ethnicity 2008-2010



U.S. Census Bureau, 2010

Figure 10 Halifax County Poverty Breakdown by Race/Ethnicity

# **Northampton County**

Poverty by Race/Ethnicity 2008-2010

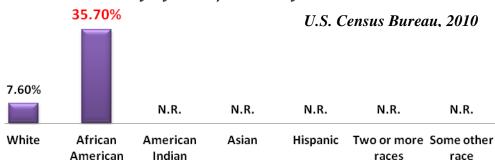


Figure 11 Northampton County Poverty Breakdown by Race/Ethnicity

# Nash County

Poverty by Race/Ethnicity 2008-2010

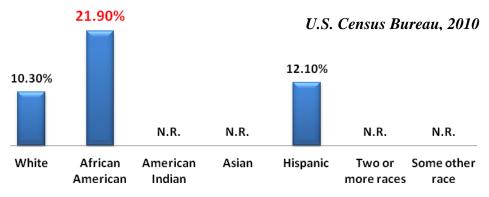


Figure 12 Nash County Poverty Breakdown by Race/Ethnicity

# North Carolina

# Poverty by Race/Ethnicity 2008-2010

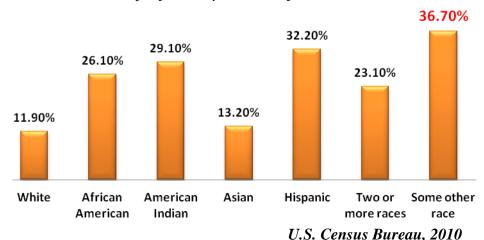


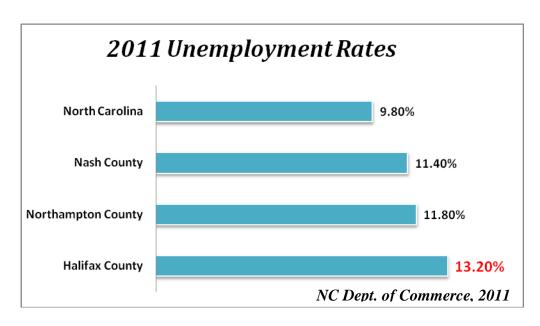
Figure 13 North Carolina Poverty Breakdown by Race/Ethnicity

#### **Unemployment Rates**

Of the 22,962 individuals included in the labor force of Halifax County, **13.2%** were considered unemployed at the end of 2011 according to the NC Department of Commerce (2011). This represents a **0.80% increase** from that of 2010, which was 12.4% (NC Dept of Commerce, 2011). There was an increase in unemployment rates in Northampton County, Nash County, and North Carolina as a whole, however, the greatest increase, in comparison was found in Halifax County.

In Northampton County, there are 8,259 people over 16 in the labor force, of which **11.8%** were reported unemployed as of December 2011 (NC Dept. of Commerce, 2011). This represents an **increase of 0.2%** in the unemployment rate since 2010. In Nash County, there are 46,561 individuals in the labor force, of which **11.4%** are unemployed, a **0.2% increase** when compared to the 2010 unemployment rate of 11.2%.

In North Carolina, the unemployment rate is significantly lower than that of Halifax, Northampton, and Nash Counties. In 2011, there were an estimated 4,478,113 persons in the work force, of which **9.8%** were unemployed in December of 2011, representing a **0.1%** increase from the rate of 9.7% in 2010. (NC Dept. of Commerce, 2011). See Figures 14 and 15.



**Figure 14 County and State Unemployment Rates** 

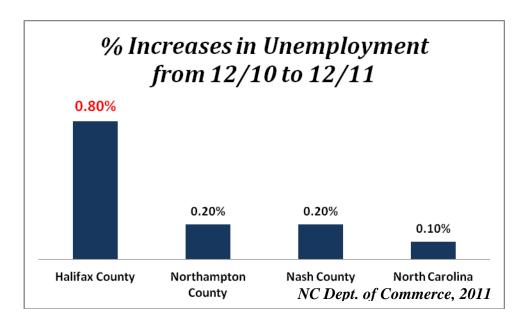


Figure 15 County & State % Increases in Unemployment

#### **Access to Health Care**

#### **Health Professional Shortage Areas**

According to the Health Resources and Services Administration (HRSA), the term *Health Professional Shortage Area* (HPSA) is designated for areas that that have:

"...shortages of primary medical care, dental or mental health providers and may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center, federally qualified health center or other public facility) (2012)."

In Halifax County, there is a single HPSA for primary medical care, and this is among a population group known as the *medically indigent*, consisting of **10**, **556 people**. According to the HRSA, the term *medically indigent* refers to everyone who falls under 200% of poverty level and who are not eligible for Medicaid or North Carolina Health Choice (2012). Among them, there **is only a single physician available for every 9**, **596 individuals** according to the HRSA (2012). Each HPSA is given a score, determined on a scale from 0-25 with 25 indicating the greatest need. For the single primary medical care HPSA of Halifax County, the score is **19**, indicating there is work to be done for this population. Refer to Table 3.

In Northampton County, there is also a single HPSA for primary medical care; however, unlike Halifax County this designation **applies to the entire county of 20, 824 people** rather than a single population group. Within the county, there is **one physician available for every 5, 206 individuals** (HRSA, 2012). A score of **19** was also given to Northampton County. See Table 3.

Another area in which HPSA designations are created is dental care. Under this category, there is one HPSA for both Halifax and Northampton Counties. For both counties, the designations fell among the *low income* population groups. *Low income* indicates that an individual falls under 200% of poverty level. In Halifax County and Northampton County, the *low income* population for whom this designation applies is **26,567 and 9,317** respectively. Halifax County possesses a HPSA score of **16** and **there is a single dental professional for every 9, 840 people**. In Northampton County, **there is a single dental professional for every 18, 634**, thus the need is higher and for this reason they have a higher HPSA score of **19**. See Table 4.

Mental health care is a third area in which HPSA designations are created. In this area, only Northampton County was reported to have a HPSA designation. This designation was assigned to a geographical area, the Roanoke-Chowan region of the county. In this region, there are **72,149 individuals**. This entire population has access to only one mental health care provider. It's HPSA score is **18**. The HPSA information for Halifax and Northampton Counties have been placed into Tables 3, 4, and 5 for comparison purposes.

Table 3 Primary Medical Care HPSA Designations for Halifax and Northampton Counties, 2012

HPSA Name	ID	Туре	FTE	# Short	Score
083 - Halifax County					_
Medically Indigent-Halifax County	1379993763	Population Group	1	2	19
Halifax		Single County			
Medical Clinic of Enfield	13799937B5	Rural Health Clinic			0
131 - Northampton County					
Northampton	137131	Single County	4	3	19
Rural Health Group, Inc.	13799937A6	Comprehensive Healtl Center	h		22

**Source:** Health Resources and Services Administration (HRSA), http://hpsafind.hrsa.gov/

Table 4 Dental Care HPSA Designations for Halifax and Northampton Counties, 2012

HPSA Name	ID	Туре	FTES	# hort	Score
083 - Halifax County					
Low Income - Halifax	6379993796	Population Group	3	4	16
Halifax		Single County			
131 - Northampton County					
Low Income - Northampton	6379993795	Population Group	1	2	19
Northampton		Single County			
Rural Health Group, Inc.	63799937A2	Comprehensive Health Center	1		22

**Source:** Health Resources and Services Administration (HRSA), http://hpsafind.hrsa.gov/

Table 5 Mental Health Care HPSA Designations for Halifax and Northampton Counties, 2012

HPSA Name	ID	Туре	FTE	# Short	Score
083 - Halifax County					
Rural Health Group, Inc.	737999374	2 Comprehensive Heal Center	th		23
131 - Northampton County					
Roanoke-Chowan	737999371	3 Geographical Area	1	1	18
Northampton		Single County			

**Source:** Health Resources and Services Administration (HRSA), http://hpsafind.hrsa.gov/

#### **Primary Care Physicians**

Figure 16 provides the breakdown of the number of primary care physicians available for every 10,000 people in Halifax, Northampton, Nash, and North Carolina in 2010. This data is based on the latest information accessible through the NC Health Professions Data System (www.shepscenter.unc.edu). As shown in the graphical representation, the number of primary care physicians per 10,000 persons available statewide is almost three times that of the number available in Northampton County, and it is well above the number for Halifax County also.

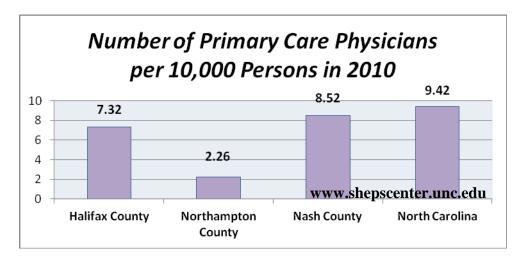


Figure 16 County & State Number of Primary Care Physicians per 10,000 persons

#### **Hospitals**

There are four hospitals available to community members throughout Halifax, Northampton, and Nash Counties. These hospitals include Halifax Regional, Our Community, Roanoke-Chowan, and Nash General. The number of beds available at each hospital is described below.

<u>Halifax Regional Hospital</u> of Roanoke Rapids serves residents throughout Halifax and Northampton Counties. Some patients travel from Warren County and Southern Virginia. The hospital operates as a **204-bed facility**, including a number of psychiatric and nursery beds.

Our Community Hospital/Bryan Long Term Care, located in Scotland Neck, NC is a private hospital consisting of **100 beds**. This hospital is the only medical center within a 20 mile radius available to residents of the southeastern portion of Halifax County.

<u>The Roanoke-Chowan Hospital</u> of Ahoskie, NC is a not-for-profit hospital containing **114 beds**. It is accessible to approximately 39,000 residents in an area of four counties.

<u>The Nash General Hospital</u> of Rocky Mount operates as a **280-bed acute care facility**, serving Residents of Nash, Edgecombe, Halifax, Wilson, and Johnston counties.

#### Healthcare Insurance

(Statehealthfacts.org)

For 2009-2010, it was reported that **1,604,100 people** or around **20%** of all North Carolina residents under 65, had no health care insurance coverage. Of those uninsured individuals, approximately **266,100 or 17%** of them were children who were yet to reach the age of 18. The lack of health care insurance was most prevalent among minorities in the state. During 2009-2010, **22% of all African Americans** and **49% of all Hispanics** in North Carolina were uninsured, compared to 15% of all Caucasians in the state.

The County Health Rankings & Roadmaps program has tracked the number of uninsured individuals throughout all counties in North Carolina (www.countyhealthrankings.org, 2012). The figures below describe the data for 2005, 2009, and 2011 for the state and Halifax, Northampton, and Nash Counties.

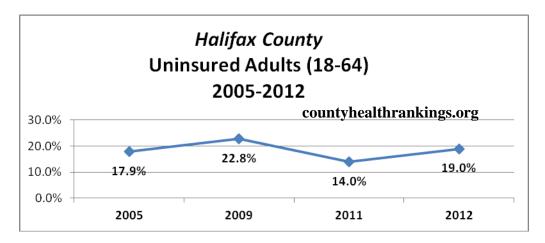


Figure 17 Uninsured Adults (18-64) in Halifax County

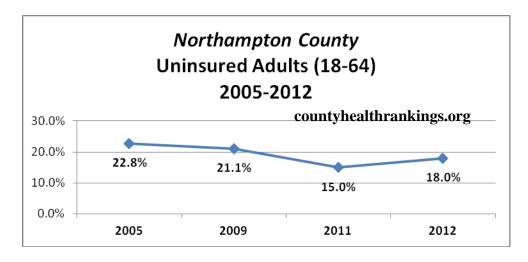


Figure 18 Uninsured Adults (18-64) in Northampton County

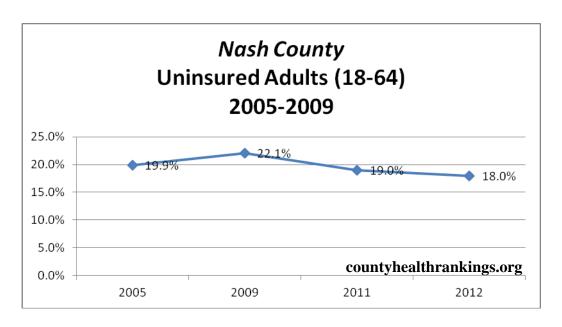


Figure 19 Uninsured Adults (18-64) in Nash County

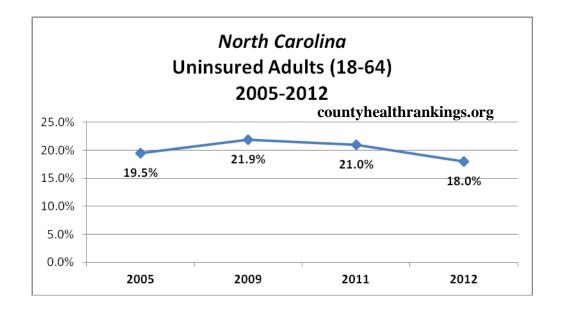


Figure 20 Uninsured Adults (18-64) in North Carolina

The chart below provides a comparison between the percentage of uninsured young people in 2008 and 2009, according to the latest data available at the county level from the US Census Bureau Small Area Health Insurance Estimates (SAHIE). Northampton County experienced a slight increase in the number of uninsured young people under 19, whereas Halifax and Nash Counties both experienced decreases.

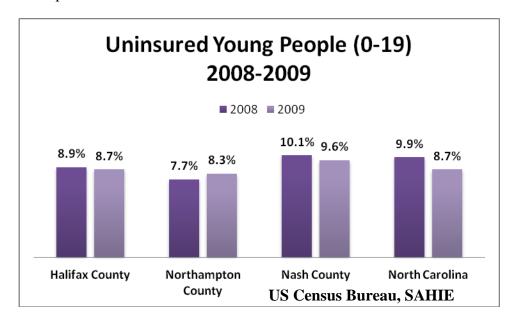


Figure 21 County & State Uninsured Young People (>19)

#### Medicare & Medicaid

Medicaid and Medicare are important to accessing health care for many residents of Halifax and Northampton Counties. Both counties experienced an increase in the amount of residents who use Medicare and Medicaid. However, when compared to Nash County and the state, Halifax and Northampton County experienced relatively slight increases in enrollees for the Medicare Program from 2009 to 2010. See Tables and Figures below for details.

**Table 6 County & State Medicare Beneficiaries** 

	Halifax County	Northampton County	Nash County	North Carolina
Medicare 2009*	12,703	4,938	18,430	1,433,946
Medicare 2010*	12,812	4,952	19,092	1,476,516

**Source: cms.gov (State Enrollment All)** 

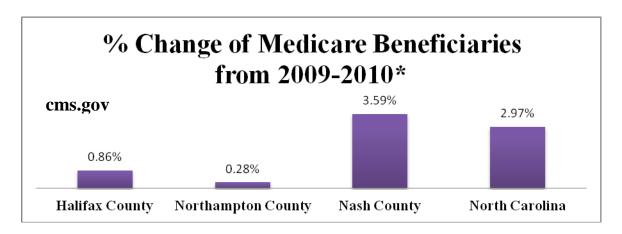


Figure 22 % Change of Medicare Beneficiaries for County & State

**Table 7 County & State Medicaid Beneficiaries** 

	Halifax County	Northampton County	Nash County	North Carolina
Medicaid 2009*	13,028	5,132	15,595	1,267,031
Medicaid 2011*	13,229	5,381	16,491	1,344,583

Source: cms.gov (State Enrollment All)

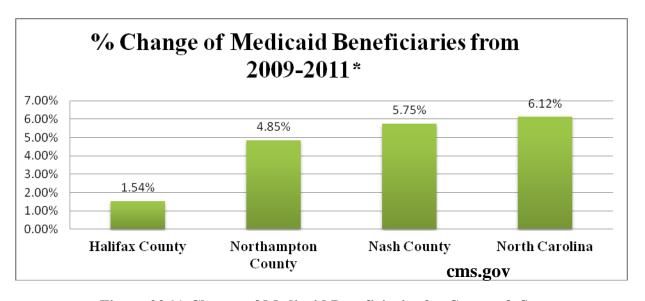


Figure 23 % Change of Medicaid Beneficiaries for County & State

# **Population Health**

#### **Leading Causes of Death**

In 2010, the three leading causes of death across North Carolina included cancer, diseases of the heart, and chronic lower respiratory disease. See Figure 24 below. Of the three leading causes of death in North Carolina, cancer was the number one cause at 22.9%, followed by diseases of the heart (21.7%) and chronic lower respiratory disease (5.7%).

In 2010, diseases of the heart caused the most deaths in Halifax County (24.6%) with cancer being the number one cause of death for Northampton County (26.5%). At 25% diseases of the heart was the number one cause of death for Halifax and Northampton Counties combined. Like Halifax and Northampton Counties combined, the leading cause of death in Nash County during that time was diseases of the heart at 24.3%. See the figures below.

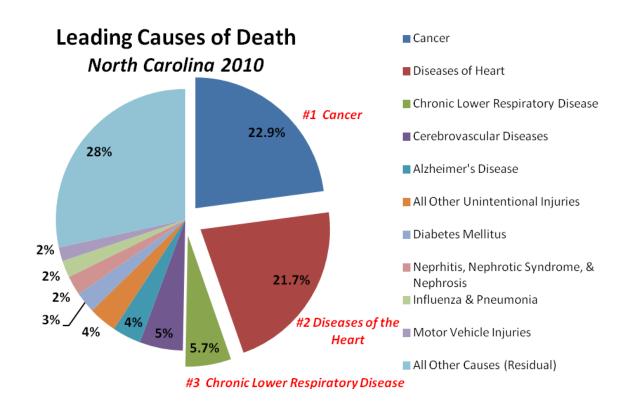


Figure 24 Leading Causes of Death in North Carolina

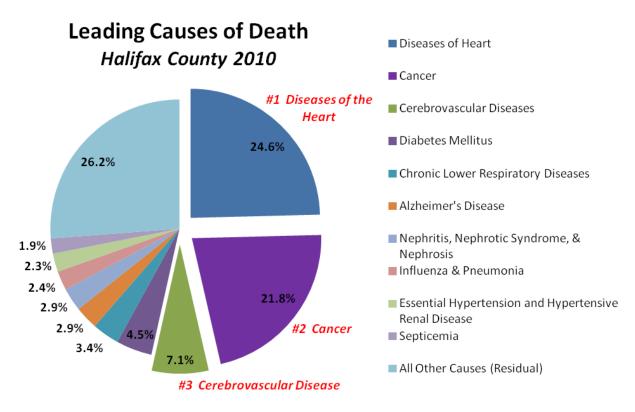


Figure 25 Leading Causes of Death in Halifax County

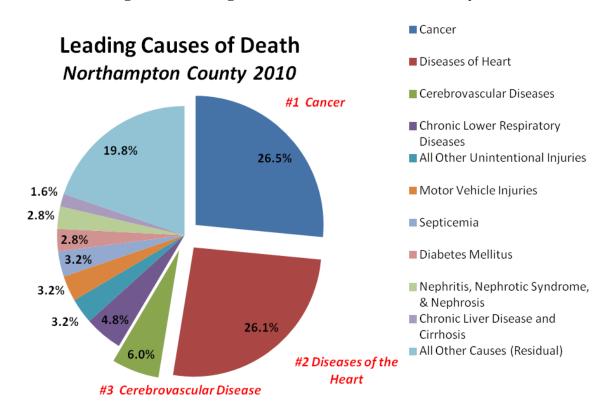


Figure 26 Leading Causes of Death in Northampton County

#### Halifax/Northampton County

Leading Causes of Death 2006-2010

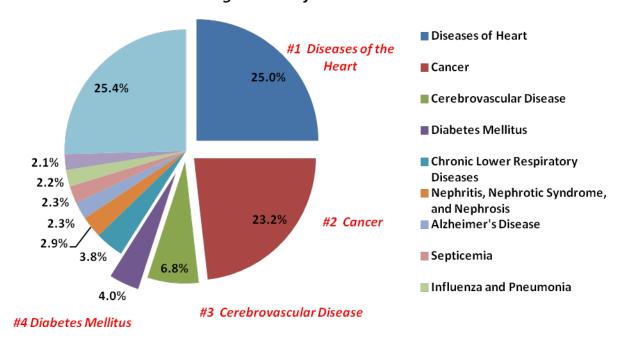


Figure 27 Leading Causes of Death in Halifax/ Northampton County Combined

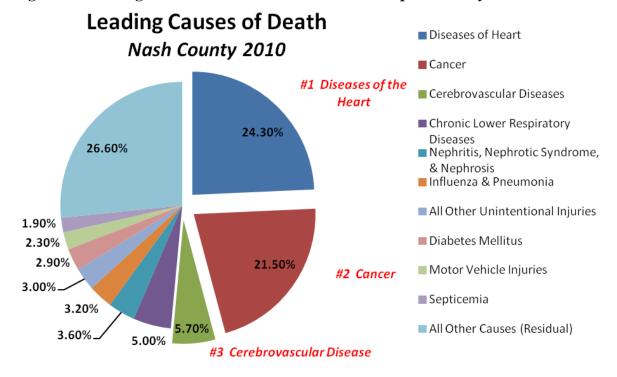


Figure 28 Leading Causes of Death in Nash County

The tables below provide a more detailed description of the leading causes of death across North Carolina in addition to Halifax, Northampton, and Nash Counties.

**Table 8 Leading Causes of Death in North Carolina** 

Rank	North Carolina	Deaths 2010	% of Total
1	Cancer	18013	22.9%
2	Diseases of the Heart	17090	21.7%
3	<b>Chronic Lower Respiratory Disease</b>	4490	5.7%
4	Cerebrovascular Disease	4281	5.4%
5	Alzheimer's Disease	2813	3.6%
6	All Other Intentional Injuries	2762	3.5%
7	Diabetes Mellitus	2036	2.6%
8	Nephritis, Nephrotic Syndrome, & Nephrosis	1886	2.4%
9	Influenza & Pneumonia	1684	2.1%
10	Motor Vehicle Injuries	1368	1.7%
	All Other Causes (Residual)	22181	28.4%
	Total (All Causes)	78604	100.00%

Source Data: North Carolina State Center for Health Statistics: http://www.schs.state.nc.us

**Table 9 Leading Causes of Death in Halifax County** 

Rank	Halifax County	Deaths 2010	% of Total
1	Diseases of the Heart	152	24.6%
2	Cancer	135	21.8%
3	Cerebrovascular Disease	44	7.1%
4	Diabetes Mellitus	28	4.5%
5	<b>Chronic Lower Respiratory Disease</b>	21	3.4%
6	Alzheimer's Disease	18	2.9%
7	Nephritis, Nephrotic Syndrome & Nephrosis	18	2.9%
8	Influenza & Pneumonia	15	2.4%
9	Essential (Primary) Hypertension and Hypertensive	14	2.3%
	Renal Disease		
10	Septicemia	12	1.9%
	All Other Causes	161	26.2%
	Total (All Causes)	618	100.00%

**Table 10 Leading Causes of Death in Northampton County** 

Rank	Northampton County	Deaths 2010	% of Total
1	Cancer	66	26.5%
2	Diseases of Heart	65	26.1%
3	Cerebrovascular Diseases	15	6%
4	<b>Chronic Lower Respiratory Diseases</b>	12	4.8%
5	All Other Unintentional Injuries	8	3.2%
6	Motor Vehicle Injuries	8	3.2%
7	Septicemia	8	3.2%
8	Diabetes Mellitus	7	2.8%
9	Nephritis, Nephritic Syndrome, & Nephrosis	7	2.8%
10	Chronic Liver Disease & Cirrhosis	4	1.6%
	All Other Causes	49	19.8%
	Total (All Causes)		100.00%

Table 11 Leading Causes of Death in Halifax/Northampton County Combined

Rank	Halifax/Northampton County	Deaths 2010	% of Total
1	Diseases of the Heart	217	25.0%
2	Cancer	201	23.2%
3	Cerebrovascular Disease	59	6.8%
4	Diabetes Mellitus	35	4.0%
5	Chronic Lower Respiratory	33	3.8%
6	Nephritis, Nephrotic Syndrome, & Nephrosis	25	2.9%
7	Alzheimer's Disease	20	2.3%
8	Septicemia	20	2.3%
9	Influenza & Pneumonia	19	2.2%
10	All Other Unintentional Injuries	18	2.1%
	All Other Causes (Residual)	220	25.4%
	Total (All Causes)	867	100.0

**Table 12 Leading Causes of Death in Nash County** 

Rank	Nash County	Deaths 2010	% of Total
1	Diseases of the Heart	230	24.3%
2	Cancer	203	21.5%
3	Cerebrovascular Diseases	54	5.7%
4	Chronic Lower Respiratory Diseases	47	5.0%
5	Nephritis, Nephrotic Syndrome, & Nephrosis	34	3.6%
6	Influenza & Pneumonia	30	3.2%
7	All Other Unintentional Injuries	28	3.0%
8	Diabetes Mellitus	27	2.9%
9	Motor Vehicle Injuries	22	2.3%
10	Septicemia	18	1.9%
	All Other Causes	253	26.6%
	Total (All Causes)	946	100.00%

#### **Hospitalization Data**:

According to the North Carolina State Center for Health Statistics, during 2010 there were **973,380** inpatient hospitalizations among North Carolina residents, including:

- 9,193 cases among Halifax County residents
- 3, 330 cases among Northampton County residents and
- 12, 206 cases among Nash County residents

The 10 leading causes of inpatient hospitalizations for North Carolina and for Halifax, Northampton, and Nash counties are found in the tables below:

Table 13 Leading Causes of Inpatient Hospitalizations in North Carolina

	North Carolina	Cases
1	Cardiovascular & Circulatory Diseases	162327
2	Pregnancy & Childbirth	125271
3	Digestive System Diseases	95068
4	Respiratory Diseases	93891
5	Other Diagnoses (Inc. Mental Disorders)	84657
6	Injuries & Poisoning	78637
7	Musculoskeletal System Diseases	58753
8	Symptoms, Signs, & III-Defined Conditions	48299
9	Genitourinary Diseases	45978
10	Infectious & Parasitic Diseases	41705

**Table 14 Leading Causes of Inpatient Hospitalizations in Halifax County** 

	Halifax County	Cases
1	Cardiovascular & Circulatory Diseases	2035
2	Other Diagnoses (Inc. Mental Disorders)	1041
3	Respiratory Diseases	925
4	Digestive System Diseases	912
5	Pregnancy & Childbirth	695
6	Injuries & Poisoning	581
7	Symptoms, Signs, & Ill-Defined Conditions	506
8	Endocrine, Metabolic, & Nutrition Diseases	450
9	Musculoskeletal System Diseases	448
10	Genitourinary Diseases	404

**Table 15 Leading Causes of Inpatient Hospitalizations in Northampton County** 

	Northampton County	Cases
1	Cardiovascular & Circulatory Diseases	705
2	Respiratory Diseases	362
3	Digestive System Diseases	312
4	Other Diagnoses (Inc. Mental Disorders)	283
5	Pregnancy & Childbirth	229
6	Injuries & Poisoning	210
7	Musculoskeletal System Diseases	184
8	Genitourinary Diseases	183
9	Endocrine, Metabolic & Nutrition Diseases	183
10	Symptoms, Signs & Ill-Defined Conditions	174

Table 16 Leading Causes of Inpatient Hospitalizations in Nash County

	Nash County	Cases
1	Cardiovascular & Circulatory Diseases	2355
2	Pregnancy & Childbirth	1296
3	Other Diagnoses (Inc. Mental Disorders)	1204
4	Digestive System Diseases	1134
5	Respiratory Diseases	1129
6	Injuries & Poisoning	866
7	Musculoskeletal System Diseases	660
8	Symptoms, Signs, & III-Defined Conditions	619
9	Genitourinary Diseases	592
10	Endocrine, Metabolic, & Nutrit. Diseases/ Infectious & Parasitic Diseases	547

The discharge rate per population of 1,000 for North Carolina in 2010 was **102.1**. The discharge rates of Halifax, Northampton, and Nash Counties were all significantly higher than that of the state. Of all three counties, Halifax had the greatest discharge rate at **168.1**, a rate that is almost 65% greater than that of the state. See the graphs below for discharge rates and comparisons.

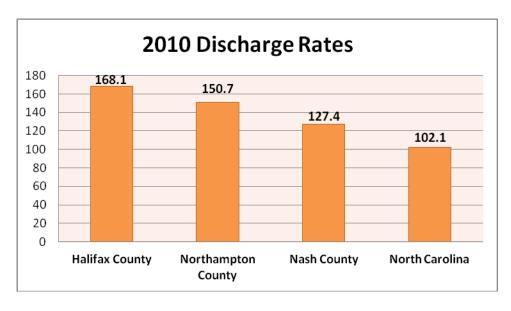


Figure 29 County and State Discharge Rates

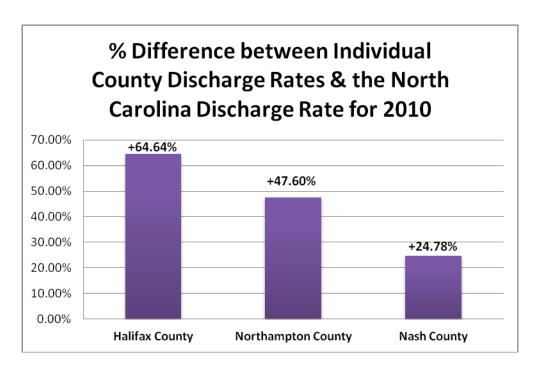


Figure 30 County vs. State Hospital Discharge Rates

Note: Since some residents may seek care in facilities in nearby Virginia, hospitalizations may be underestimated.

#### Rates of Preventable Hospitalization

According to the Agency for Healthcare Research, avoidable hospitalizations serve as an indicator of adequate access to primary care. The prevention quality indicators for Halifax, Northampton, and Nash Counties in 2009 have been provided below. In the tables below, the county numerator represents the number of admissions in each county for the particular disease listed. In Halifax County, the largest number of admissions was for **congestive heart failure** with an admission rate of **91**, followed by **chronic obstructive pulmonary disease** at **53**. The number of admissions per 100,000 for the same diseases, respectively, was **997.2** and **580.8**. In Northampton County, the only recorded rates were for congestive heart failure for which there were **36** admissions (**1060.1 admissions per 100,000**) and chronic obstructive pulmonary disease for which there were **20** admissions (**588.9 admissions per 100,000**). Like in Halifax County, congestive heart failure at **76** admissions (**890.2 admissions per 100,000**) and chronic obstructive pulmonary disease at **42** admissions (**492.0 admissions per 100,000**) held the largest admissions rates in Nash County.

This same trend was demonstrated across North Carolina. Congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD) were the leading causes of avoidable hospitalizations in the state with rates of **577.2 per 100,000** and **429.7 per 100,000**, respectively. These rates are significantly lower than the rates found in Halifax, Nash, and Northampton County. See the tables on page 45.

**Table 17 Preventative Quality Indicators for Halifax County (Calendar Year 2009)** 

Agency for Healthcare Research (AHRQ) Quality Indicators 12			CY2009		
Prevention Quality Indicators	County <sup>13</sup> Numerator	Average of all Counties (the mean)	County Rate per 100,000	State Rate per 100,000	Compared to Std Dev <sup>14</sup>
Diabetes short-term complication admission rate	26	212.4	284.9	223.7	•
Diabetes long-term complication admission rate	18	272.5	197.2	297.5	•
Chronic obstructive pulmonary disease admission rate	53	460.0	580.8	429.7	•
Congestive heart failure admission rate	91	557.0	997.2	577.2	1
Adult asthma admission rate	38	261.0	416.4	286.0	1
Pediatric asthma admission rate		186.4		192.9	
Below 1 Std Dev. ↑ above 1 Std De	ev.	•	within +/-1S	td Dev.	

**Source:** The Department of Health and Human Services (DHHS):

http://www.ncdhhs.gov/dma/countyreports/ and http://www.ahrq.gov

**Table 18 Preventative Quality Indicators for Northampton County (Calendar Year 2009)** 

Agency for Healthcare Research (AHRQ) Quality Indicators 12 CY2009					
Prevention Quality Indicators	County <sup>13</sup> Numerator	Average of all Counties (the mean)	County Rate per 100,000	State Rate per 100,000	Compared to Std
Diabetes short-term complication admission rate		212.4		223.7	
Diabetes long-term complication admission rate		272.5		297.5	
Chronic obstructive pulmonary disease admission rate	20	460.0	588.9	429.7	•
Congestive heart failure admission rate	36	557.0	1060.1	577.2	1
Adult asthma admission rate		261.0		286.0	
Pediatric asthma admission rate		186.4		192.9	
Below 1 Std Dev. above 1 Std De	ev.	•	within + / - 1 S	td Dev.	

**Source:** The Department of Health and Human Services (DHHS):

http://www.ncdhhs.gov/dma/countyreports/ and http://www.ahrq.gov

**Table 19 Preventative Quality Indicators for Nash County (Calendar Year 2009)** 

ency for Healthcare Research (AHRQ) Quality Indicators <sup>12</sup> CY2009					
Prevention Quality Indicators	County <sup>13</sup> Numerator	Average of all Counties (the mean)	County Rate per 100,000	State Rate per 100,000	Compared to Std Dev <sup>14</sup>
Diabetes short-term complication admission rate	16	212.4	187.4	223.7	•
Diabetes long-term complication admission rate	18	272.5	210.8	297.5	•
Chronic obstructive pulmonary disease admission rate	42	460.0	492.0	429.7	•
Congestive heart failure admission rate	76	557.0	890.2	577.2	1
Adult asthma admission rate	29	261.0	339.7	286.0	•
Pediatric asthma admission rate	30	186.4	417.1	192.9	1
Below 1 Std Dev. above 1 Std Dev	v.	•	within +/-19	td Dev.	

**Source:** The Department of Health and Human Services (DHHS):

http://www.ncdhhs.gov/dma/countyreports/ and http://www.ahrq.gov

**Note:** *County Numerator* indicates the number of admissions in the county.

#### Risk Factor Behaviors and Conditions related to the Top 10 Causes of Death

According to the North Carolina State Center for Health Statistics, the top three leading causes of death across the board in North Carolina, Halifax, Northampton, and Nash Counties include **diseases of the heart, cancer, and ischemic heart disease**. See Figures 31-35. Each of these diseases has been related to lifestyle and has modifiable risk factors, of which **obesity**, **physical inactivity, and adult smoking** are included. The following graphs highlight these risk factors throughout Halifax and Northampton County.

Both adult and childhood obesity are prevalent in Halifax and Northampton Counties. While adult obesity in Northampton County has decreased over the span of three years from 2010 to 2012, it has significantly increased in Halifax County. See Figure 31 below. Childhood obesity in both counties has also followed a similar trend. According to the North Carolina Nutrition and Physical Activity Surveillance System (NC-NPASS), from 2007 to 2009, childhood obesity among 2-18 year olds increased 2.6% in Halifax County, but it decreased 2.6% in Northampton County. Notice also in Figure 33, that the percentage of restaurants that are fast food in Halifax County far exceeds those that are in Northampton County.

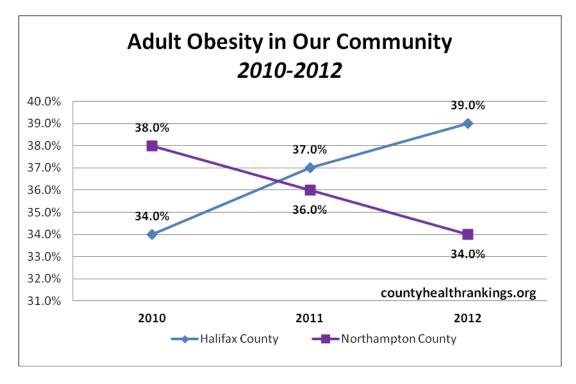


Figure 31 Adult Obesity in Halifax and Northampton County

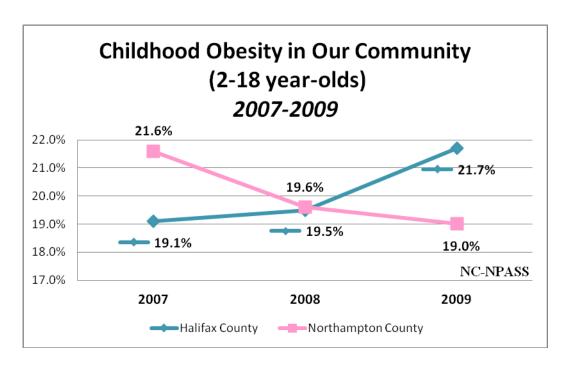


Figure 32 Childhood Obesity in Halifax and Northampton County

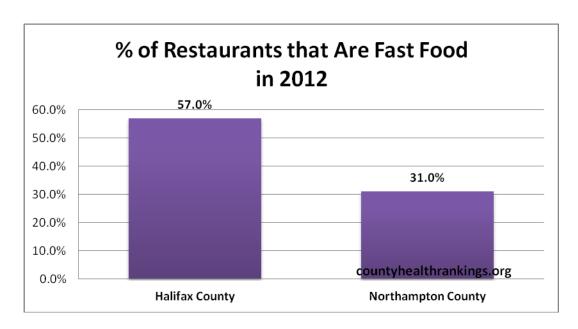


Figure 33 % Fast Food Restaurants

Physical inactivity is another modifiable risk factor associated with the top three leading causes of death in North Carolina and Halifax and Northampton Counties. The reported percentages of Halifax County and Northampton County residents that are physically inactive exceed the percentages of residents in not only North Carolina, but in the country as well. See Figure 34.

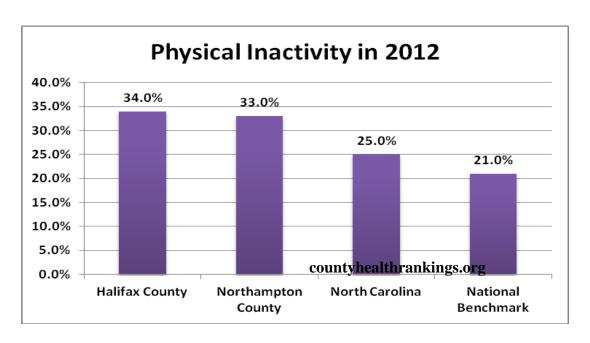


Figure 34 County & State Physical Inactivity

Adult smoking, another modifiable risk factor, is also found throughout Halifax and Northampton County. In both counties, from 2010 to 2012, the percentage of residents using tobacco increased. The graph below describes these changes.

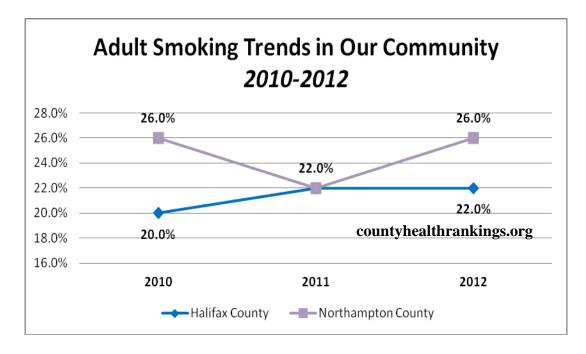


Figure 35 Adult Smoking in Halifax & Northampton County

Each of these risk factors, obesity, physical inactivity, and smoking has a profound impact on the development of diseases of the heart, ischemic heart disease, and cancers.

Screening is also an important element of disease prevention. Diabetes screening and mammography utilization percentages have been reported for Halifax, Northampton, and Nash Counties and have been compared to those for North Carolina.

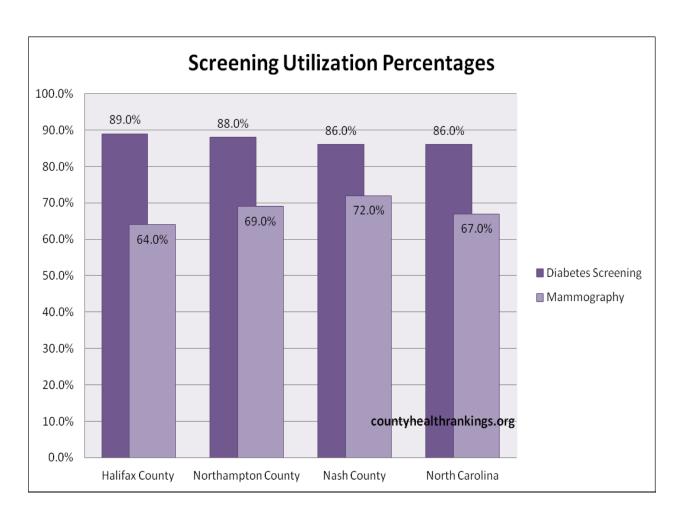


Figure 36 County and State Screening Utilization Percentages

#### **Child Health**

According to the NC State Center for Health Statistics, from 2009 to 2010, the infant mortality rates for Halifax County, Nash County, and the state as a whole declined. The rates for Northampton County, however, skyrocketed more than threefold from 2009 to 2010. See Figure 37 below. The low birth weight percentages for Northampton in 2010 were also elevated when compared to those of the state and Halifax and Northampton Counties. See Figure 38.

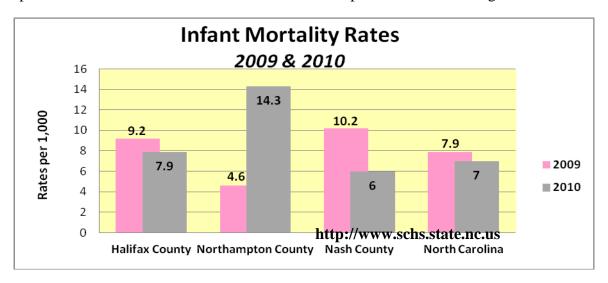


Figure 37 County and State Infant Mortality Rates

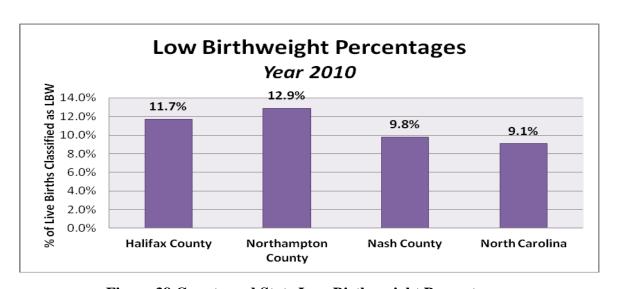


Figure 38 County and State Low Birth-weight Percentages

From 2007-2009, the percentages of pregnant mothers in Halifax and Northampton Counties who received late or no prenatal care were lower than those of North Carolina. At 23.2%, Nash County on the contrary exceeded the state percentage.

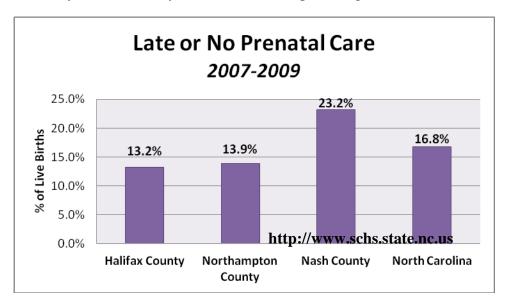


Figure 39 County and State Late or No Prenatal Care

Teenage pregnancy rates among young girls between the ages of 15 and 19 decreased from 2009 to 2010 in Halifax, Northampton, and Nash Counties. A similar trend was also recorded for the state of North Carolina. See Figure below.

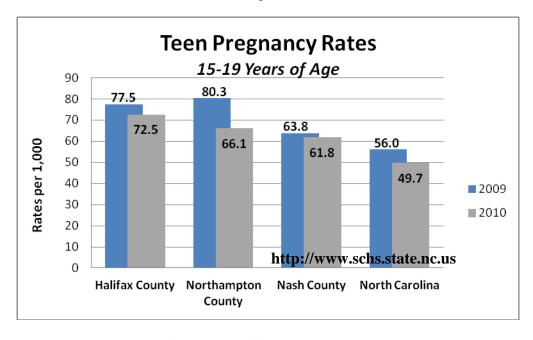


Figure 40 County and State Teen Pregnancy Rates

#### **Infectious Diseases**

The number of sexually transmitted diseases (STDs) found in Halifax County is significantly higher than its neighboring counties when considering its size. Rates of STDs such as Gonorrhea and Chlamydia in Halifax County are comparable to the rates of Nash County, though it is a much smaller county. See the tables and charts below for details.

**Table 20 County and State Chlamydia Cases** 

Chlamydia Cases for 2006 and 2010							
Halifax Northampton County Nash North Carolin County County							
2006	437	176	502	33615			
2010	348	91	650	42167			

**Source:** NC Department of Health and Human Services, http://epi.publichealth.nc.gov/cd/stds/figures/std10rpt.pdf

The graph below depicts the percent change in Chlamydia cases from 2006 to 2010. The number of Chlamydia cases decreased by a fifth in Halifax County and almost by half in Northampton County. However, the number of cases increased in Nash County and North Carolina as a whole.

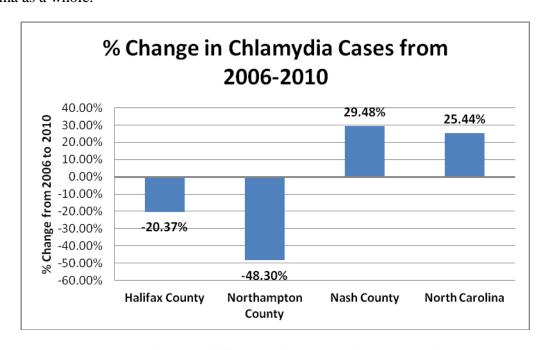


Figure 41 County & State % Change in Chlamydia Cases

**Table 21 County and State Gonorrhea Cases** 

Gonorrhea Cases for 2006 & 2007								
Halifax Northampton Nash North Carolina								
2006	244	85	281	17311				
2010	<b>2010</b> 152 44 250 14153							

**Source:** NC Department of Health and Human Services, http://epi.publichealth.nc.gov/cd/stds/figures/std10rpt.pdf

The graph below shows the percent change in Gonorrhea cases from 2006 to 2007. The number of cases decreased not only for the state, but for each county as well. Halifax and Northampton County had greater percentage decreases in the number of cases than did Nash County and the state as a whole.

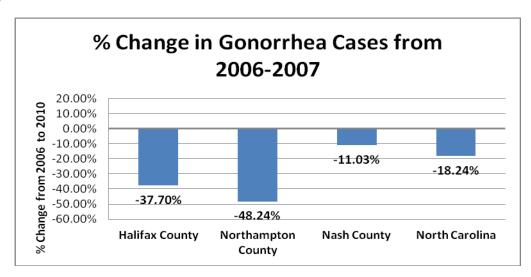


Figure 42 County and State % Change in Gonorrhea Cases

**Table 22 County and State Syphilis Cases** 

Syphilis Cases, 2006 & 2010							
Halifax Northampton Nash North Carolina							
2006	2	2	7	309			
<b>2010</b> 2 3 6 396							

**Source:** NC Department of Health and Human Services, http://epi.publichealth.nc.gov/cd/stds/figures/std10rpt.pdf

The number of syphilis cases remained the same in Halifax County, increased by 1 in Northampton County, and decreased by 1 in Nash County. There was a significant increase in the number of cases for the state. These numbers are depicted graphically below; however, it is important to note that the percentages are reflecting changes in smaller numbers, so they may appear inflated.

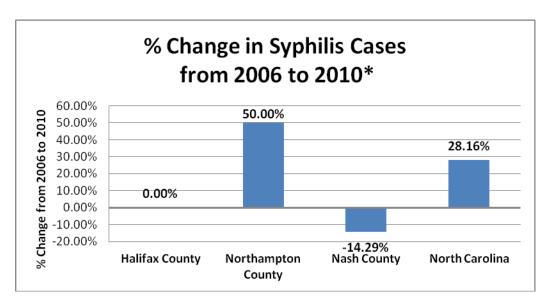


Figure 43 County and State % Change in Syphilis Cases

HIV incidence in Halifax, Northampton, and Nash Counties and North Carolina are recorded in the table and graph below.

Table 23 County and State HIV Incidence as of 12/31/2010

HIV/AIDS Incidence							
Halifax Northampton Nash North Carolina							
2010	137	61	267	25074			

**Source:** NC Department of Health and Human Services, http://epi.publichealth.nc.gov/cd/stds/figures/std10rpt.pdf

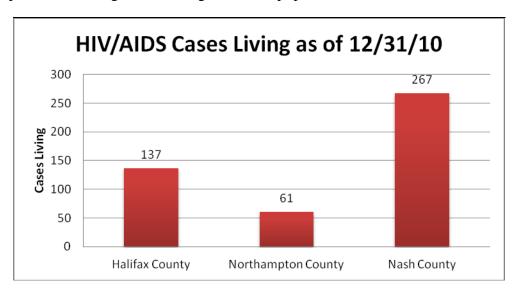


Figure 44 HIV/AIDS Cases Living as of 12/31/10

Tuberculosis cases are rare when compared to other infectious disease rates, but they are existent in Halifax, Northampton, and Nash Counties. The table below shows the tuberculosis incidence rates that have been reported for 2006 and 2010.

**Table 24 County and State Tuberculosis Cases** 

Tuberculosis Incidence Rates (# per 100,000), 2006 & 2010							
Halifax Northampton Nash North Carolina							
2006	8.7	4.5	6.9	4.6			
2010	8.9	0	1	3.1			

Source: NC Department of Health and Human Services,

http://epi.publichealth.nc.gov/cd/stds/figures/tbannual2010.pdf

#### **Natural Environment**

The air quality of a natural environment is one aspect of a community that is important for health. The air quality index provides a report of daily air quality and it tells how clean or polluted the air in a certain area is. The air quality index ratings for Halifax, Northampton, and Nash Counties have been graphically demonstrated and compared to the rating for the state as a whole in the figure below.

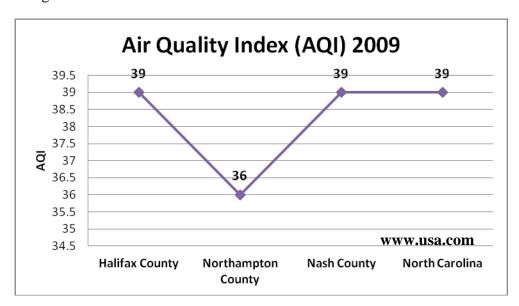


Figure 45 County and State Air Quality Index

In table 25, utilized by the U.S. Environmental Protection Agency, describes the scale by which the AQI for each county and the state can be interpreted. The larger the AQI for a population is, the greater the likelihood that an increasing percentage of that population is going to experience severe adverse health effects.

**Table 25 Air Quality Index Values** 

Air Quality Index (AQI) Values	Levels of Health Concern
0 to 50	Good
51 to 100	Moderate
101 to 150	Unhealthy for Sensitive Groups
151 to 200	Unhealthy
201 to 300	Very Unhealthy
301 to 500	Hazardous

Source: www.usa.com

#### **Social Environment**

#### **Violent Crime Rates**

From 2009 to 2010, violent crime in Halifax, Northampton, and Nash Counties decreased, as it did statewide according to the NC Department of Justice. The graphs below provide the violent crime rate per 100,000 persons for each county and the state, and the percent change in those rates from 2009 to 2010.

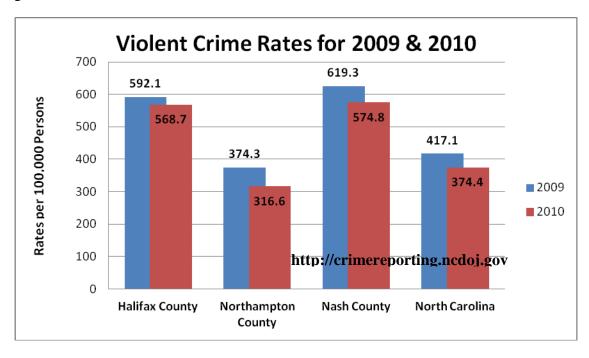


Figure 46 County and State Violent Crime Rates

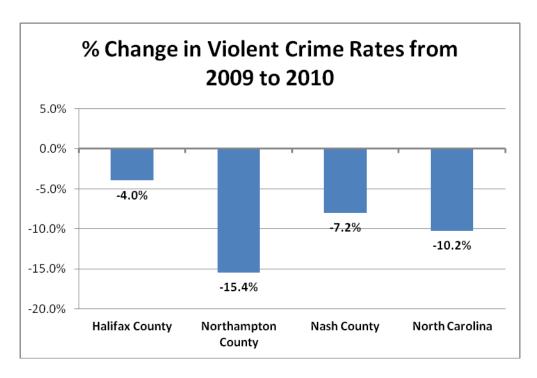


Figure 47 County and State % Change in Violent Crime Rates

#### Child Abuse Rate

Child abuse and neglect also presents a problem throughout Halifax and Northampton Counties. According to statistics obtained from the Prevent Child Abuse: North Carolina website, abuse and neglect of children in Halifax and Northampton County alike have decreased since 2009. The number of reported cases has been provided in the table and graph below.

Table 26 County and State Reported Child Abuse and Neglect Cases

# of Children Reported for Abuse & Neglect								
Halifax County Northampton County Nash County North Carolina								
2010-2011	1134	271	1218	131184				
2009-2010	<b>2009-2010</b> 1185 272 1148 127030							

**Source:** http://www.preventchildabusenc.org

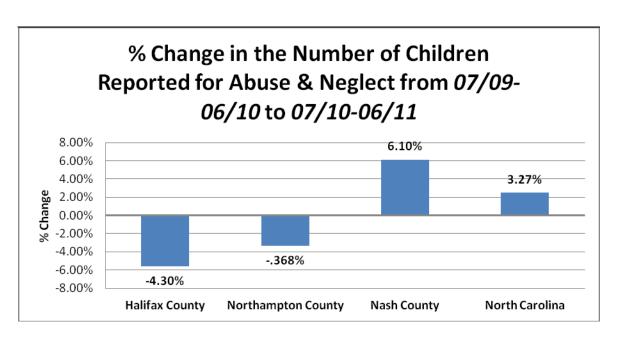


Figure 48 % Change in Number of Children Reported for Abuse & Neglect

#### **Housing Affordability**

When compared to its neighboring counties, and the state, Halifax County has the highest unaffordable housing percentage according to the North Carolina Rural Economic Development Center, Inc. See Figure 49 below.

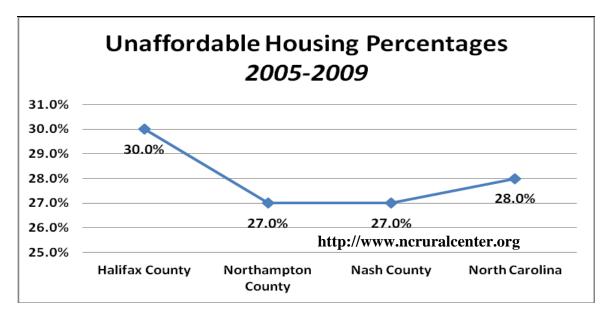


Figure 49 County and State Unaffordable Housing Percentages

#### **Community Survey**

#### Halifax County

The surveys for Halifax County were distributed and analyzed by the Halifax County Community Health Assessment Team. Their primary data collection procedure has been retrieved from their 2010 Halifax County Community Health Assessment and duplicated as follows:

During the months of April through September 2010, a community-wide survey was conducted in order to give residents an opportunity to express concerns and opinions about the quality of life in Halifax County. The Office of Healthy Carolinians and NC Department of Public Health provided the survey tool utilized. The survey was reviewed by the Community Health Assessment team and approved with few changes and revisions. Halifax County's self-administered survey included questions about the quality of life, economy, education, environment, health, housing, leisure activities, safety, social issues, transportation, emergency preparedness and elder issues. Surveys were distributed strategically across the county in an effort to reach a wide variety of the population. Seven hundred surveys were collected; 41 of which were excluded because the respondents were not Halifax County residents. A total of **659 surveys** were included in the final analysis. (Halifax, 2010)

#### Northampton County

The surveys for Northampton County were distributed and analyzed by Northampton County Healthy Carolinians Task Force Board Members. Additional surveys were distributed in town halls, at community events, and churches. Surveys were also available on Northampton County Health Department's website. Articles were published in the local newspapers asking for residents to participate in the survey process. The surveys were conducted during the months of April through August 2010. The Office of Healthy Carolinians and NC Department of Public Health provided the survey tool utilized. The self-administered survey included questions about the quality of life, economy, education, environment, health, housing, leisure activities, safety, social issues, transportation, emergency preparedness and elder issues.

#### **Location of 2012 Community Health Assessment**

Halifax Regional Website: <a href="https://www.halifaxmedicalcenter.org">www.halifaxmedicalcenter.org</a>

Halifax Regional Medical Library

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#### **Table of In-Text Figures**

Figure 1 Percent Increase in Halifax, Northampton, Nash, and NC Population Since 2000	18
Figure 2 County & State Female Population, 2010	19
Figure 3 County & State Male Population, 2010	19
Figure 4 Halifax County vs. NC in Education 2006-2010	21
Figure 5 Northampton County vs. NC in Education, 2006-2010	22
Figure 6 Nash County vs. NC in Education, 2006-2010	
Figure 7 County & State Median Incomes, 2006-2010	23
Figure 8 County & State % Poverty, 2006-2010	
Figure 9 County & State Poverty Trends, 2010	24
Figure 10 Halifax County Poverty Breakdown by Race/Ethnicity	25
Figure 11 Northampton County Poverty Breakdown by Race/Ethnicity	
Figure 12 Nash County Poverty Breakdown by Race/Ethnicity	25
Figure 13 North Carolina Poverty Breakdown by Race/Ethnicity	26
Figure 14 County and State Unemployment Rates	27
Figure 15 County & State % Increases in Unemployment	27
Figure 16 County & State Number of Primary Care Physicians per 10,000 persons	31
Figure 17 Uninsured Adults (18-64) in Halifax County	32
Figure 18 Uninsured Adults (18-64) in Northampton County	32
Figure 19 Uninsured Adults (18-64) in Nash County	33
Figure 20 Uninsured Adults (18-64) in North Carolina	33
Figure 21 County & State Uninsured Young People (>19)	34
Figure 22 % Change of Medicare Beneficiaries for County &State	35
Figure 23 % Change of Medicaid Beneficiaries for County & State	35
Figure 24 Leading Causes of Death in North Carolina	36
Figure 25 Leading Causes of Death in Halifax County	37
Figure 26 Leading Causes of Death in Northampton County	37
Figure 27 Leading Causes of Death in Halifax/ Northampton County Combined	38
Figure 28 Leading Causes of Death in Nash County	38
Figure 29 County and State Discharge Rates	43
Figure 30 County vs. State Hospital Discharge Rates	44
Figure 31 Adult Obesity in Halifax and Northampton County	46
Figure 32 Childhood Obesity in Halifax and Northampton County	47
Figure 33 % Fast Food Restaurants	47
Figure 34 County & State Physical Inactivity	48
Figure 35 Adult Smoking in Halifax & Northampton County	48
Figure 36 County and State Screening Utilization Percentages	49
Figure 37 County and State Infant Mortality Rates	50

Figure 38 County and State Low Birth-weight Percentages	50
Figure 39 County and State Late or No Prenatal Care	51
Figure 40 County and State Teen Pregnancy Rates	51
Figure 41 County & State % Change in Chlamydia Cases	52
Figure 42 County and State % Change in Gonorrhea Cases	53
Figure 43 County and State % Change in Syphilis Cases	54
Figure 44 HIV/AIDS Cases Living as of 12/31/10	54
Figure 45 County and State Air Quality Index	55
Figure 46 County and State Violent Crime Rates	56
Figure 47 County and State % Change in Violent Crime Rates	57
Figure 48 % Change in Number of Children Reported for Abuse & Neglect	58
Figure 49 County and State Unaffordable Housing Percentages	58

#### **Table of In-Text Tables**

Table 1 County & State Racial Makeup, 2010	18
Table 2 County and State Age Distribution, 2010	20
Table 3 Primary Medical Care HPSA Designations for Halifax and Northampton Counties, 20	12
	29
Table 4 Dental Care HPSA Designations for Halifax and Northampton Counties, 2012	29
Table 5 Mental Health Care HPSA Designations for Halifax and Northampton Counties, 2012	30
Table 6 County & State Medicare Beneficiaries	34
Table 7 County & State Medicaid Beneficiaries	35
Table 8 Leading Causes of Death in North Carolina	39
Table 9 Leading Causes of Death in Halifax County	39
Table 10 Leading Causes of Death in Northampton County	40
Table 11 Leading Causes of Death in Halifax/Northampton County Combined	40
Table 12 Leading Causes of Death in Nash County	41
Table 13 Leading Causes of Inpatient Hospitalizations in North Carolina	41
Table 14 Leading Causes of Inpatient Hospitalizations in Halifax County	42
Table 15 Leading Causes of Inpatient Hospitalizations in Northampton County	42
Table 16 Leading Causes of Inpatient Hospitalizations in Nash County	43
Table 17 Preventative Quality Indicators for Halifax County (Calendar Year 2009)	45
Table 18 Preventative Quality Indicators for Northampton County (Calendar Year 2009)	45
Table 19 Preventative Quality Indicators for Nash County (Calendar Year 2009)	45
Table 20 County and State Chlamydia Cases	52
Table 21 County and State Gonorrhea Cases	53
Table 22 County and State Syphilis Cases	53
Table 23 County and State HIV Incidence as of 12/31/2010	54
Table 24 County and State Tuberculosis Cases	55
Table 25 Air Quality Index Values	56
Table 26 County and State Reported Child Abuse and Neglect Cases	57

## CHNA PRIORITIZATION RESULTS

# CHNA Prioritization Results



## Criteria for Selecting Top 3 Health Priorities:

#### Magnitude of the Problem

How many people does the problem affect, either actually or potentially?

Seriousness of the Consequences

What are the potential economic and social burdens to the community?

Feasibility of Correcting the Problem

Are we able to carry out interventions in correcting the problem? (i.e. Are the resources available to affect change?)

Magnitude of the Problem						
Person	Obesity	Diet	Smoking Alcohol	Stress	Inactivity	HPTN/High Cholesterol
Person 1	6	4	3	1	2	5
Person 2	1	4	3	5	2	6
Person 3	2	4	3	6	5	1
Person 4	2	3	4	6	5	1
Person 5	1	2	3	6	5	4
Person 6	1	2	6	4	5	3
Person 7	1	4	3	6	5	2
Person 8	1	3	5	6	2	4
Person 9						
Person 10						
Person 11						
Person 12						
Person 13						
Person 14						
Person 15						
Person 16						
Person 17						
Person 18						
Person 19						
Person 20						
Total	15	26	30	40	31	26
Rankings	1	2	4	6	5	3

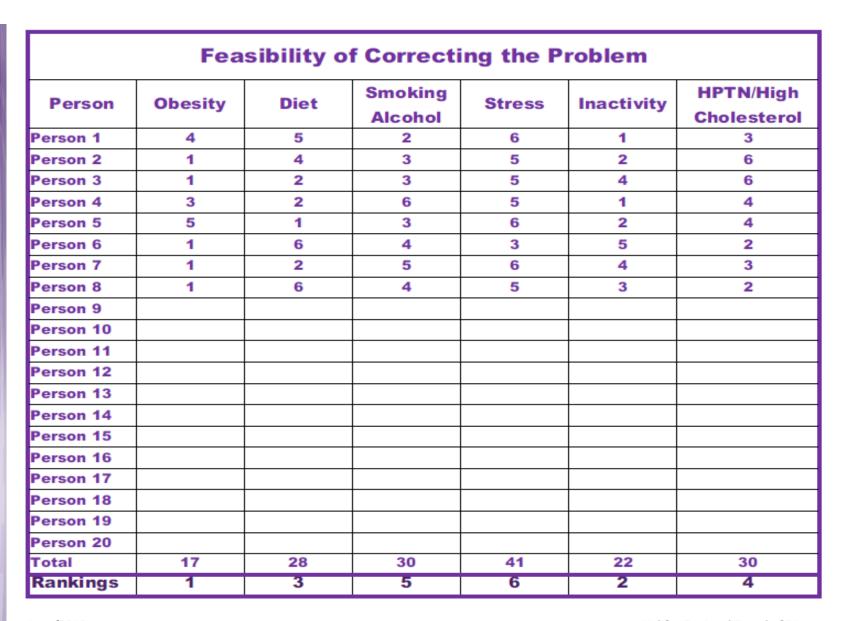
June/2012

Halifax Regional Board of Directors

Seriousness of the Consequences						
Person	Obesity	Diet	Smoking Alcohol	Stress	Inactivity	HPTN/High Cholesterol
Person 1	6	1	4	2	3	5
Person 2	3	4	6	5	2	1
Person 3	3	2	1	4	6	5
Person 4	1	2	3	6	5	4
Person 5	1	3	4	6	5	2
Person 6	2	6	4	3	5	1
Person 7	1	5	3	6	4	2
Person 8	1	3	5	6	2	4
Person 9						
Person 10						
Person 11						
Person 12						
Person 13						
Person 14						
Person 15						
Person 16						
Person 17						
Person 18						
Person 19						
Person 20						
Total	18	26	30	38	32	24
Rankings	1	3	4	6	5	2

June/2012

Halifax Regional Board of Directors



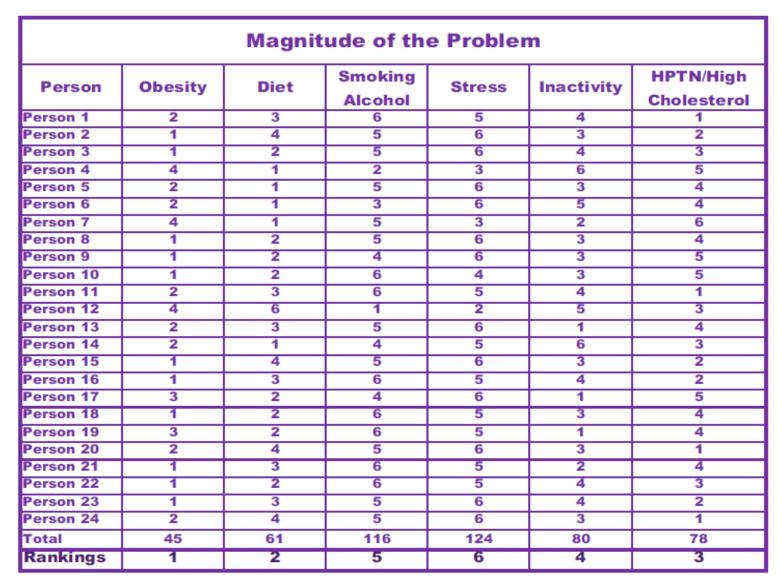
June/2012

Halifax Regional Board of Directors

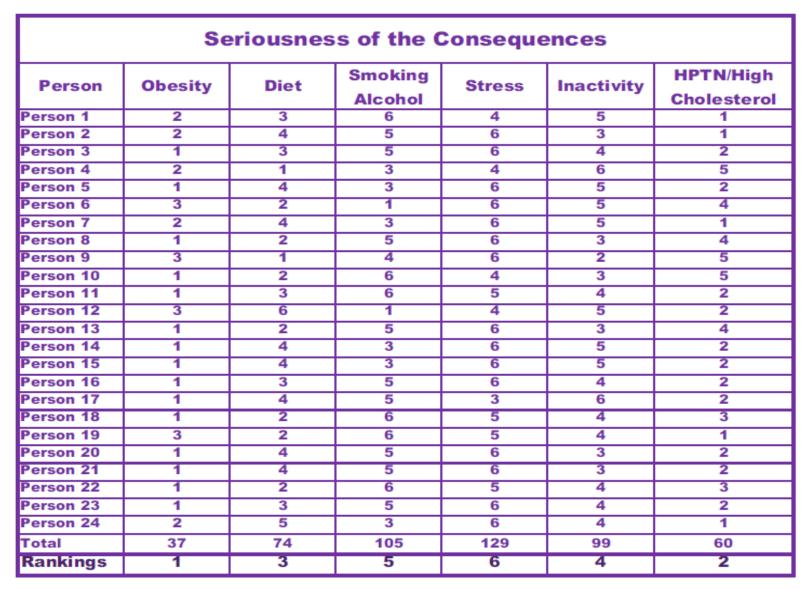
### Halifax Regional Board of Directors Prioritization Results

Individual Ranking	Magnitude	Seriousness	Feasibility	Total Ranking	Final Results	
1	Obesity-15	Obesity-18	Obesity-17	1	Obesity	50
2	Diet-26	HPTN/High Cholesterol-24	Inactivity-22	2	Diet	80
3	HPTN/High Cholesterol-26	Diet-26	Diet-28	3	НРТМ	80
4	Substance Abuse-30	Substance Abuse-30	HPTN/High Cholesterol-30	4	Inactivity	85
5	Inactivity-31	Inactivity-32	Substance Abuse-30	5	Substance Abuse	90
6	Stress-40	Stress-38	Stress-41	6	Stress	119

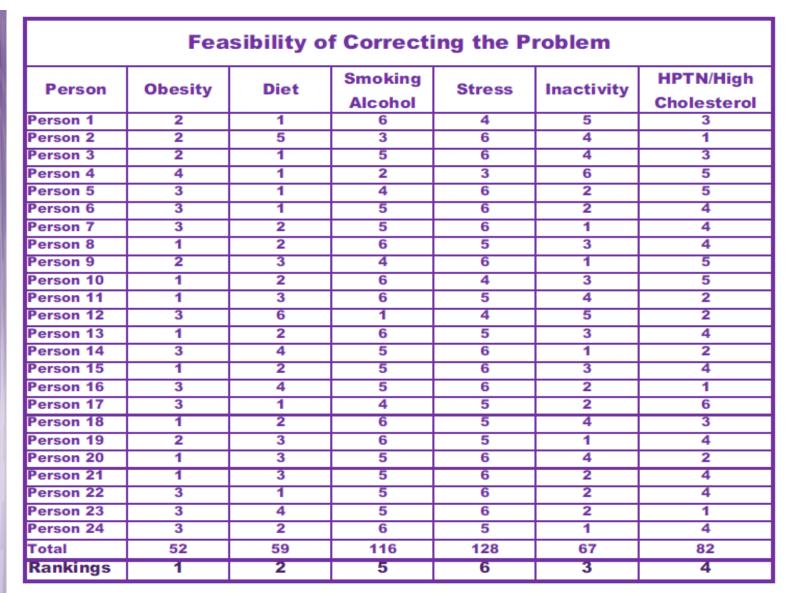
June/2012



May/2012 Community Health Initiative



May/2012 Community Health Initiative



May/2012 Community Health Initiative

#### Community Health Initiative Prioritization Results

Individual Ranking	Magnitude	Seriousness	Feasibility	Total Ranking	Final Results	
1	Obesity-45	Obesity-37	Obesity-52	1	Obesity	134
2	Diet-61	HPTN-60	Diet-59	2	Diet	194
3	HPTN-78	Diet-74	Inactivity-67	3	НРТМ	220
4	Inactivity-80	Inactivity-99	HPTN-82	4	Inactivity	246
5	Substance Abuse-116	Substance Abuse-105	Substance Abuse-116	5	Substance Abuse	337
6	Stress-124	Stress-129	Stress-128	6	Stress	381

May/2012

#### **CHNA Prioritization Results**

Total Ranking CHI	Final Results CHI		Total Ranking HR BOD	Final Results HR BOD		Total Combined Ranking	Final Results Combined	
1	Obesity	134	1	Obesity	50	1	Obesity	184
2	Diet	194	2	Diet	80	2	Diet	274
3	HPTN/ High Cholesterol	220	3	HPTN /High Cholesterol	80	3	HPTN /High Cholesterol	300
4	Inactivity	246	4	Inactivity	85	4	Inactivity	331
5	Substance Abuse	337	5	Substance Abuse	90	5	Substance Abuse	427
6	Stress	381	6	Stress	119	6	Stress	500

June/2012 Halifax Regional Board of Directors