



Edgemombe County Community Health Assessment

2013



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Acknowledgements

The completion of the 2013 Edgecombe County Community Health Assessment is a result of a collaborative effort between Vidant Edgecombe Hospital, Edgecombe County Health Department, and East Carolina University. Please see below for members of the leadership collaborative.

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Purpose

The Affordable Care Act requires hospitals with a 501 (c) (3) to conduct a community health needs assessment (CHNA) and adopt an implementation strategy at least once every three years. These CHNA requirements are effective for tax years beginning after March 23, 2012. Furthermore, local health departments within North Carolina are required to conduct a similar assessment every four years. In turn, Vidant Edgecombe Hospital and the Edgecombe County Health Department partnered with one another and East Carolina University to complete the required community health assessment.

The purpose of the community health assessment is to investigate the health status of the community and identify specific priority areas of focus. As a result, the selected focus areas will be addressed for three to four years following the assessment. The health needs assessment process is thorough, inclusive, and transparent. It is a collaborative effort between key stakeholder groups, members of the community, Vidant Edgecombe Hospital, the Edgecombe County Health Department, and East Carolina University. Action plans that address the key health issues for the community will be developed following the assessment.

Team Composition

To ensure input from persons with a broad knowledge of the community, personal invitations were sent to organizations representing the county in sectors such as mental health and senior health services. Additionally, individuals from agencies representing the uninsured and underinsured were invited to participate. Those who committed to the assessment and planning process became the Community Health Advisory Council and attended meetings beginning in June 2013. Finally, partners from Vidant Edgecombe Hospital, the Edgecombe County Health Department, and East Carolina University formed a separate leadership team, which worked collectively to identify the types and sources of data to be collected and helped prioritize the community health concerns.

Process Overview

The community health assessment has several requirements. One requirement is the collection of primary data from community members. Edgecombe County elected to elicit feedback from key stakeholder groups, conduct focus groups throughout the county, and circulate a health opinion survey. The health opinion survey was adapted from the Community Health Assessment Guidebook provided by the NC Division of Public Health (see Appendix A). A final component of the assessment process was the collection of secondary data. In turn, a four-part model was created to assess the social and health indicators in Edgecombe County (see Figure 1). The hospital contracted with the Center for Survey Research, housed in East Carolina University's Office of Innovation and Economic Development to conduct the community health assessment.

Figure 1. CHA Model



The stakeholder group, consisting of 14 members, known as the Community Health Advisory Council, met throughout the process to provide feedback. Four focus groups were held to discover community members' perception of health concerns and suggestions for improving health within the community. There were a total of 26 focus group participants. Finally, the survey was available online and in paper format in both English and Spanish. A total of 475 surveys were completed.

A review of secondary data was conducted by examining county level health data primarily compiled by the NC State Center for Health Statistics. These data were reviewed to determine the potential for impact on health status within the county. Moreover, a review of data across several years was conducted to determine trends in health status for Edgecombe County.

Social and health focus areas were selected based on the convergence of stakeholder input, focus group and survey results as well as secondary data sources. Members of the Community Health Advisory Council received a presentation of the data during their August 2013 meeting. During the meeting, ECU's team led a prioritization and feasibility exercise to help prioritize the focus areas.

Outcomes

The community health assessment identified eight focus areas for 2014 – 2017 (see Figure 2). Although this was a community health assessment, social indicators were selected that both directly and indirectly influence community health. Thus, it is appropriate to acknowledge both social and health indicators. However, it was determined that while the social indicators were very important, it would be more feasible to narrow the focus areas into specific priorities for the action plan. Thus, for the action plan, the eight focus areas were narrowed to four and are listed below.

- Chronic Disease Prevention and Management
- Access to Care
- Obesity and Weight Management
- HIV/AIDS, STDs and Teen Pregnancy

Figure 2. Focus Areas

Focus Areas for Edgecombe County	
Social Indicators: -Income -Poverty -Crime/Violence -Access to Healthcare	Health Indicators: -HIV/AIDS/STDs -Teen Pregnancy -Overweight/Obesity -Chronic Disease

County Overview: Located on the Edge of Yesterday and Tomorrow

Edgecombe County is an eastern North Carolina County that is rich in history but ready for the future. Edgecombe is a rural county situated approximately one hour's drive east of Raleigh and two hour's drive inland from North Carolina's beaches. With a population of approximately 56,000 persons, the County maintains a firm agricultural base while supporting the addition of environmentally friendly industries (Sara Lee, Keihin, QVC, and MBM). Municipalities within Edgecombe County include Rocky Mount, Pinetops, Conetoe, Whitakers, Macclesfield, Leggett, Sharpsburg, Princeville, Speed and Tarboro.

Located in Tarboro, NC, Vidant Edgecombe Hospital is a full service, 117-bed, not-for-profit community hospital that serves Edgecombe County and surrounding communities. The hospital is part of Vidant Health (formerly University Health Systems of Eastern Carolina), a regional health system serving 29 counties in eastern North Carolina. The health system's mission, "To enhance the quality of life for the communities and people we serve, touch and support" drives a system of care for healthier communities beyond the traditional walls of our facilities.

Population Demographics

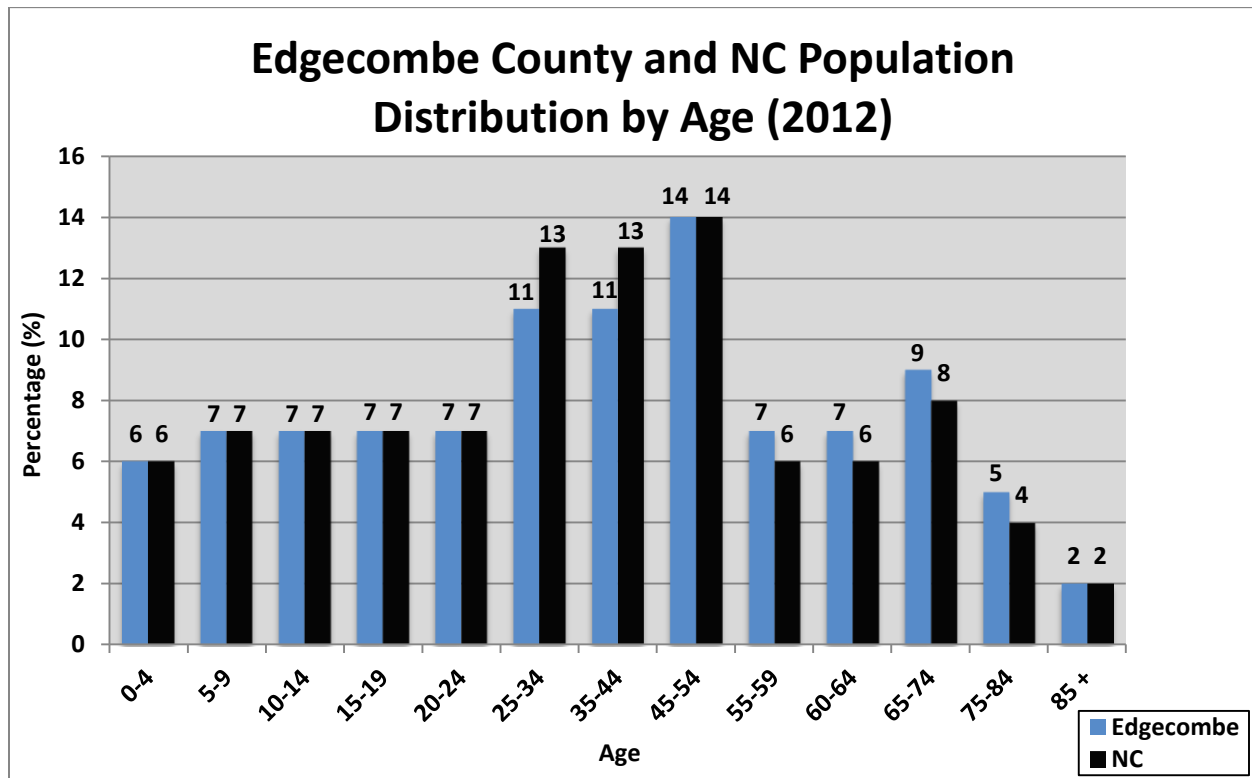
Population Estimates

As of July 2012, the estimated population of Edgecombe County was 56,085, a slight decrease from the April 2010 population count of 56,552. This is a loss of 0.8% with a net migration of -1.0%. However, since April 2000, the population of Edgecombe County has grown from 55,604, representing a 0.9% increase.¹

¹ NC Office of State Budget and Management. Available at: http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/county_estimates.shtm

Age Distribution

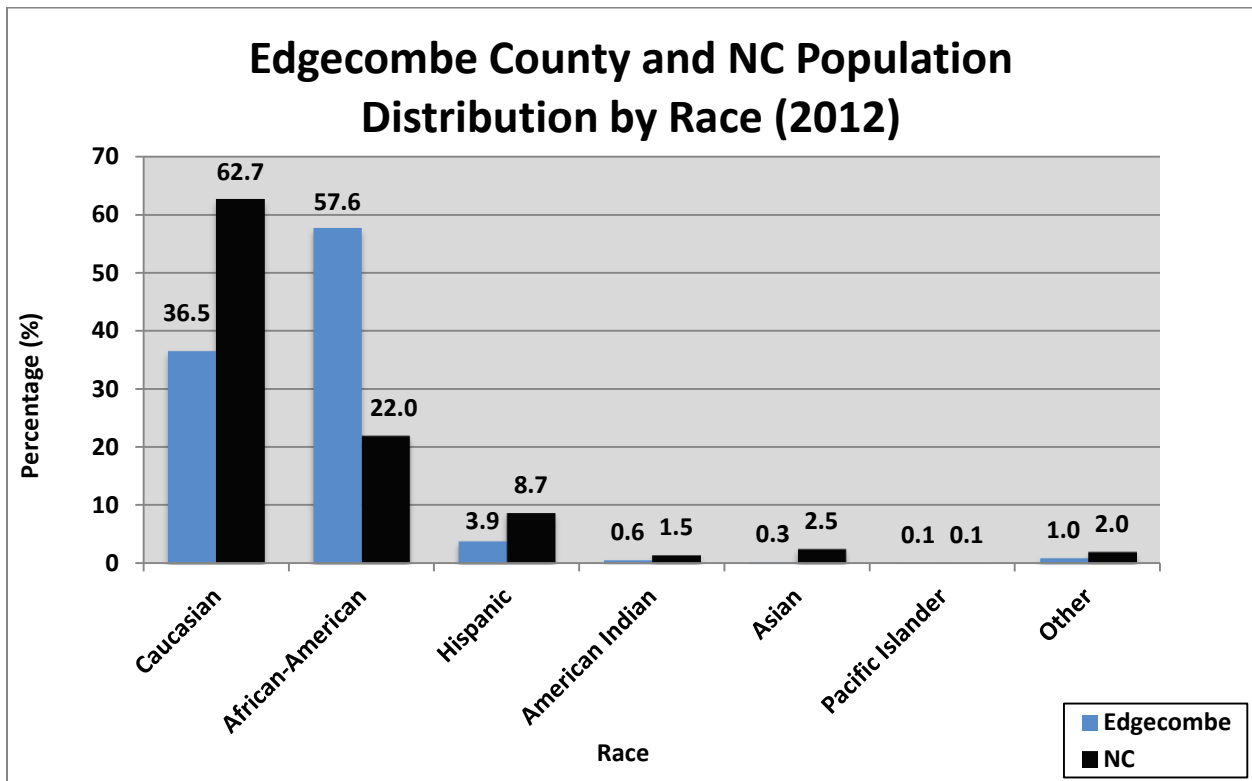
The graph below represents population data for Edgecombe County as of 2012. The median age in Edgecombe County is 40.1 years, whereas the median age in North Carolina is 37.8. The largest portion of the population in Edgecombe County is between the ages of 25 and 54 (36 percent). The school age (ages 5-19) population for Edgecombe County comprises 21 percent of the total population. Furthermore, 16 percent of the population in Edgecombe County are senior citizens (65 and older), which is two percent more than the state percentage.²



² US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

Race Distribution

The majority of Edgecombe County citizens are African-American (57.6 percent), whereas Caucasians represent 36.5 percent of the population. Since 2000, the Hispanic population in Edgecombe County has grown from 2.8 percent to 3.9 percent in 2012. American Indian, Alaska Native, Asian, Pacific Islander or persons reporting two or more races represent the remaining population. Overall, the race distribution is quite different from that of North Carolina. In North Carolina, 62.7 percent of the population is Caucasian and 22.0 percent is African-American. North Carolina's percent population of Hispanic origin is more than double that of Edgecombe County at 8.7 percent.³



Sex Distribution

The sex distribution in Edgecombe County as of 2012 is relatively unequal with 54 percent being female and 46 percent being male. As of 2012, the sex distribution in North Carolina was more balanced with 51 percent being female and 49 percent being male.⁴

³ US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

⁴ US Census Bureau, State and County Quick Facts. Available at: <http://quickfacts.census.gov/qfd/states/37/37191.html>

Economic Factors

Income and Poverty

The graphs below depict Edgecombe County's annual household income, median annual household income, per capita income, poverty rates, and percentage of households with food stamps benefits. From 2009 to 2011, 23.4 percent of Edgecombe County residents reported an annual household income less than \$15,000, compared to 15.2 percent in North Carolina. Additionally, only 15.6 percent of Edgecombe County residents reported an annual household income of \$75,000 or more, compared to 27.1 percent in North Carolina.⁵ Although the three-year average median annual household income has steadily risen in Edgecombe County since 2005, the 2009-2011 average was \$33,740. In comparison, the 2009-2011 average for median annual household income in North Carolina was \$44,942.⁶ From 2007-2011, the average per capita income in Edgecombe County was \$17,808, compared to \$25,256 and \$27,915 in North Carolina and the US, respectively.⁷ The percentage of Edgecombe County residents below the poverty level has remained relatively stable since 2005, but remains at 23.6 percent, with the state at 17.2 percent.⁸ Finally, Edgecombe County has a disproportionate percentage of households receiving food stamps benefits compared to North Carolina. This percentage has markedly increased from 17.9 percent in the 2005-2007 time period to 28 percent in the 2009-2011 time period.⁹

⁵ US Census Bureau, American Fact Finder. Available at:
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

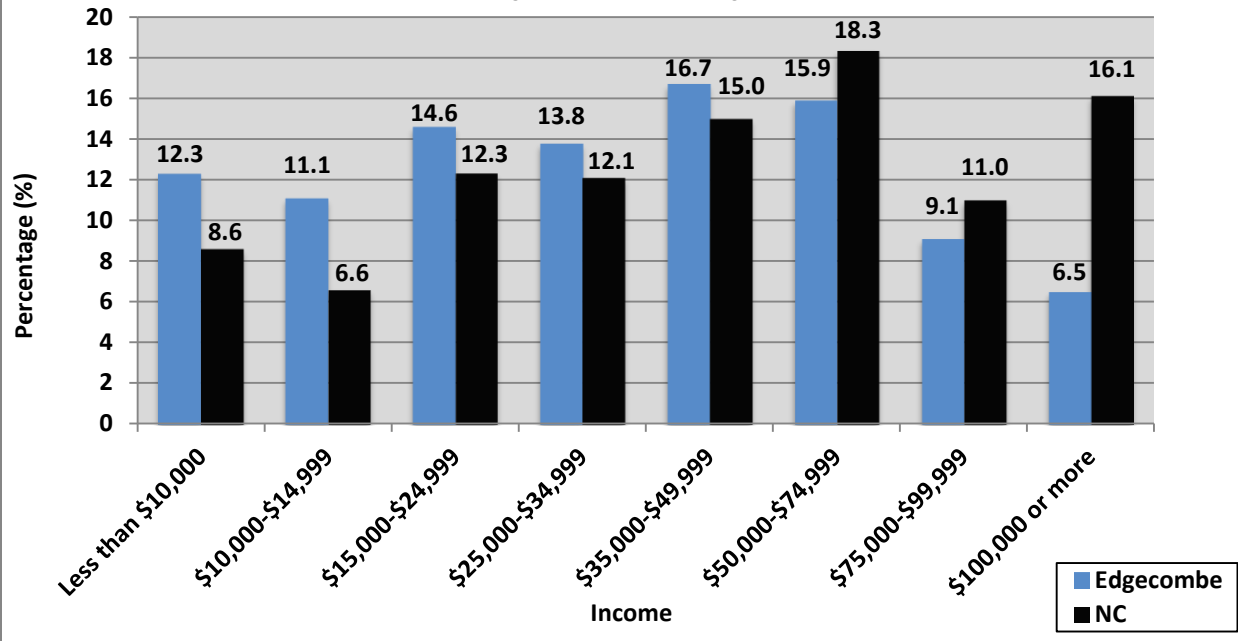
⁶ US Census Bureau, American Fact Finder. Available at:
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

⁷ US Census Bureau, State and County Quick Facts. Available at:
<http://quickfacts.census.gov/qfd/states/37/37191.html>

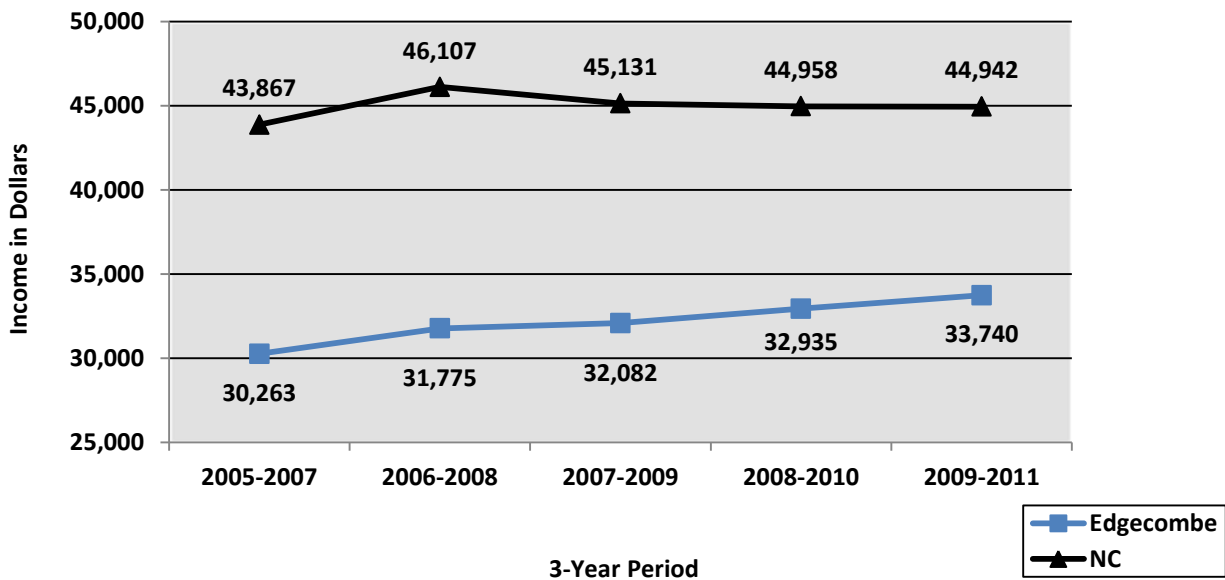
⁸ US Census Bureau, American Fact Finder. Available at:
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

⁹ US Census Bureau, American Fact Finder. Available at:
<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

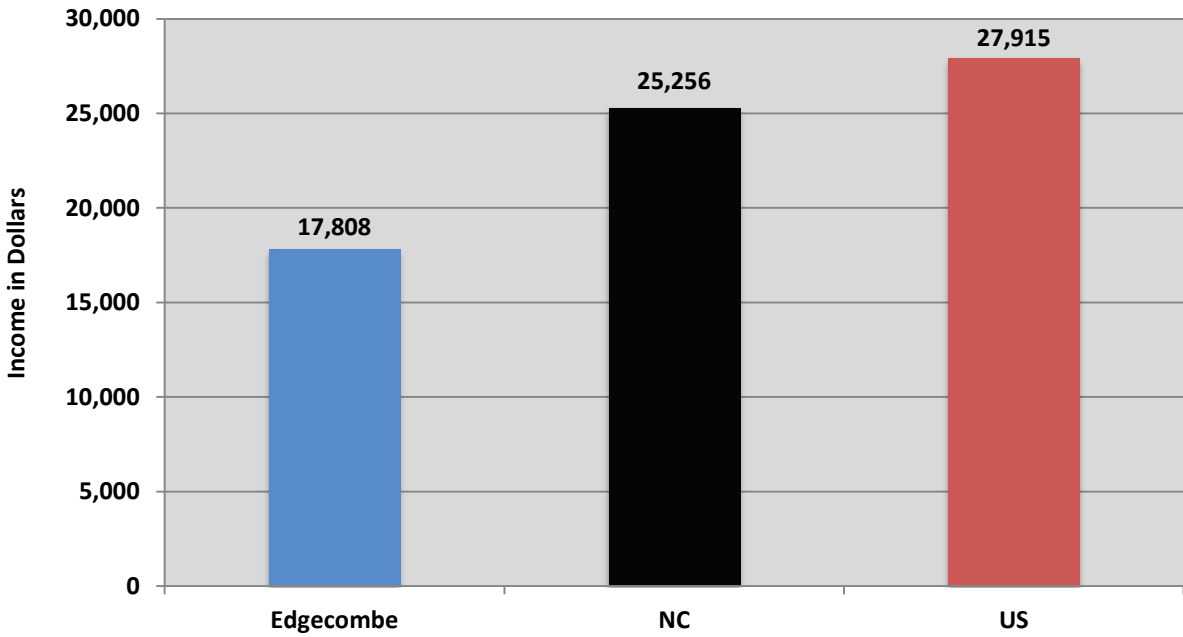
Edgecombe County and NC Household Income (2009-2011)



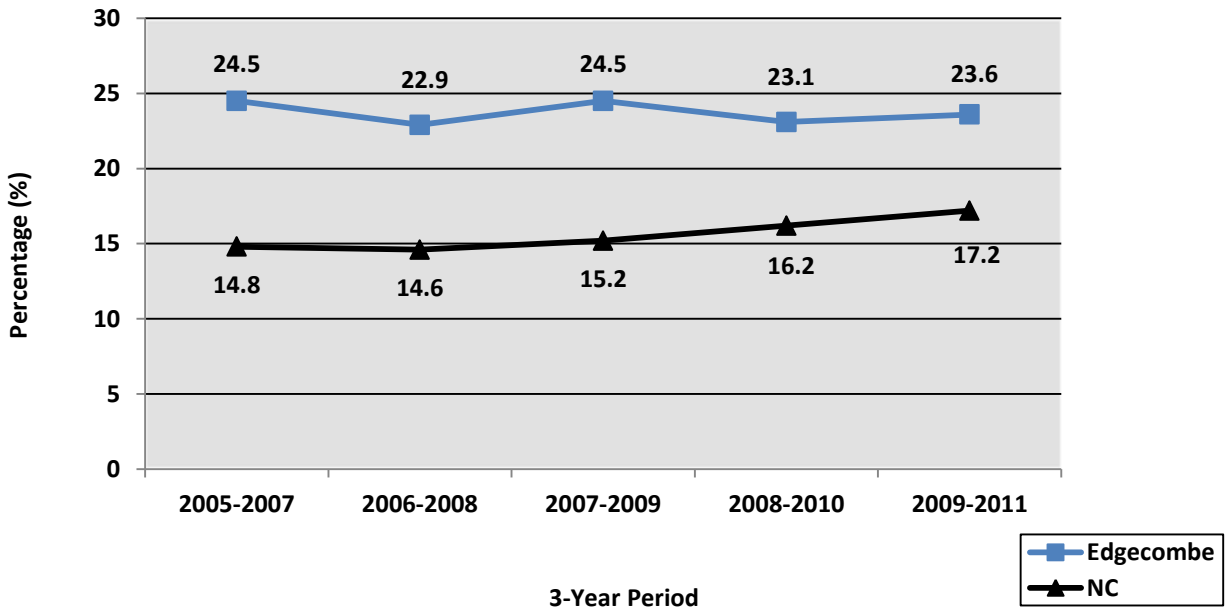
Edgecombe County and NC Median Annual Household Income



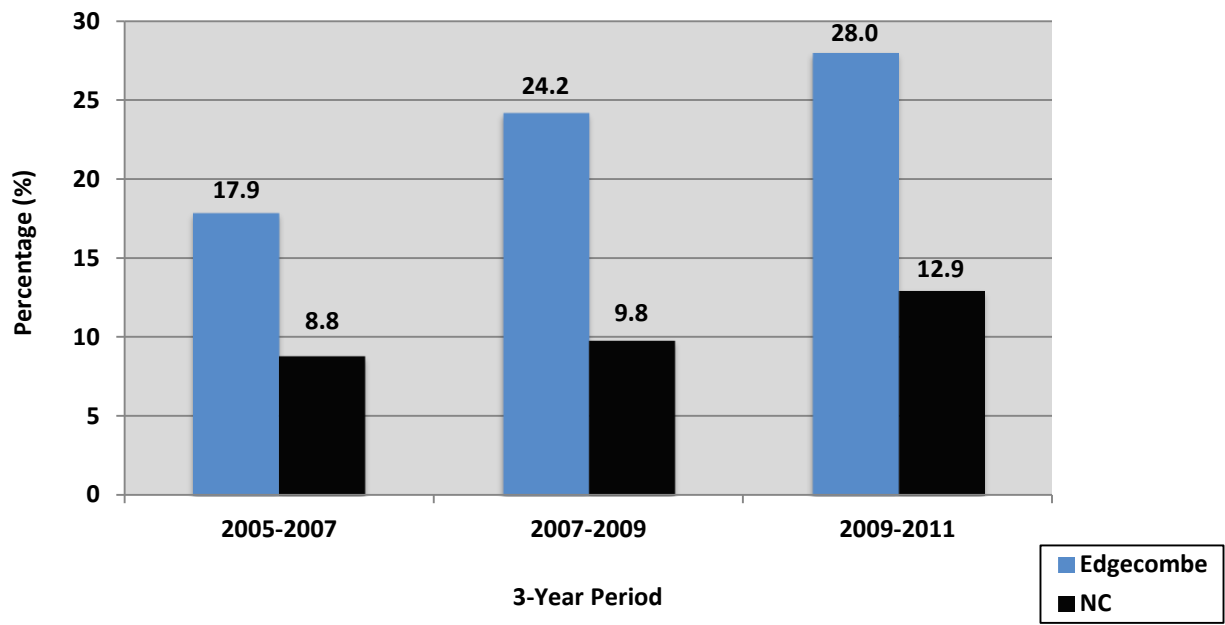
Per Capita Income (2007-2011)



Edgemombe County and NC Poverty Rates

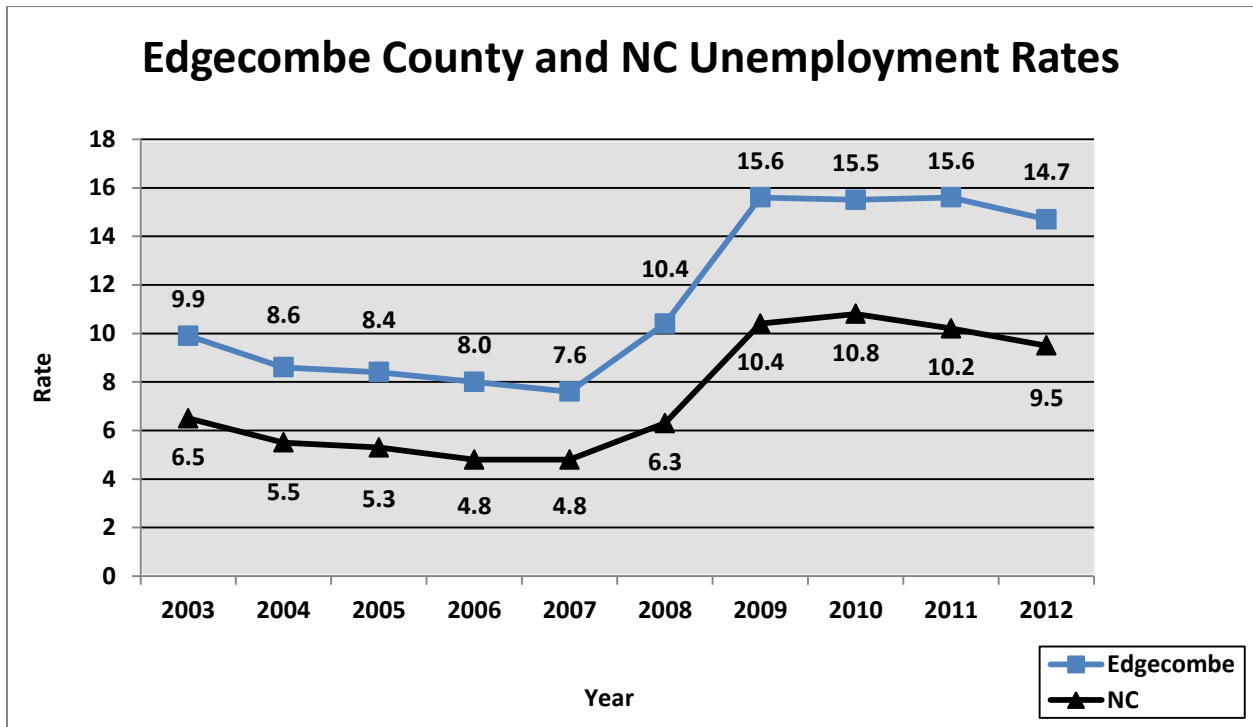


Edgecombe County and NC Percentage of Households with Food Stamps Benefits



Employment

The following chart portrays the unemployment rates for Edgecombe County and North Carolina from 2003 to 2012. Edgecombe County's unemployment rate for 2012 was estimated at 14.7 percent compared to 9.5 percent for North Carolina. The unemployment rate in Edgecombe County has 4.8 percent since 2003. The highest unemployment rates for Edgecombe County in the past ten years were reported in 2009 and 2011, with 15.6 percent of the population being unemployed.¹⁰

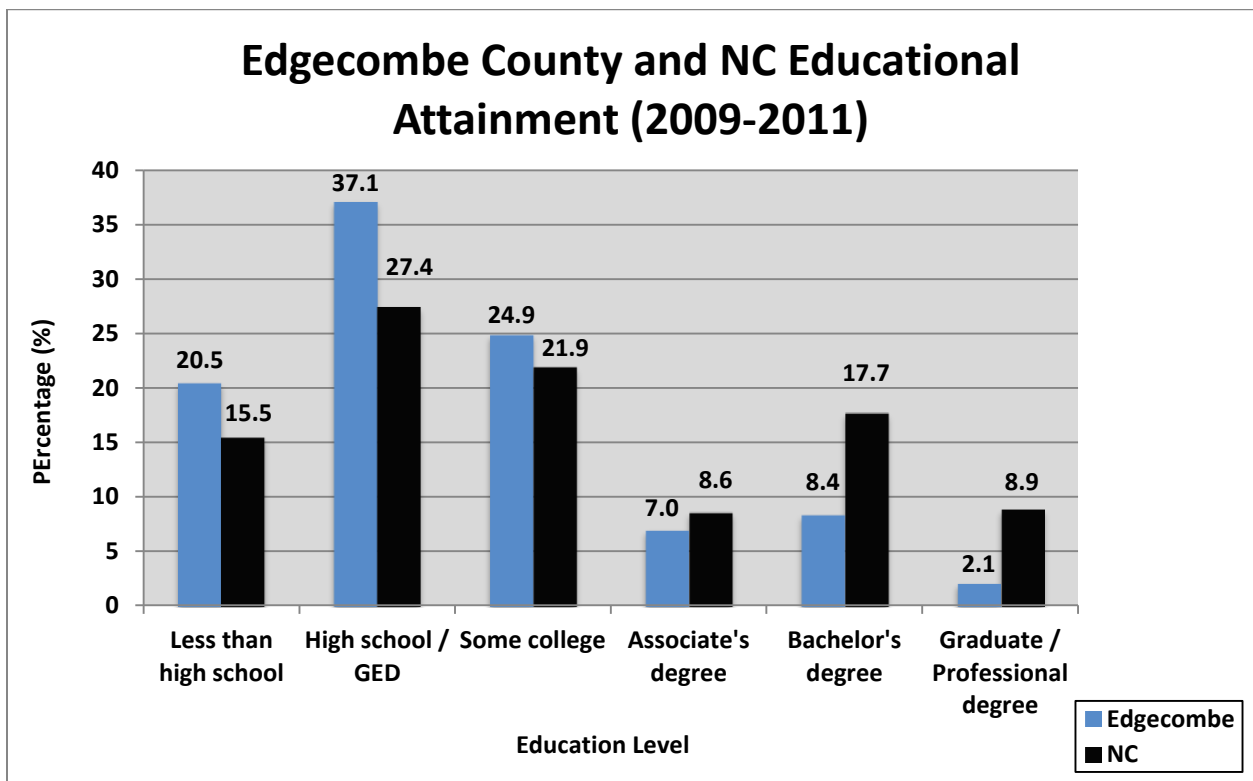


¹⁰ The U.S. Department of Labor. Available at: <http://bls.gov/lau/>

Education

Educational Attainment

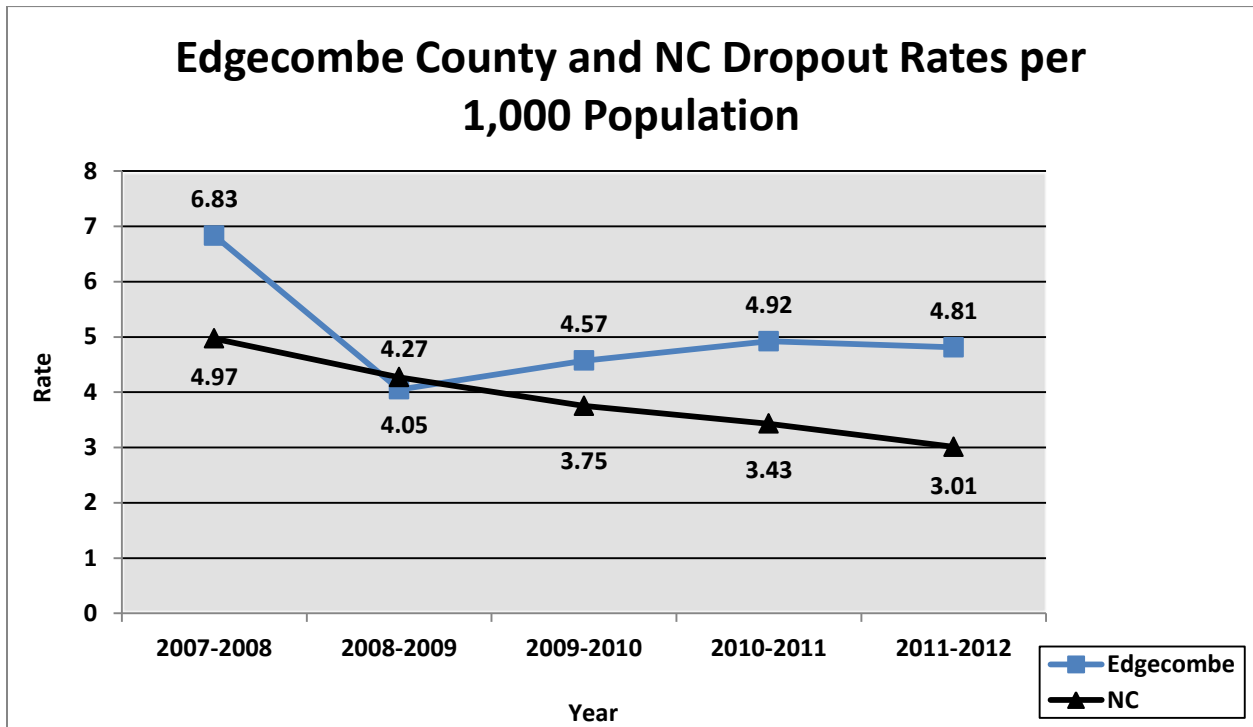
The following graph depicts the educational attainment of Edgecombe County's population age 25 and older. According to the 2009-2011 three-year estimates, 20.5 percent of the population have not completed high school or received an equivalency diploma, compared to 15.5 percent of North Carolina adults. Edgecombe County has a much lower percentage of adults who report having a bachelor's degree or higher (10.5 percent) than the state (26.6 percent).¹¹



¹¹ US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

Dropout Rates

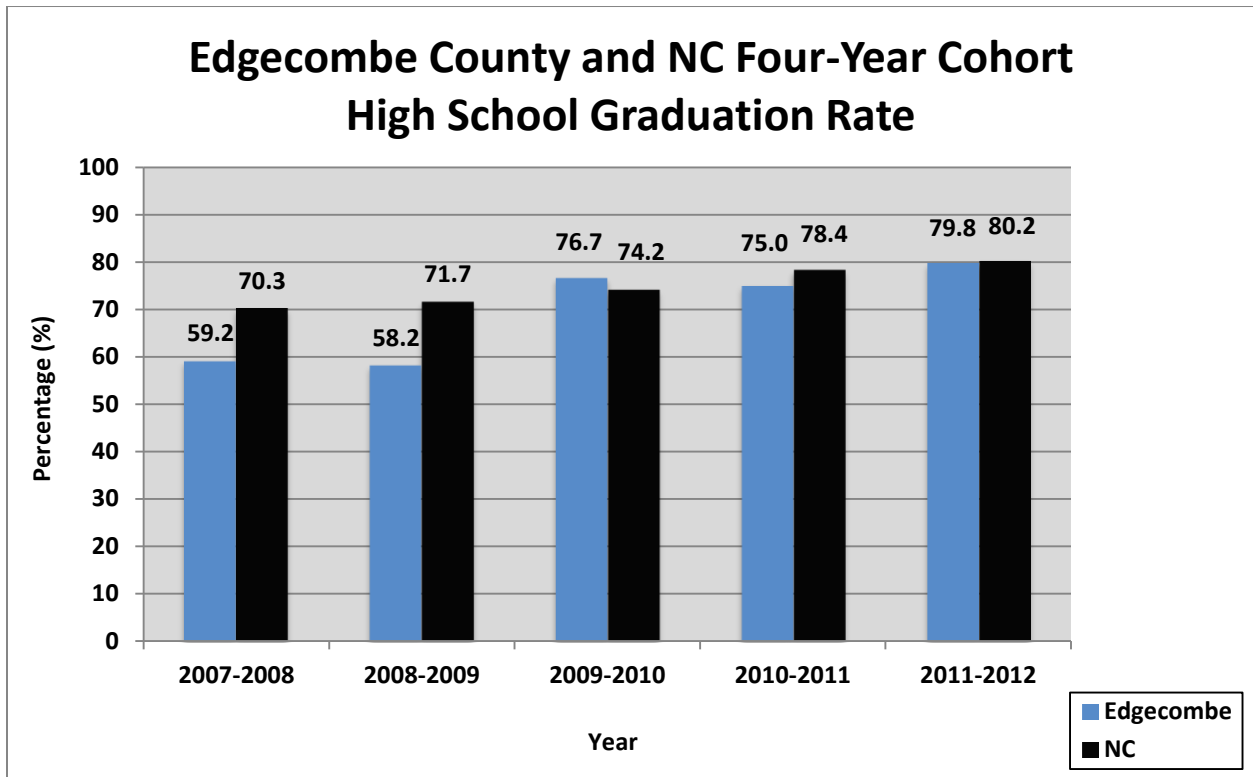
The graph below depicts the dropout rates for Edgecombe County and North Carolina from the 2007-2008 school year to the 2011-2012 school year. While the dropout rate in Edgecombe County has decreased from 6.83 to 4.81 per thousand students in this time period, the 2011-2012 estimate for Edgecombe County (4.81) remains higher than North Carolina (3.01). Edgecombe County achieved the lowest dropout rate in the 2008-2009 school year, where it decreased from 6.83 to 4.05.¹²



¹² NC Public Schools Reports and Statistics. Available at: <http://www.ncpublicschools.org/data/reports/>

High School Graduation

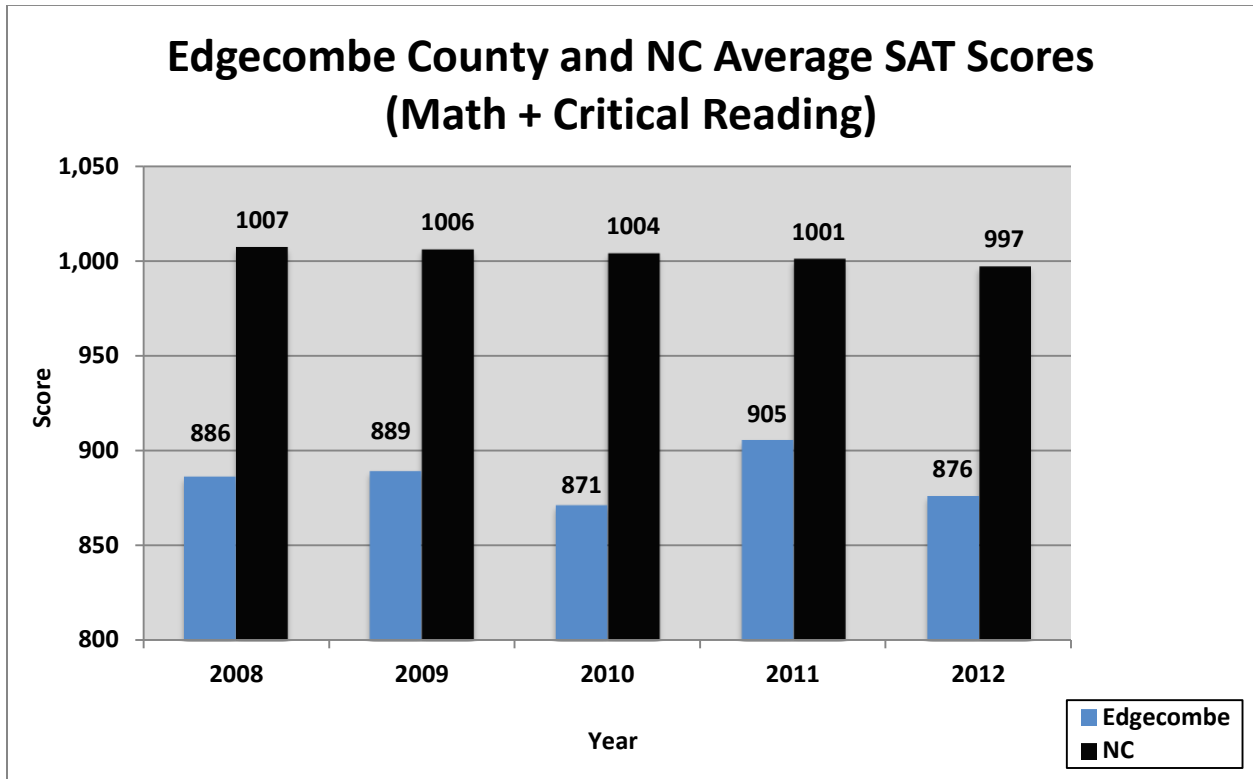
As shown in the graph below, Edgecombe County high school graduation rates are as the highest that they have been in the last five school years at 79.8 percent. This positive trend represents a dramatic increase from the 2007-2008 (59.2) and 2008-2009 (58.2) percentages. Edgecombe County has successfully closed the gap with the high school graduation percentages of North Carolina, which was 80.2 percent in the 2011-2012 school year.¹³



¹³ NC Public Schools Reports and Statistics. Available at: <http://www.ncpublicschools.org/data/reports/>

SAT Scores

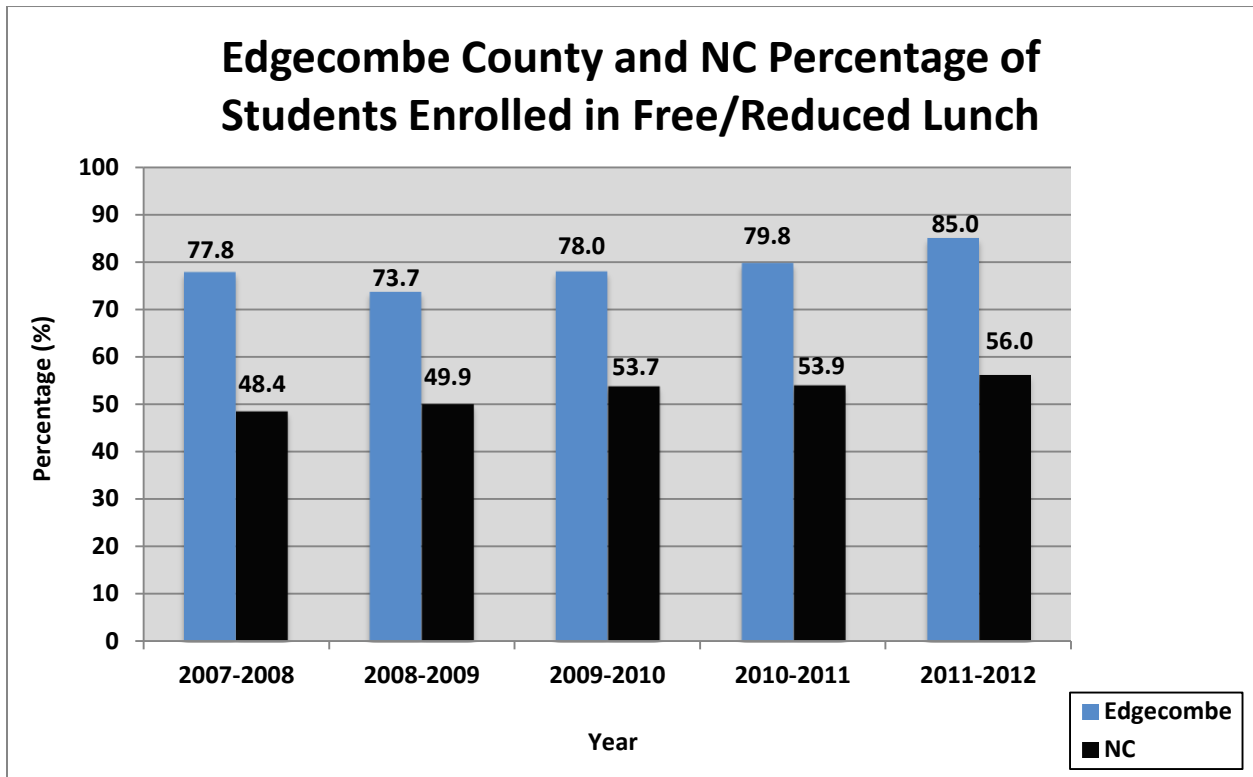
The following graph reports the average SAT scores for Edgecombe County and North Carolina, calculated by adding the verbal and quantitative scores from 2008 to 2012. In this five year period, Edgecombe County average SAT scores have remained lower than North Carolina, with the average SAT scores in 2012 being 876 and 997, respectively.¹⁴



¹⁴ NC Public Schools Reports and Statistics. Available at:
<http://www.ncpublicschools.org/data/reports/>

Free and Reduced Lunch

According to Edgecombe County Schools, 85 percent of students enrolled in for the 2011-2012 school year were enrolled in free or reduced price lunch benefits. This percentage increased from 73.7 percent in the 2008-2009 school year. In contrast, 56 percent of students in North Carolina were enrolled in free and reduced lunch benefits in the 2011-2012 school year.¹⁵

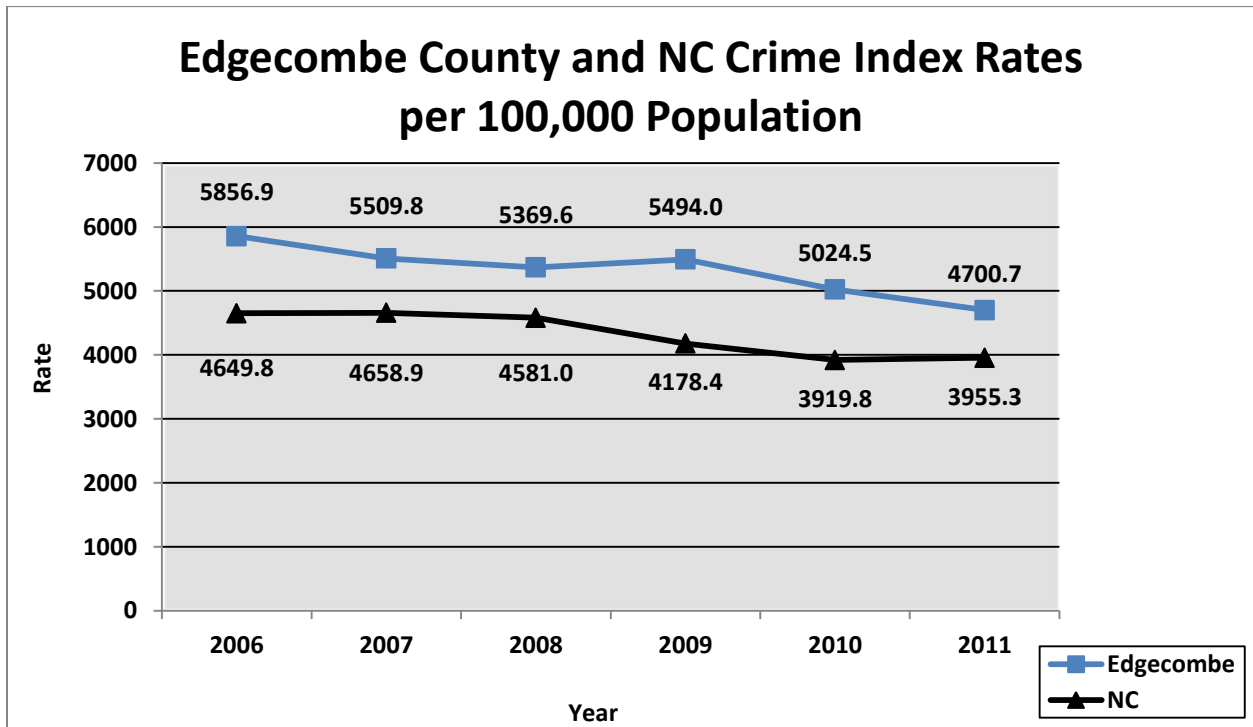


¹⁵ Data Center, Kids count. Available at:
<http://datacenter.kidscount.org/data/bystate/Rankings.aspx?ind=2239&state=NC>

Crime and Violence

Crime Index Rates

As illustrated in the chart below, the index crime rates for Edgecombe County have steadily decreased since 2006. However, when compared to the state, the index crime rates for all years from 2006-2011 were higher in Edgecombe County.¹⁶ Index crime rates are composed of both violent crimes (e.g., murder) and property crimes (e.g., burglary).



¹⁶ NC Department of Justice, Crime. Available at:
<http://www.ncdoj.gov/Crime/View-Crime-Statistics.aspx>

Detailed Crime Statistics

The table below provides detailed crime statistics for Edgecombe County from 2003 to 2011. All of the classes of crime have decreased in Edgecombe County from 2003 to 2011 except murder and aggravated assault. Specifically, rape, robbery, burglary, larceny, and motor vehicle theft has decreased since 2003.¹⁷

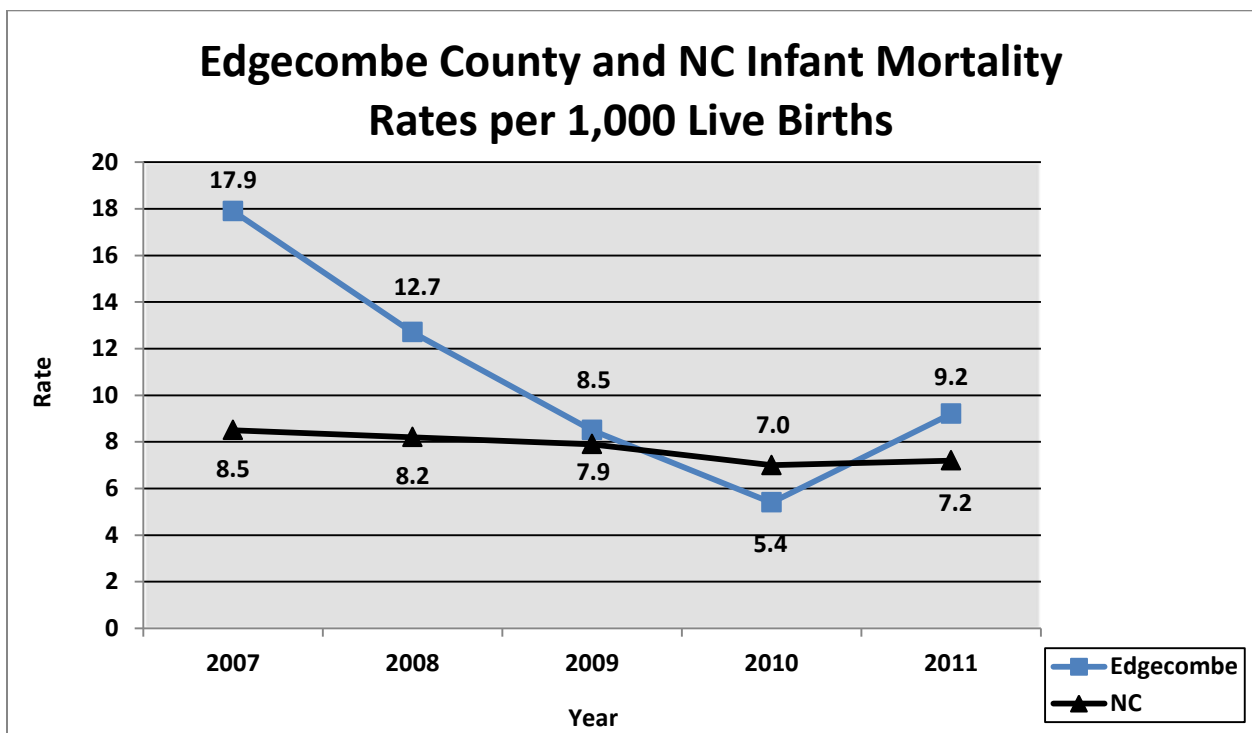
Detailed Crime Statistics for Edgecombe County									
Offense	2003	2004	2005	2006	2007	2008	2009	2010	2011
Murder	9	9	12	13	17	20	9	13	13
Rape	32	30	25	27	31	37	42	25	17
Robbery	238	202	218	262	300	335	303	237	177
Aggravated Assault	369	413	368	413	444	512	551	557	479
Burglary	1,722	1,820	1,747	2,098	1,777	1,972	1,810	1,477	1,596
Larceny	4,541	3,970	3,982	4,252	3,889	3,406	3,289	2,974	3,315
MV Theft	328	315	302	463	305	313	232	214	189
Total	7,239	6,759	6,654	7,528	6,763	6,595	6,236	5,497	5,786

¹⁷ NC Department of Justice, Crime. Available at:
<http://www.ncdoj.gov/Crime/View-Crime-Statistics.aspx>

Health Indicators

Infant Mortality Rates

Infant mortality is the death of an infant prior to his/her first birthday. Edgecombe County's total infant mortality rate in 2011 was 9.2 per thousand live births, compared to North Carolina's total infant mortality rate of 7.2 per thousand live births. The infant mortality rate in Edgecombe County has decreased dramatically since 2007 (17.9 per thousand live births). Edgecombe County experienced the lowest infant mortality rate in 2010 at 5.4 per thousand live births.¹⁸ Infant mortality data may also be further classified as fetal (>20 weeks of gestation), neonatal (<28 days), or postneonatal (28 days - 1 year) deaths.



¹⁸ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

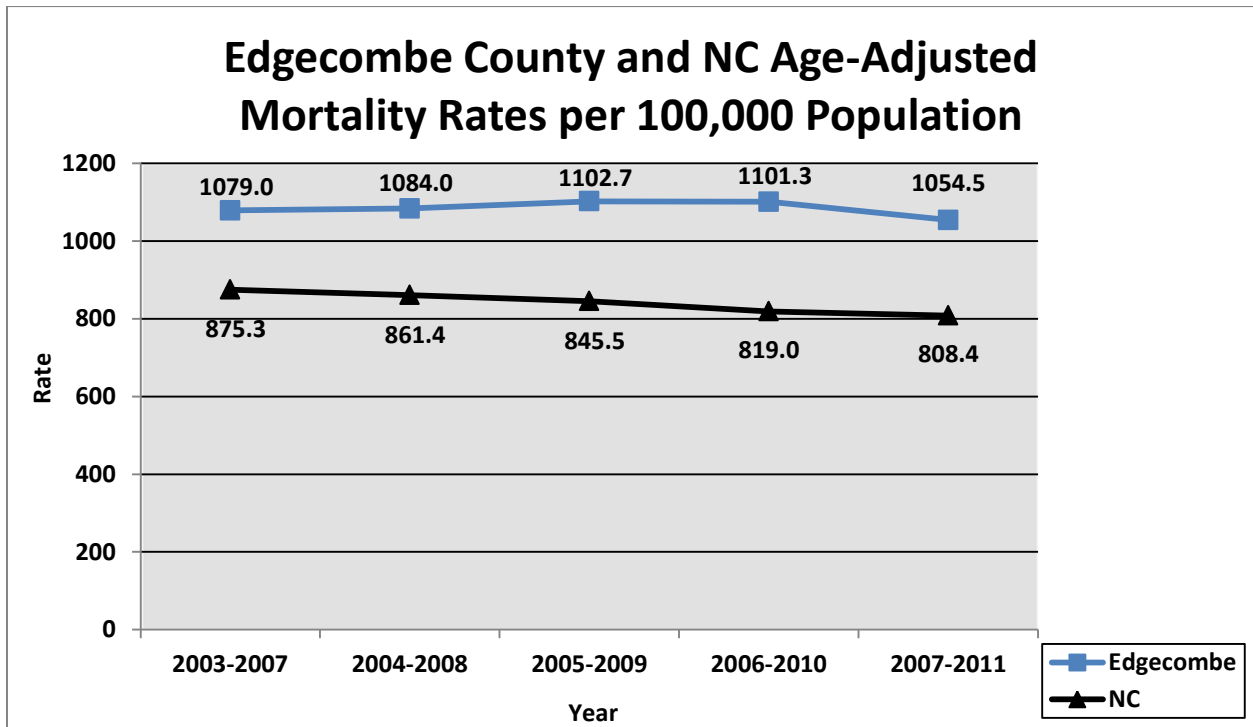
The table below compares fetal, neonatal, and postneonatal mortality rates for Edgecombe County and North Carolina in four-year averages from 1999 to 2011. For each of the three time periods, Edgecombe County has experienced higher fetal and neonatal mortality rates than North Carolina. Moreover, the largest portion of infant mortality deaths in Edgecombe County are exhibited in the fetal period.¹⁹

Year	Edgecombe			North Carolina		
	Fetal	Neonatal	Postneonatal	Fetal	Neonatal	Postneonatal
2007-2011	16.4	8.6	2.4	6.5	5.2	2.6
2003-2007	11.9	8.5	4.8	6.8	5.8	2.7
1999-2003	11.8	7.6	3.6	7.3	6.0	2.5

¹⁹ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

General Mortality Rates

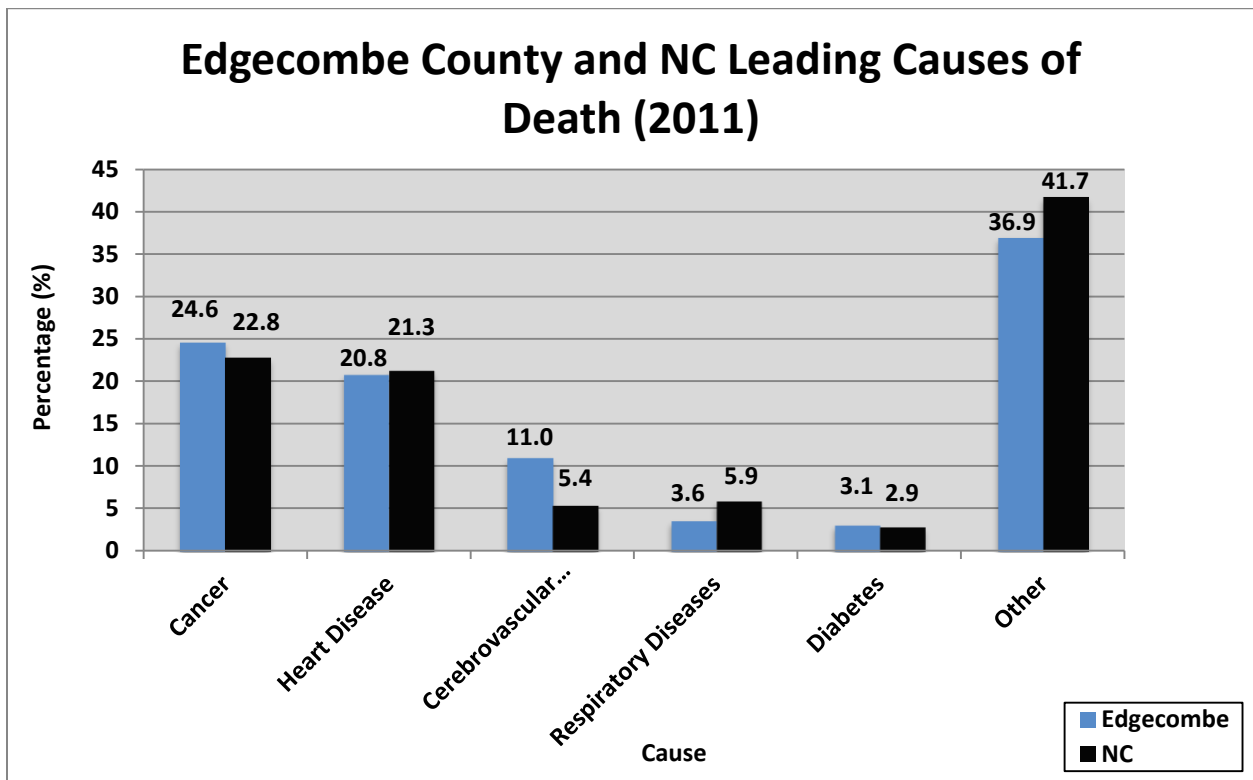
The chart below depicts the overall age-adjusted mortality rates for Edgecombe County and North Carolina in five-year averages from 2003 to 2011. Each of the five-year averages for Edgecombe County was more than 100 deaths higher per 100,000 population than North Carolina. The 2007-2011 average death rate in Edgecombe County was 1,054.5 per 100,000 population compared to 808.4 per 100,000 population in North Carolina. Overall, the general mortality rates for Edgecombe County have remained relatively constant since 2003.²⁰



²⁰ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

Leading Causes of Death

A comparison of the top five leading causes of death for all ages in Edgecombe County and North Carolina are depicted in the graph below. Cancer (24.6 percent / 22.8 percent) and heart disease (20.8 percent / 21.3 percent) are the top two leading causes of death in both Edgecombe County and North Carolina, respectively. Edgecombe County exceeds the state in deaths caused by cancer, cerebrovascular disease, and diabetes. Conversely, North Carolina exceeds Edgecombe County in deaths caused by heart disease, respiratory diseases, and other causes of death. Moreover, the percentage of deaths caused by cerebrovascular disease in Edgecombe County is more than two times higher than the state.²¹



²¹ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

Age-Specific Death Rates

The table below presents the top three leading causes of death in Edgecombe County categorized by age group from 2007-2011 and compared to the state. For the population age 0-19 in Edgecombe County, the death rates per 100,000 for perinatal conditions (35.4), motor vehicle deaths (9.2), and birth defects (9.2) were higher than those for the state. For the population age 20-39 in Edgecombe County, the death rates per 100,000 for heart disease (25.4), cancer (20.6), and homicide (20.6) were higher than those for the state. For the population age 40-64 in Edgecombe County, the death rates per 100,000 for cancer (243.2), heart disease (174.0), and diabetes (46.1) were higher than those for the state. For the population age 65-84 in Edgecombe County, the death rates per 100,000 for cancer (1,132.2), heart disease (970.9), and cerebrovascular disease (391.7) were higher than those for the state. For the population age 85 and older in Edgecombe County, the death rates per 100,000 for heart disease (4335.0), cerebrovascular disease (2,375.7), and cancer (1,641.0) were higher than those for the state.²²

Leading Causes of Death in Edgecombe County by Age (2007-2011)				
Age Groups	Cause of Death	# of Deaths (2007-2011)	2007-2011 Death Rate	
			Edgecombe	NC
0-19	Perinatal Cond.	27	35.4	19.9
	Motor Vehicle	7	9.2	7.9
	Birth Defects	7	9.2	8.8
20-39	Heart Disease	16	25.4	10.0
	Cancer	13	20.6	11.0
	Motor Vehicle	13	20.6	21.1
	Homicide	13	20.6	12.2
40-64	Cancer	232	243.2	179.2
	Heart Disease	166	174.0	120.5
	Diabetes	44	46.1	20.5
65-84	Cancer	344	1132.2	898.0
	Heart Disease	295	970.9	717.9
	Cerebrovascular	119	391.7	187.7
85+	Heart Disease	177	4335.0	3871.4
	Cerebrovascular	97	2375.7	1146.8
	Cancer	67	1641.0	1638.4

²² NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

Race/Sex-Specific Death Rates

The leading causes of death by race and sex from 2007-2011 can be found in the table below. Heart disease is the leading cause of death for white males and African-American females, whereas cancer is the leading cause of death for African-American males and white females. African-American males and females have diabetes as a top five leading cause of death. Additionally, white males and females have respiratory diseases as a more prominent cause of death than African-American males and females. Overall, the death rates for cancer and heart disease are substantially higher for white and African-American males than for white and African-American females.²³

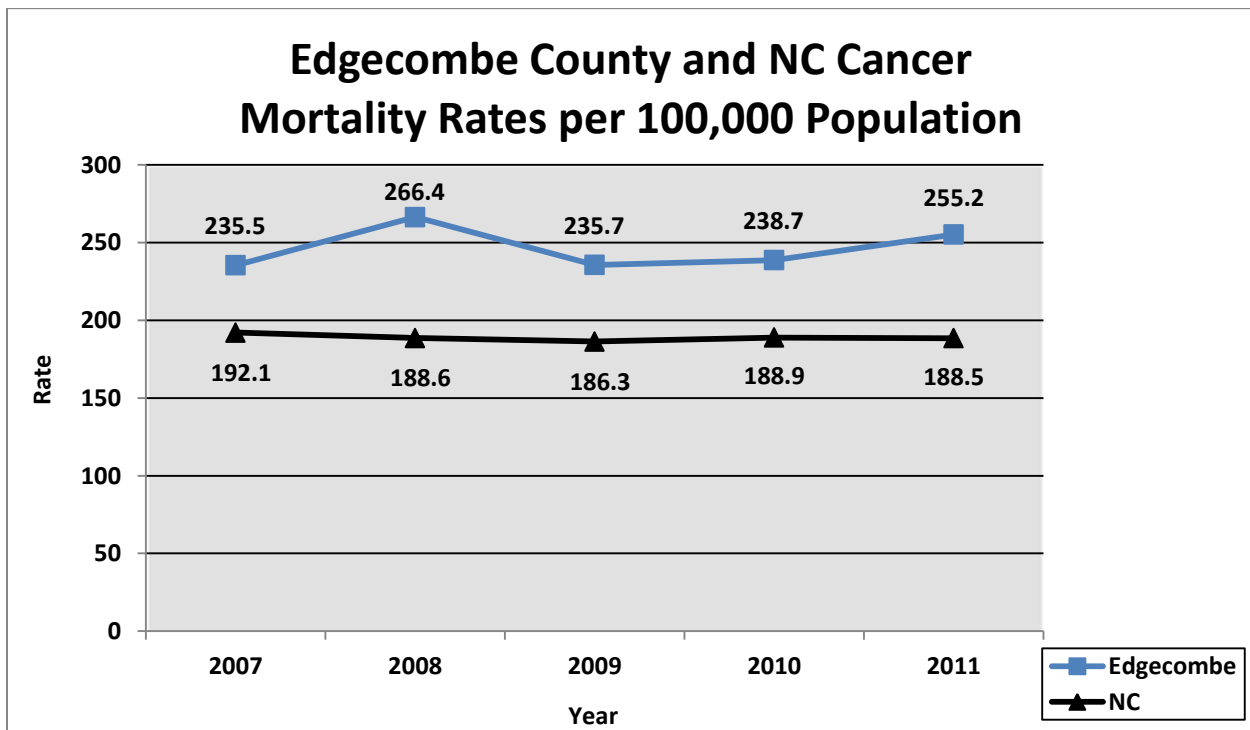
The Five Leading Causes of Death in Edgecombe County by Race and Sex (2007-2011)				
	White Males	African-American Males	White Females	African-American Females
1	Heart Disease (226.4)	Cancer (293.2)	Cancer (146.6)	Heart Disease (167.5)
2	Cancer (220.7)	Heart Disease (271.6)	Heart Disease (137.5)	Cancer (164.0)
3	Respiratory Diseases (58.2)	Cerebrovascular Disease (67.9)	Respiratory Diseases (47.3)	Cerebrovascular Disease (57.7)
4	Cerebrovascular Disease (43.3)	Diabetes (50.9)	Cerebrovascular Disease (42.0)	Diabetes (40.4)
5	Injuries (43.3)	Respiratory Diseases (43.9)	Alzheimer's Disease (33.4)	Nephritis (33.7)

²³ NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

Health Conditions

Cancer

The leading cause of death in Edgecombe County is cancer. The following graph depicts the cancer mortality rates for Edgecombe County and North Carolina from 2007 to 2011 per 100,000 population. From 2007-2011, Edgecombe County experienced an increase in cancer mortality rates of almost 20 deaths per 100,000 population. As of 2011, the cancer mortality rate in Edgecombe County was nearly 67 deaths per 100,000 population higher than the state.²⁴



²⁴ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

The following tables report the cancer incidence rates, mortality rates, and projected new cases and deaths by type of cancer. From 2006 to 2010, the incidence rates for prostate, breast, lung, and colon cancers were higher than the state. From 2007-2011, the mortality rates for all four major types of cancer were also higher than the state. Edgecombe County is projected to have 347 new cancer cases and 125 cancer deaths in 2013. Breast cancer (60 cases) is projected to have the most new cases in 2013, whereas lung cancer (39 deaths) is projected to have the most deaths in 2013 for Edgecombe County.²⁵

Cancer Incidence Rates by Type per 100,000 Population (2006-2010)				
Place	Prostate	Breast	Lung	Colon
Edgecombe	181.3	162.6	84.8	56.5
NC	153.7	155.9	74.8	43.4

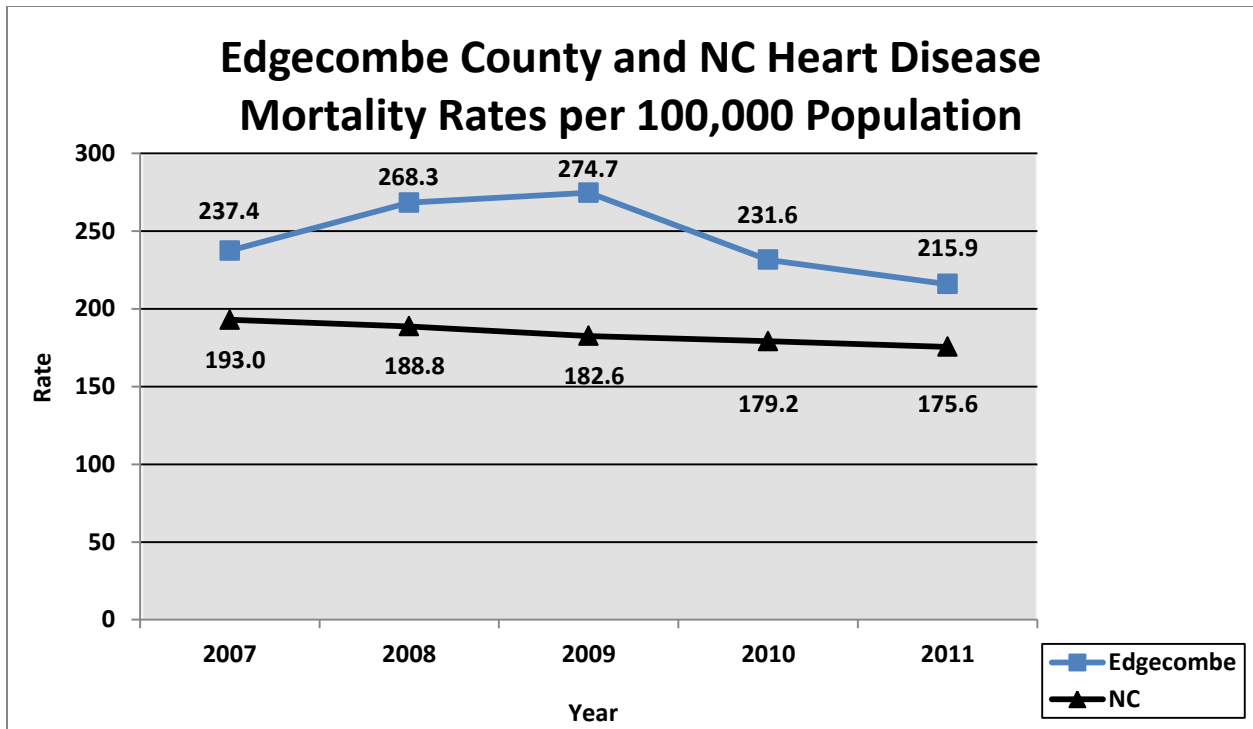
Cancer Mortality Rates by Type per 100,000 Population (2007-2011)				
Place	Lung	Prostate	Breast	Colon
Edgecombe	64.4	37.0	34.5	20.0
NC	54.6	24.4	22.8	15.3

Projected New Cancer Cases and Deaths - 2013				
	Projected New Cases		Projected Deaths	
	Edgecombe	NC	Edgecombe	NC
Total	347	56,164	125	20,067
Lung	53	8,559	39	6,186
Breast	60	9,339	9	1,410
Prostate	50	8,316	6	1,022
Colon	30	4,852	11	1,694

²⁵ NC Division of Public Health, State Center for Health Statistics, Cancer Data. Available at: <http://www.schs.state.nc.us/schs/data/cancer.cfm>

Heart Disease

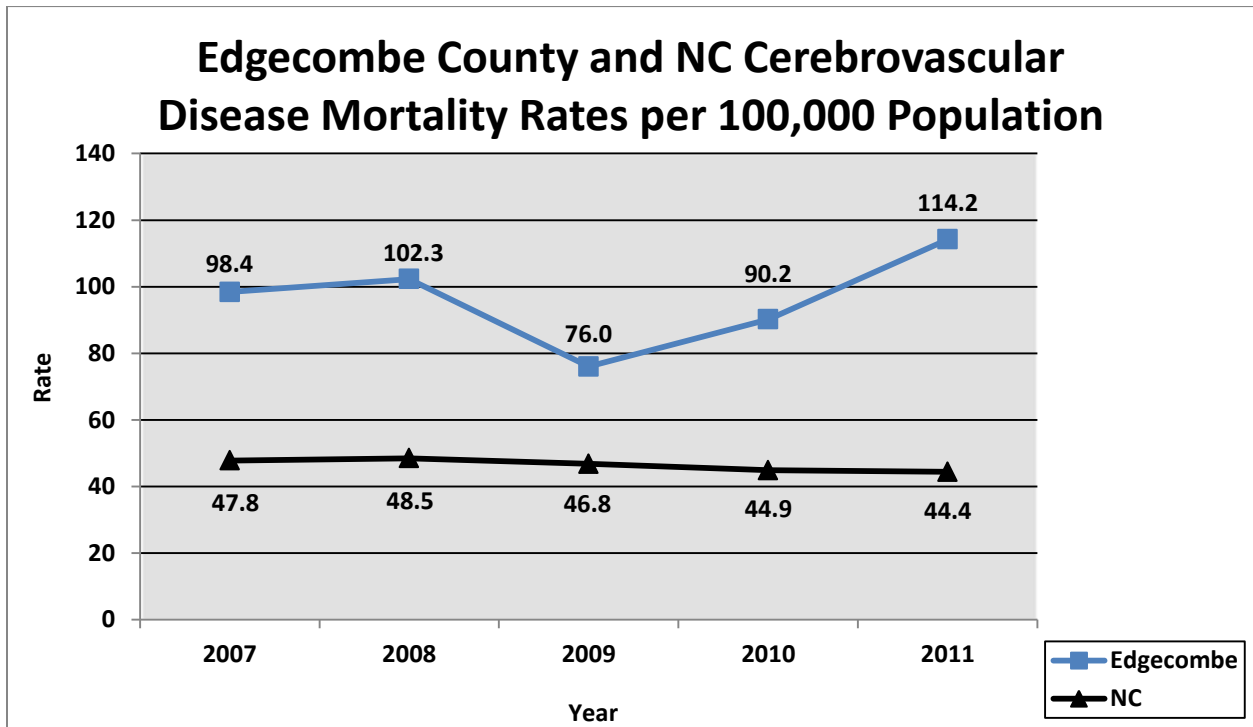
The second leading cause of death in Edgecombe County is heart disease. The following graph depicts the heart disease mortality rates for Edgecombe County and North Carolina from 2007-2011. Although the heart disease mortality rates in Edgecombe County are relatively high, the rates have decreased dramatically since 2009. As of 2011, the heart disease mortality rate for Edgecombe County was higher than the state by almost 41 deaths per 100,000 population.²⁶



²⁶ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

Cerebrovascular Disease

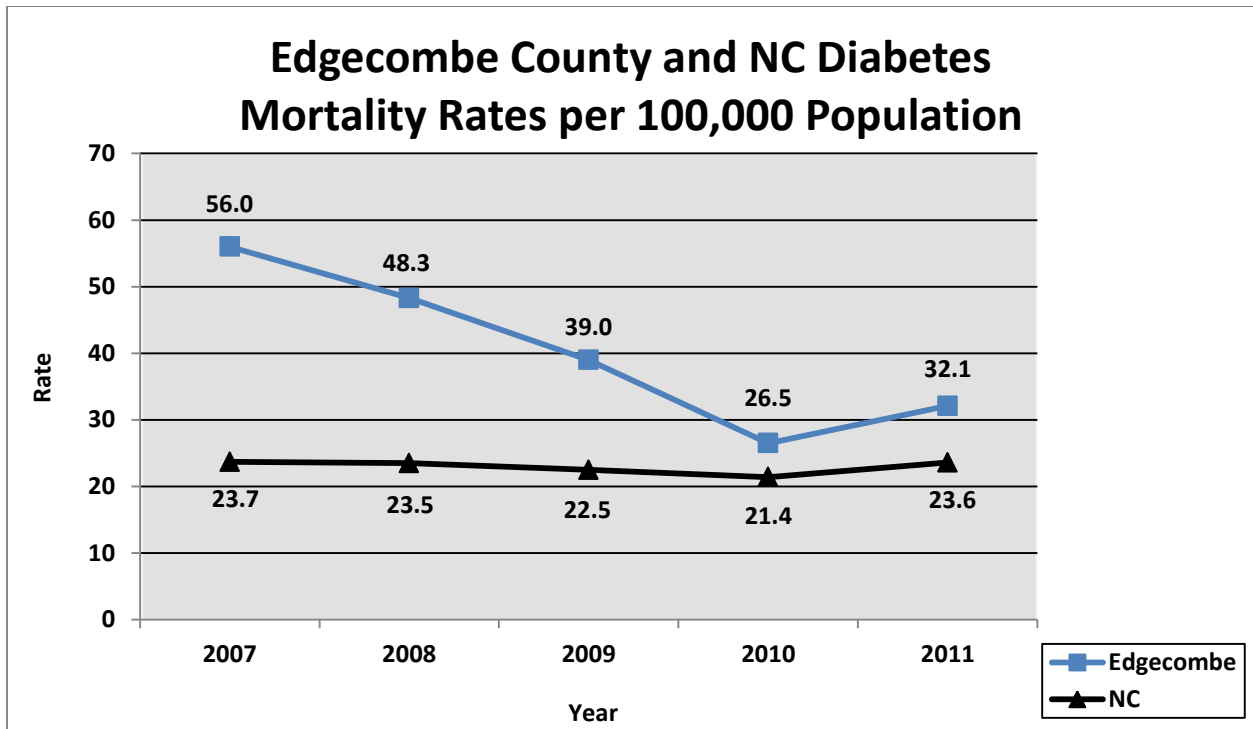
The third leading cause of death in Edgecombe County is cerebrovascular disease. The graph below shows a comparison of the cerebrovascular disease mortality rates for Edgecombe County and North Carolina from 2007-2011. Since 2009, Edgecombe County has experienced a substantial increase in cerebrovascular disease mortality rates of almost 39 deaths per 100,000 population. As of 2011, Edgecombe County's cerebrovascular mortality rate was almost three times that of North Carolina.²⁷



²⁷ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

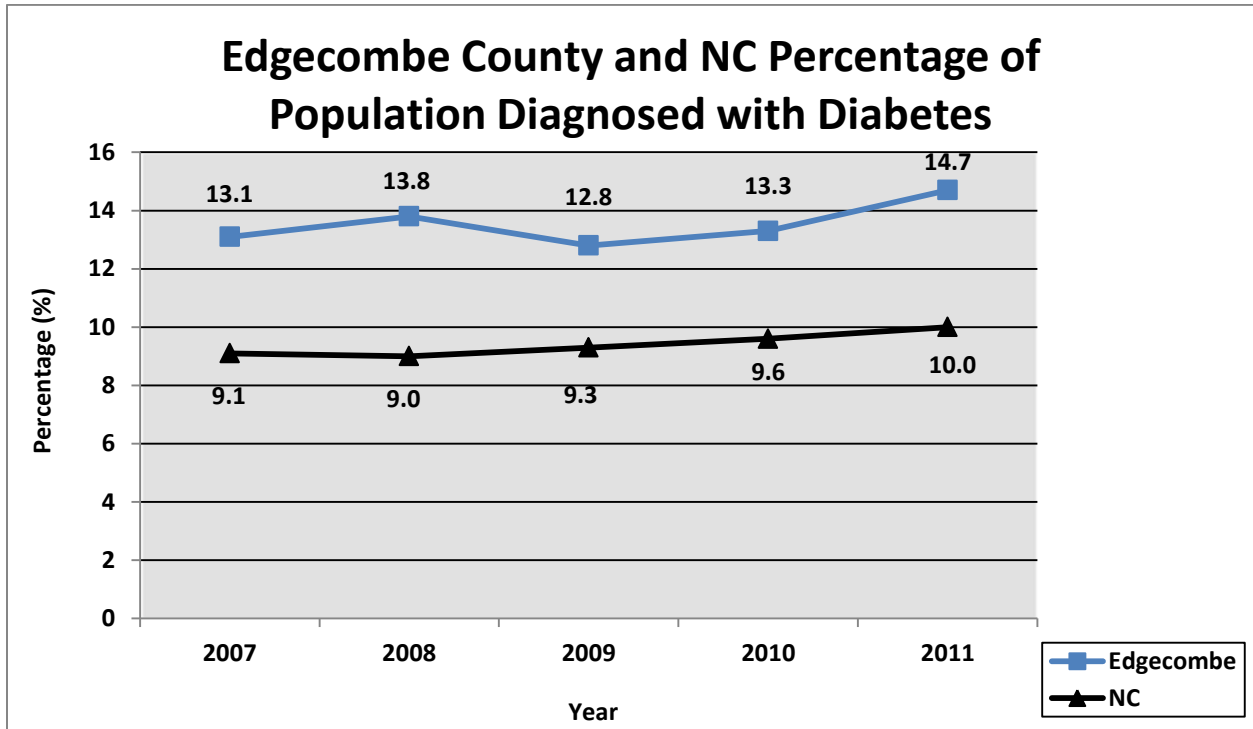
Diabetes

The fifth leading cause of death in Edgecombe County is diabetes. The graph below depicts the diabetes mortality rates for Edgecombe County and North Carolina from 2007-2011. The diabetes mortality rate in Edgecombe County has decreased by about 24 deaths per 100,000 population since 2007. As of 2011, the diabetes mortality rate in Edgecombe County was marginally higher than North Carolina.²⁸



²⁸ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

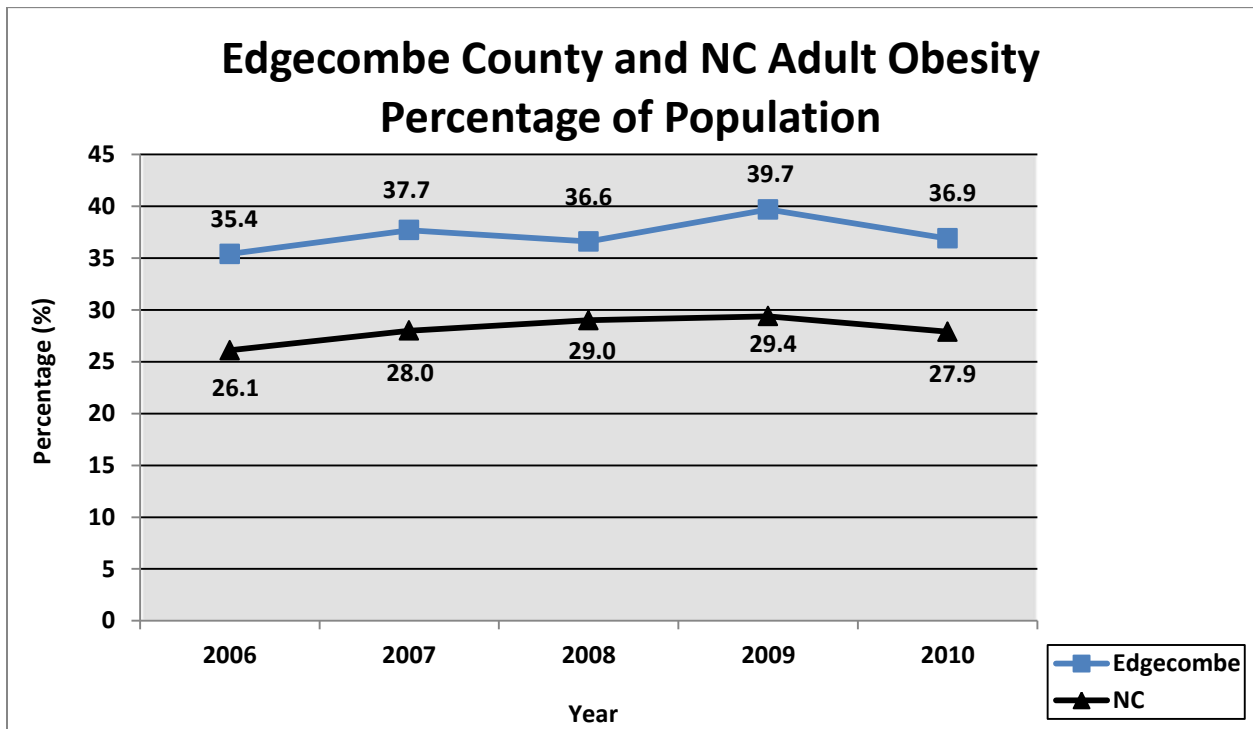
Moreover, the next graph shows a comparison of the percentage of the population diagnosed with diabetes for Edgecombe County and North Carolina. From 2007-2011, Edgecombe County has demonstrated a consistently higher percentage of residents having diabetes than the state. Furthermore, the percentage of Edgecombe County residents diagnosed with diabetes has risen from 13.1 percent in 2007 to 14.6 percent in 2011.²⁹



²⁹ Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/>

Overweight/Obesity

Obesity has been shown to contribute to several of the leading causes of death including heart disease, some cancers, and diabetes. The graph below depicts a comparison between Edgecombe County and North Carolina with respect to the percentage of population reporting obesity from 2006 to 2010. The percentage of obese residents in Edgecombe County has remained relatively constant from 2006 to 2010, but also higher than the state. As of 2010, 36.9 percent of Edgecombe County residents were obese, compared to 27.9 percent of North Carolina residents.³⁰

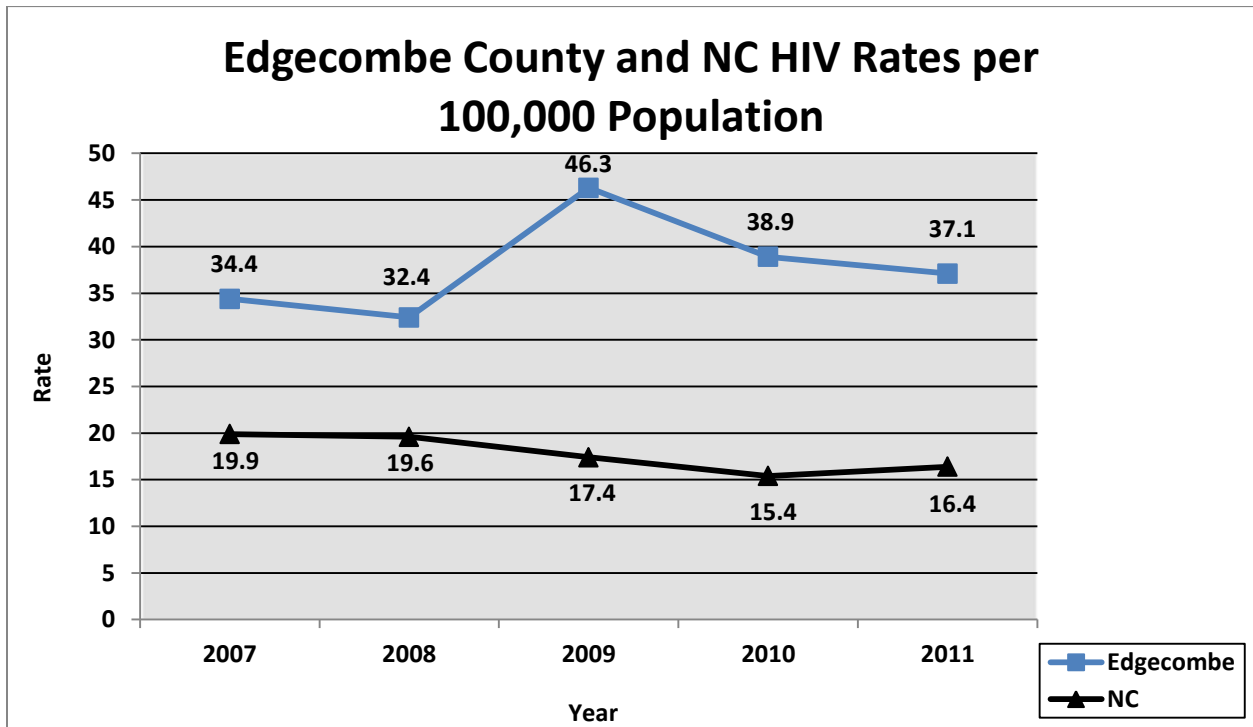


³⁰ Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/>

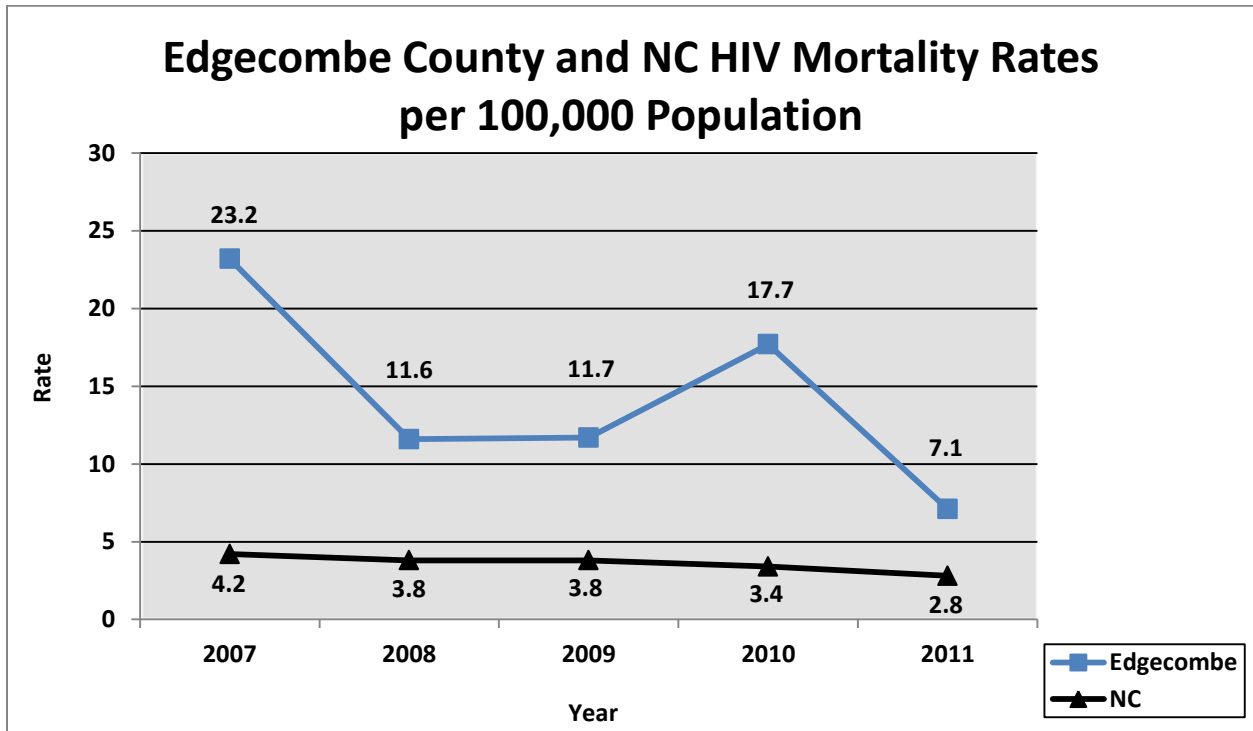
Communicable Diseases

HIV

The following graphs depict the HIV rates and HIV mortality rates from 2007 to 2011, respectively. The HIV rate of Edgecombe County has decreased from 46.3 to 37.1 per 100,000 population in the 2009-2011 time period. However, as of 2011, the HIV rate in Edgecombe County was more than double that of the state.



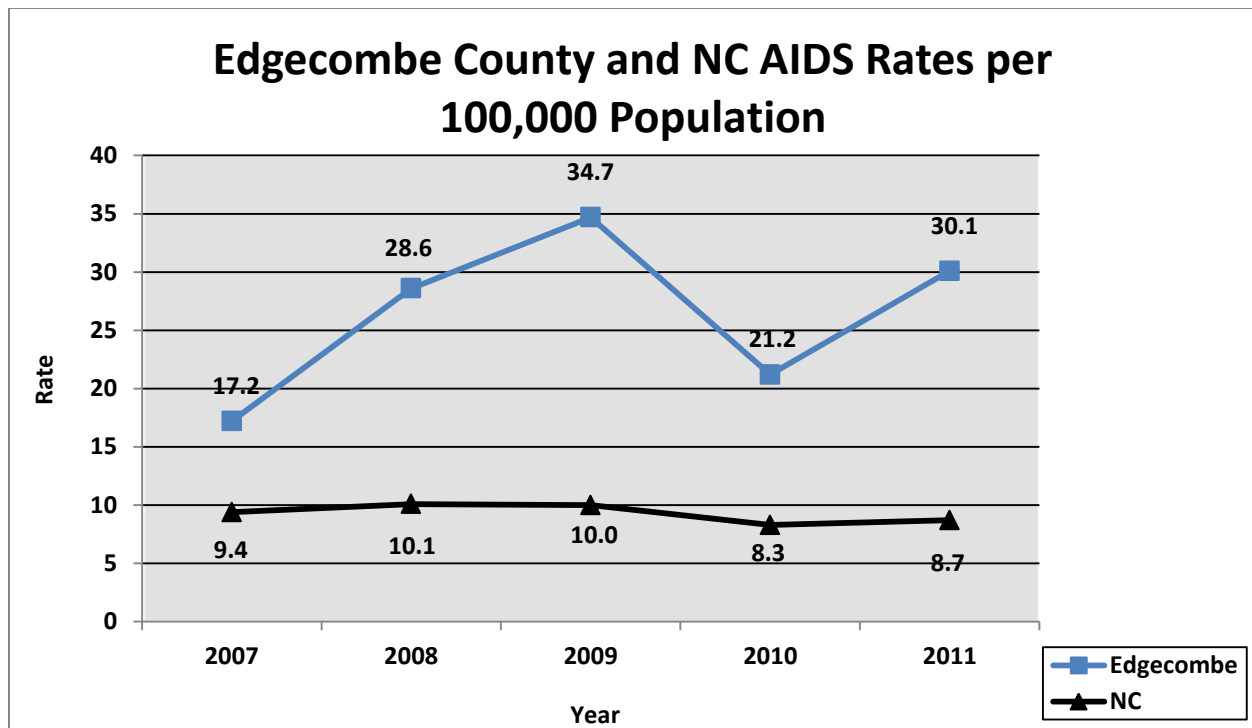
Furthermore, the HIV mortality rate has decreased dramatically since 2007 from 23.2 to 7.1 per 100,000 population. As of 2011, the HIV mortality rate in Edgecombe County was also more than double that of the state.³¹



³¹ NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

AIDS

The AIDS rates per 100,000 population in Edgecombe County and North Carolina from 2007-2011 are presented in the following graph. Although the AIDS rate in Edgecombe County has fluctuated since 2007, it has increased from 17.2 in 2007 to 30.1 per 100,000 population in 2011. As of 2011, the AIDS rate in Edgecombe County was more than three times higher than the state.³²

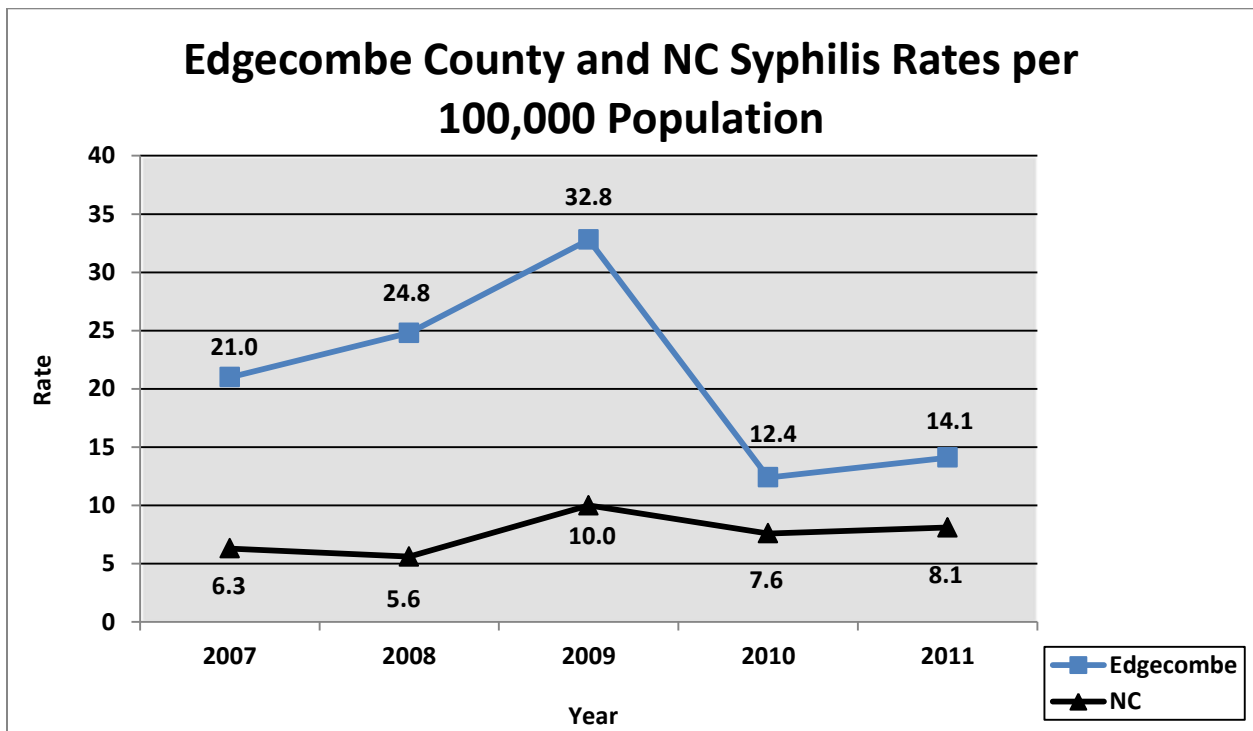


³² NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

STDs

Syphilis:

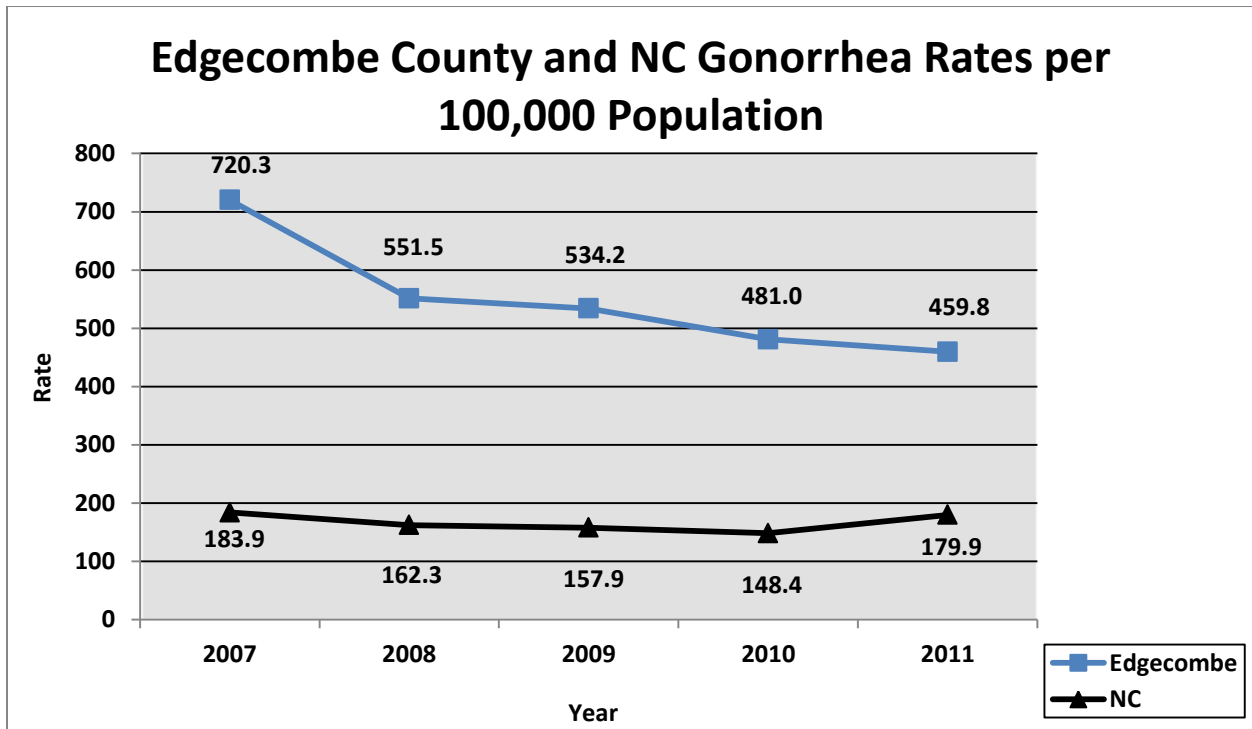
Sexually transmitted diseases have been identified as a primary health concern in Edgecombe County, as the rates of the three major STDs (i.e., syphilis, gonorrhea, and chlamydia) are substantially higher than state. The following graph depicts the syphilis rates per 100,000 population for Edgecombe County and North Carolina from 2007 to 2011. Edgecombe County has experienced a dramatic decrease in syphilis rates since 2009, with a decrease of 18.7 per 100,000 population from 2009 to 2011. As of 2011, Edgecombe County has a syphilis rate of 14.1 compared to 8.1 for the state per 100,000 population.³³



³³ NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

Gonorrhea:

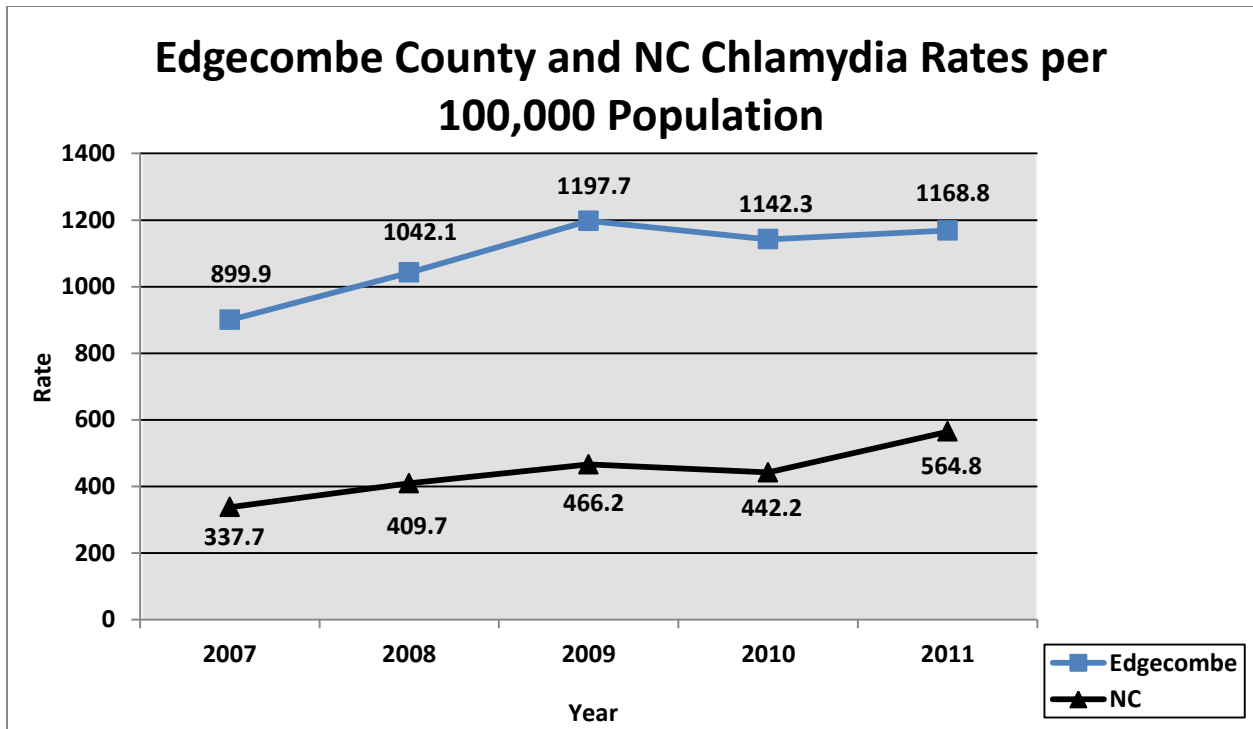
The following graph reports the gonorrhea rates per 100,000 population for Edgecombe County and North Carolina from 2007 to 2011. The gonorrhea rate in Edgecombe County has steadily declined since 2007 (720.3 per 100,000 population) to 459.8 per 100,000 population in 2011. As of 2011, the gonorrhea rate in Edgecombe County was approximately 280 per population higher than the state.³⁴



³⁴ NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

Chlamydia:

The most prevalent sexually transmitted disease in Edgecombe County is chlamydia. The following graph depicts the chlamydia rates in Edgecombe County and North Carolina from 2007 to 2011. The chlamydia rate in Edgecombe County has grown by about 168 cases per 100,000 population since 2007. As of 2011, the chlamydia rate in Edgecombe County was more than double that of the state.³⁵

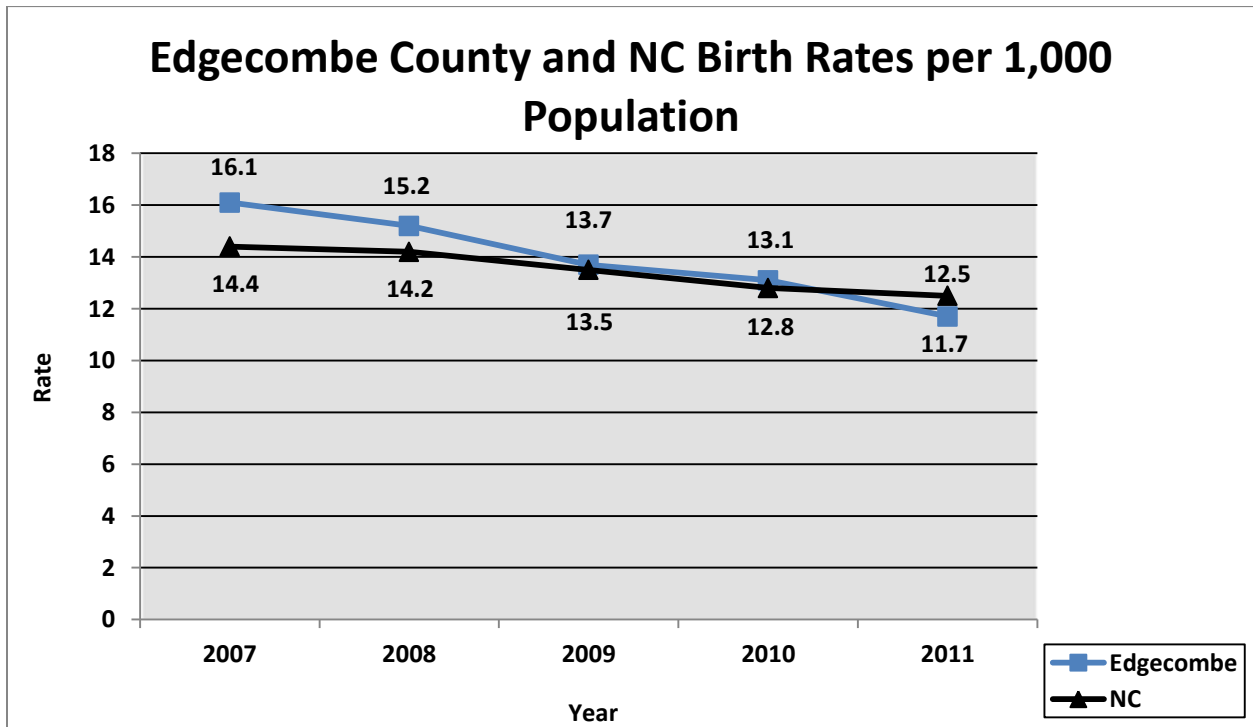


³⁵ NC Department of Health and Human Services, Facts and Figures. Available at: <http://epi.publichealth.nc.gov/cd/stds/figures.html#annual>

Maternal Health

Birth Rates

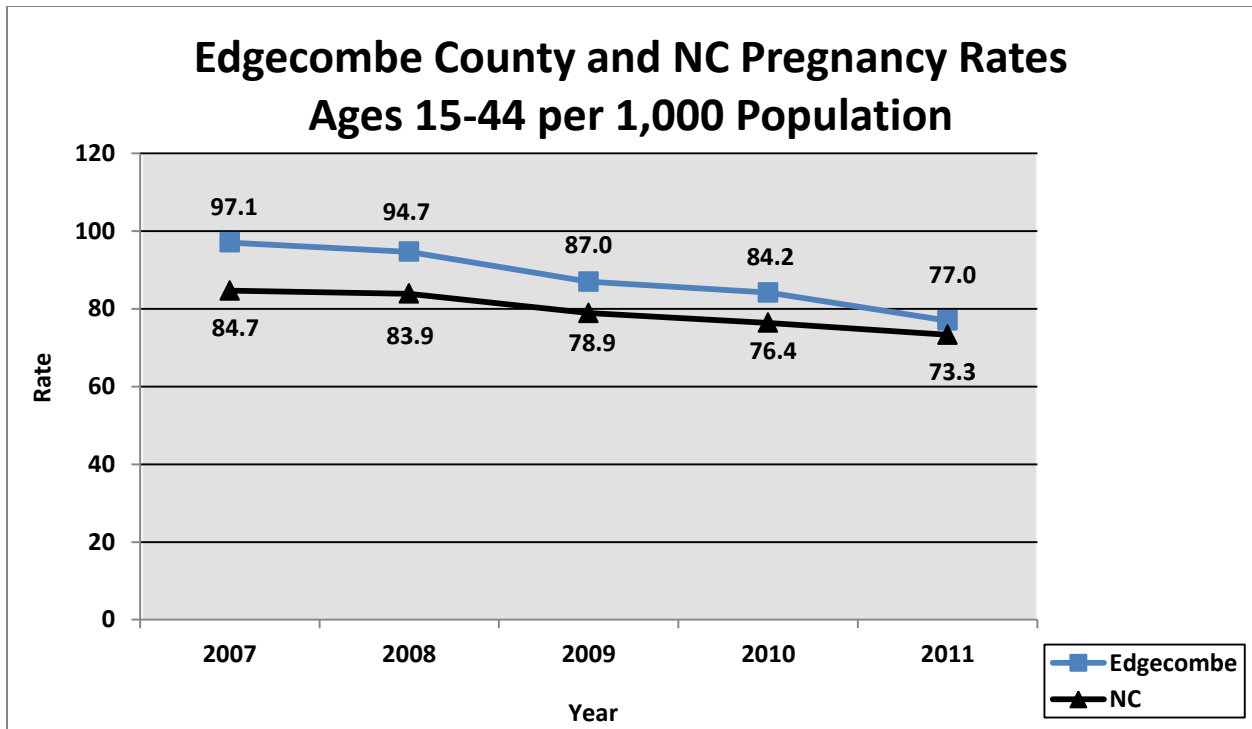
The following graph reports the overall birth rates per 1,000 population for Edgecombe County and North Carolina from 2007 to 2011. The birth rate in Edgecombe County has steadily decreased since 2007 by 3.6 births per 1,000 population. As of 2011, the birth rate for Edgecombe County (11.7) was marginally lower than that of the state (12.5).³⁶



³⁶ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

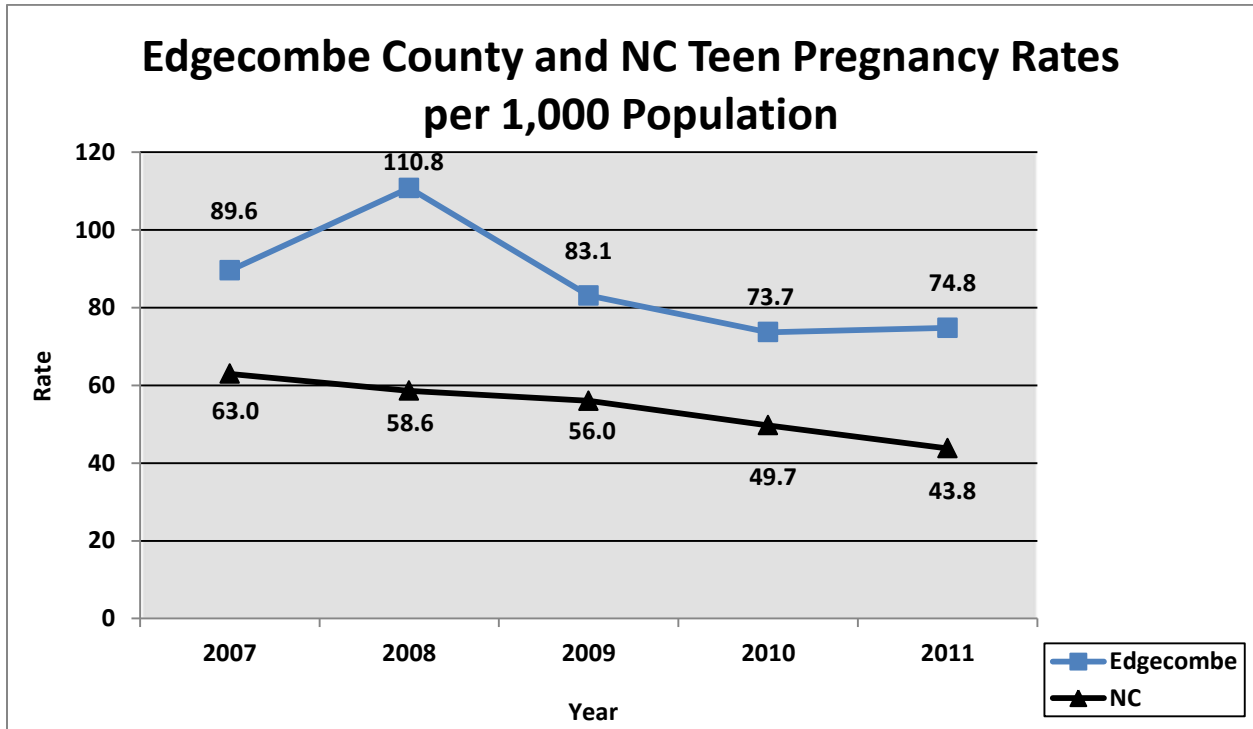
Pregnancy Rates

The pregnancy rates for females ages 15 to 44 in Edgecombe County and North Carolina from 2007 to 2011 are depicted in the graph below. Over the five year period, Edgecombe County has demonstrated a steady decline from 97.1 (2007) to 77.0 (2011) per 1,000 population. As of 2011, the pregnancy rate in Edgecombe County (77.0) was marginally higher than the state (73.3).³⁷



³⁷ NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

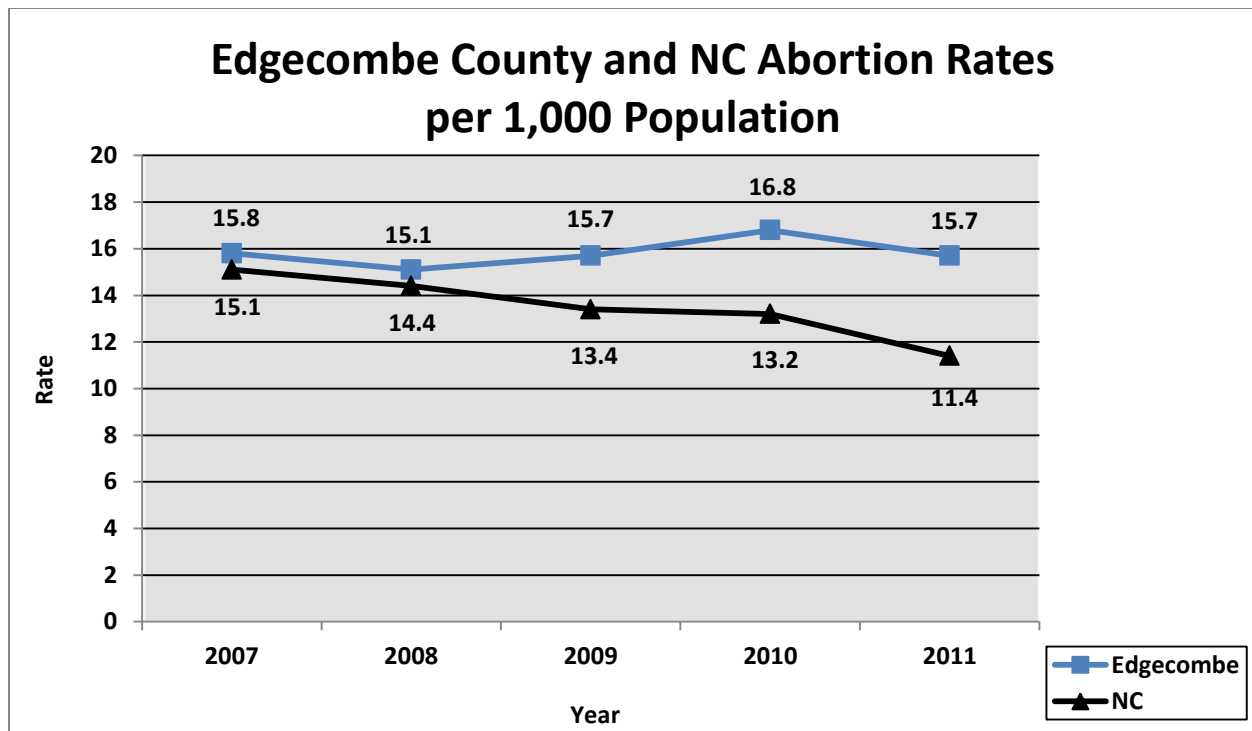
The next graph portrays the teen pregnancy rates per 1,000 population in Edgecombe County and North Carolina from 2007 to 2011. Teen pregnancy is defined as pregnancy that occurs and ends prior to the mother's 20th birthday. Edgecombe County experienced the highest teen pregnancy rate in 2008 at 110.8 teen pregnancies per 1,000 population. As of 2011, the teen pregnancy rate in Edgecombe County (74.8) was higher than the state (43.8).³⁸



³⁸ NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

Abortion Rates

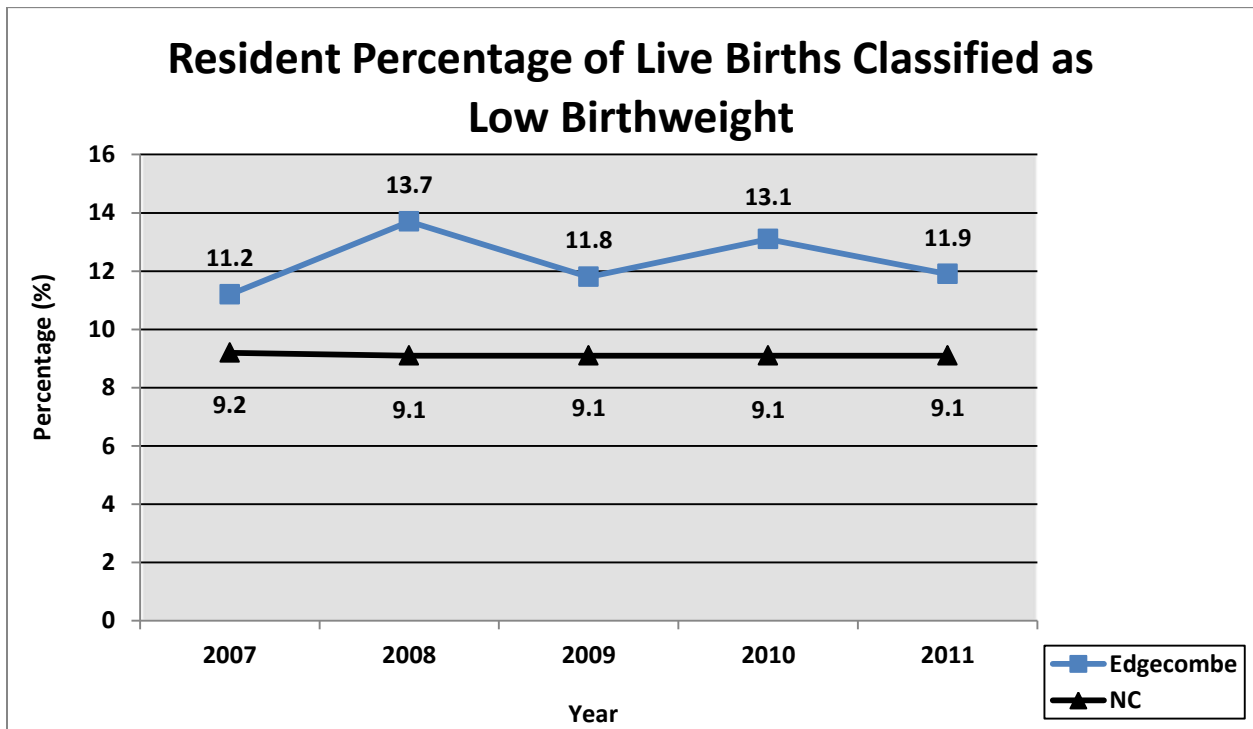
The following graph depicts the abortion rates per 1,000 population for Edgecombe County and North Carolina from 2007 to 2011. The abortion rates in Edgecombe County have remained relatively constant since 2007, and experience the highest rate in 2010 (16.8). As of 2011, the abortion rate in Edgecombe County was 15.7 compared to the state's rate of 11.4 per 1,000 population.³⁹



³⁹ NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

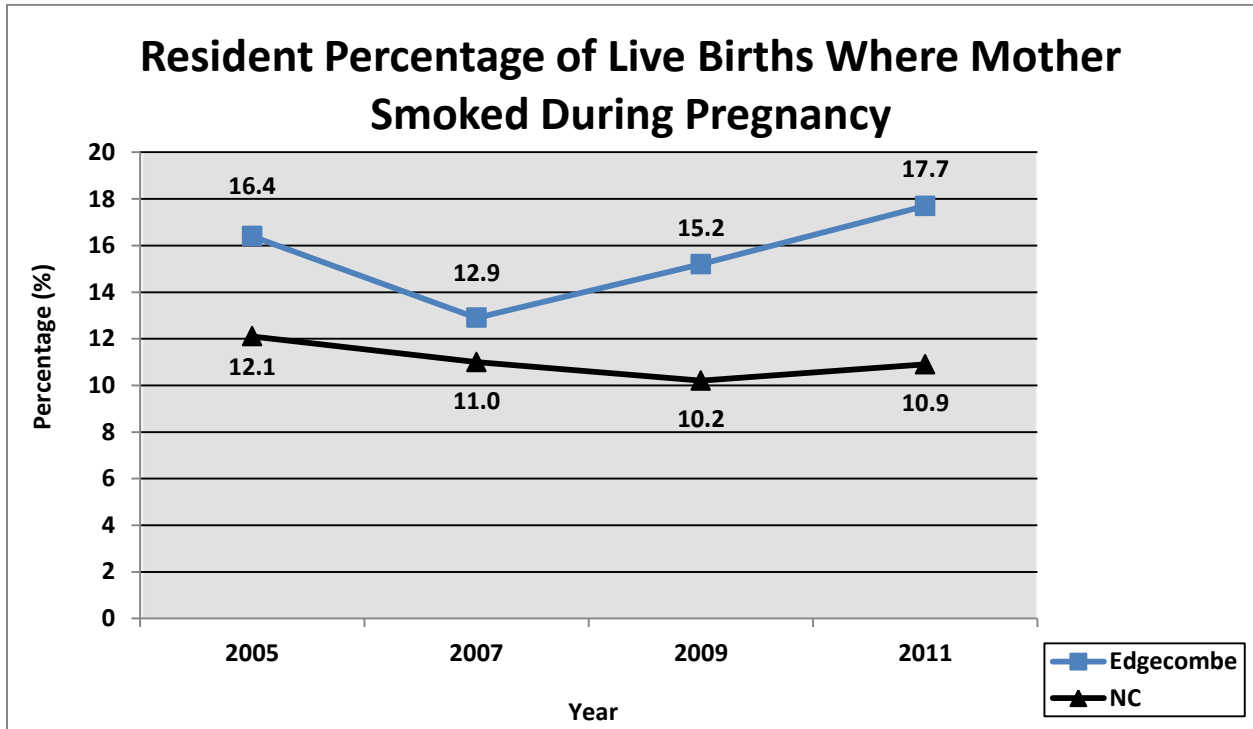
Maternal Health Indicators

The following graph details the percentage of resident live births classified as low birth weight in Edgecombe County and North Carolina from 2007-2011. Low birth weight is defined as birth weight of a newborn infant that is less than 5.5 pounds, regardless of gestational age. The percentage of low birth weights in Edgecombe County and the state have remained relatively constant across this time period. Since 2007, Edgecombe County's percentage of low birth weights has increased 0.7 percent. As of 2011, the percentage of low birth weights in Edgecombe County was 2.8 percent higher than the state.⁴⁰



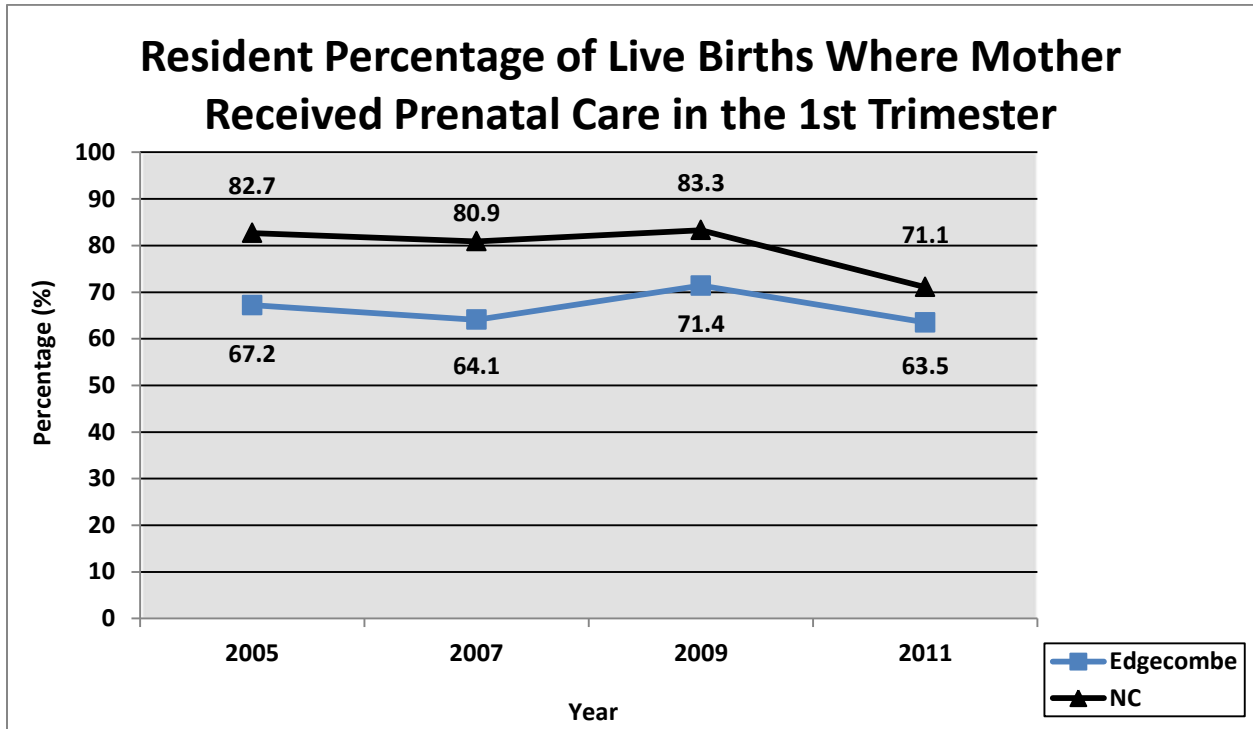
⁴⁰ NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Edgecombe.pdf>

The graph below portrays the percentage of resident live births where the mother smoked during pregnancy for Edgecombe County and North Carolina from 2005 to 2011. The percentage of mothers who smoked during pregnancy have steadily increased in Edgecombe County since 2007. As of 2011, 17.7 percent of mothers in Edgecombe County smoked during pregnancy, whereas 10.9 percent of mothers in North Carolina smoked during pregnancy.⁴¹



⁴¹ NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Edgecombe.pdf>

The graph below portrays the percentage of mothers who received prenatal care in the first trimester in Edgecombe County and North Carolina from 2005 to 2011. This percentage for Edgecombe County has decreased from 67.2 percent in 2005 to 63.5 percent in 2011. Furthermore, for this time period, Edgecombe County has had a consistently lower percentage of mothers receiving prenatal care in the first trimester than the state.⁴²



⁴² NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Edgecombe.pdf>

Other Health Status Data

Mental Health

The following tables report the number of Edgecombe County residents served in area mental health programs, alcohol / drug treatment centers, and state psychiatric hospitals from 2006 to 2010. The number of Edgecombe County residents served in area mental health programs has decreased slightly since 2006, but increased by over 400 from 2008 to 2010. Since 2006, the number of Edgecombe County residents receiving services from alcohol / drug treatment centers has nearly tripled. Finally, the number of residents served in state psychiatric hospitals declined dramatically from 293 in 2006 to 75 in 2010.⁴³

Edgecombe County Residents Served in Area Mental Health Programs				
2006	2007	2008	2009	2010
2,141	1,774	1,513	1,948	1,960

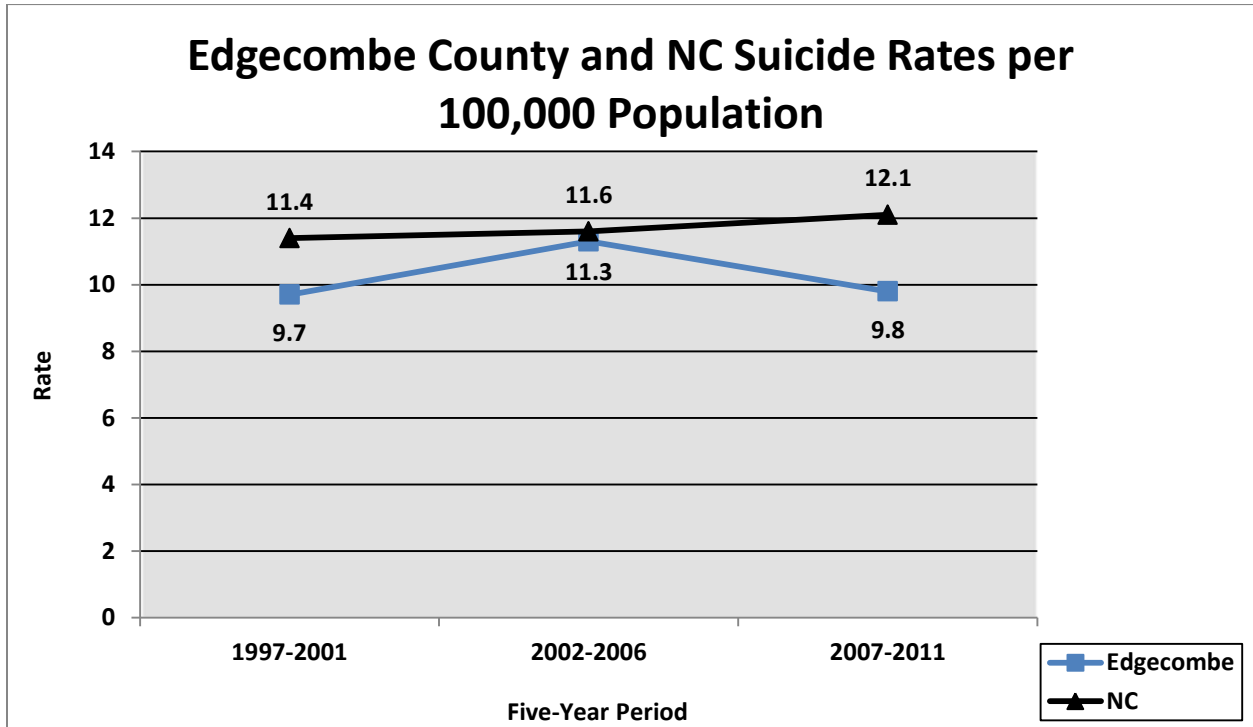
Edgecombe County Residents Served in NC Alcohol / Drug Treatment Centers				
2006	2007	2008	2009	2010
17	17	59	56	48

Edgecombe County Residents Served in State Psychiatric Hospitals				
2006	2007	2008	2009	2010
293	257	136	97	75

⁴³ Log Into North Carolina (LINC). Available at:
http://data.osbm.state.nc.us/pls/linc/dyn_linc_main.show

Suicide:

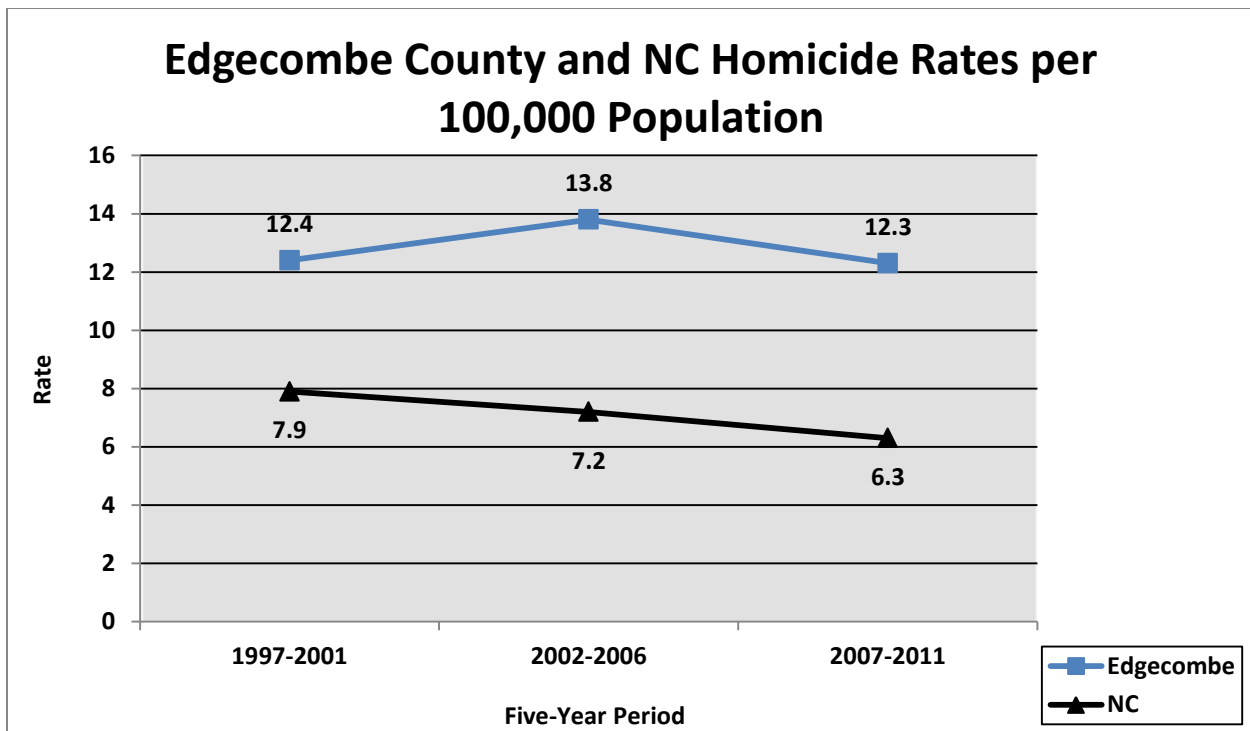
Another conceptualization of mental health can be identified by the suicide rates within a particular county. The following graph portrays the suicide rates per 100,000 population in Edgecombe County and North Carolina in five year periods from 1997 to 2011. The rates for Edgecombe County decreased slightly from the 2002-2006 time period (11.3) to the 2007-2011 time period (9.8). As of the 2007-2011 time period, Edgecombe County's suicide rates were 2.3 suicides per 100,000 population lower than the state.⁴⁴



⁴⁴ NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Edgecombe.pdf>

Homicide:

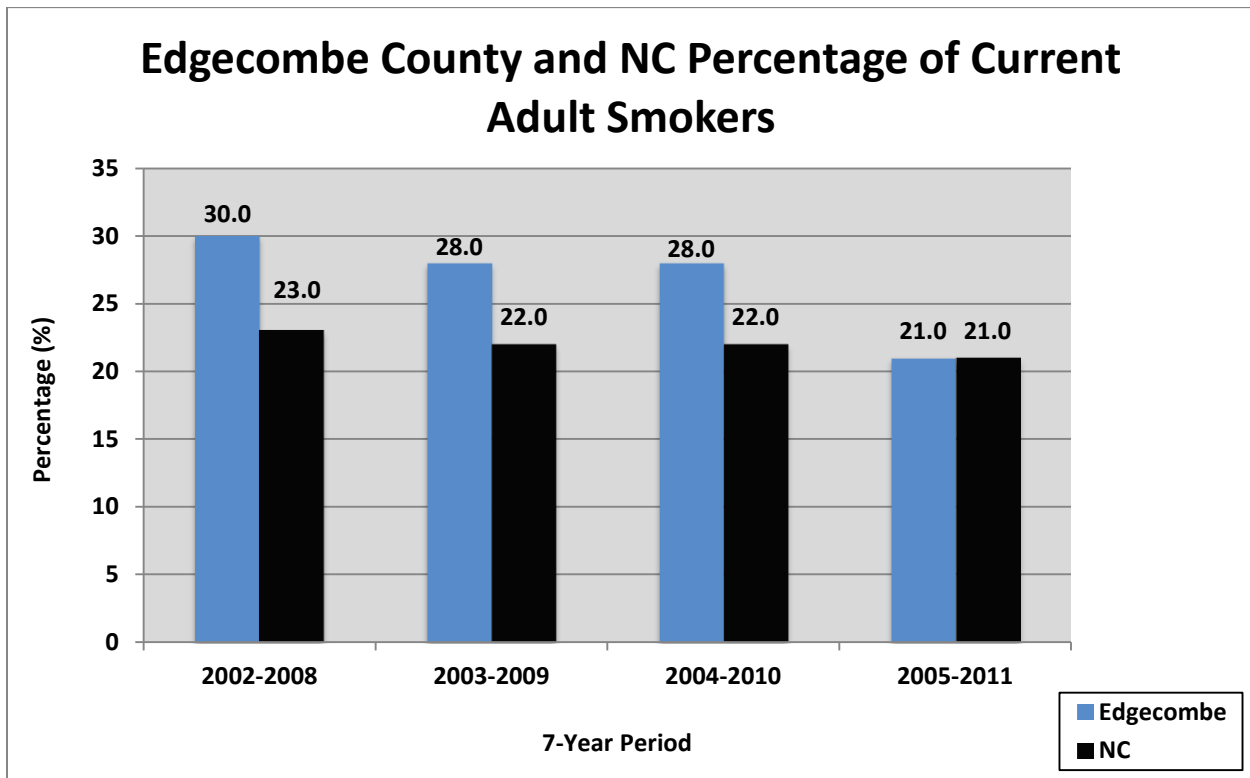
A third indicator of mental health can be determined by the homicide rates in a given county. The following graph depicts the homicide rates for Edgecombe County and North Carolina in five-year periods from 1997 to 2011. Over this time period, Edgecombe County has experienced considerably higher homicide rates than the state. As of the 2007-2011 time period, the homicide rates in Edgecombe County were nearly two times higher than the state.⁴⁵



⁴⁵ NC Division of Public Health, State Center for Health Statistics, Trends in Key Health Indicators. Available at: <http://www.schs.state.nc.us/schs/data/trends/pdf/Edgecombe.pdf>

Smoking/Tobacco

Smoking and tobacco use are notorious precipitating factors in cancer- and heart-related deaths, among a variety of other health-related issues. The following graph depicts the percentage of current adult smokers in Edgecombe County and North Carolina in seven-year periods from 2002 to 2011. The percentage of adult smokers in Edgecombe County has decreased by 9.0 percent from the 2002-2008 time period (30 percent) to the 2005-2011 time period (21 percent). As of the 2005-2011 time period, Edgecombe County and the state had the same percentage of adult smokers (21 percent).^{46 47}

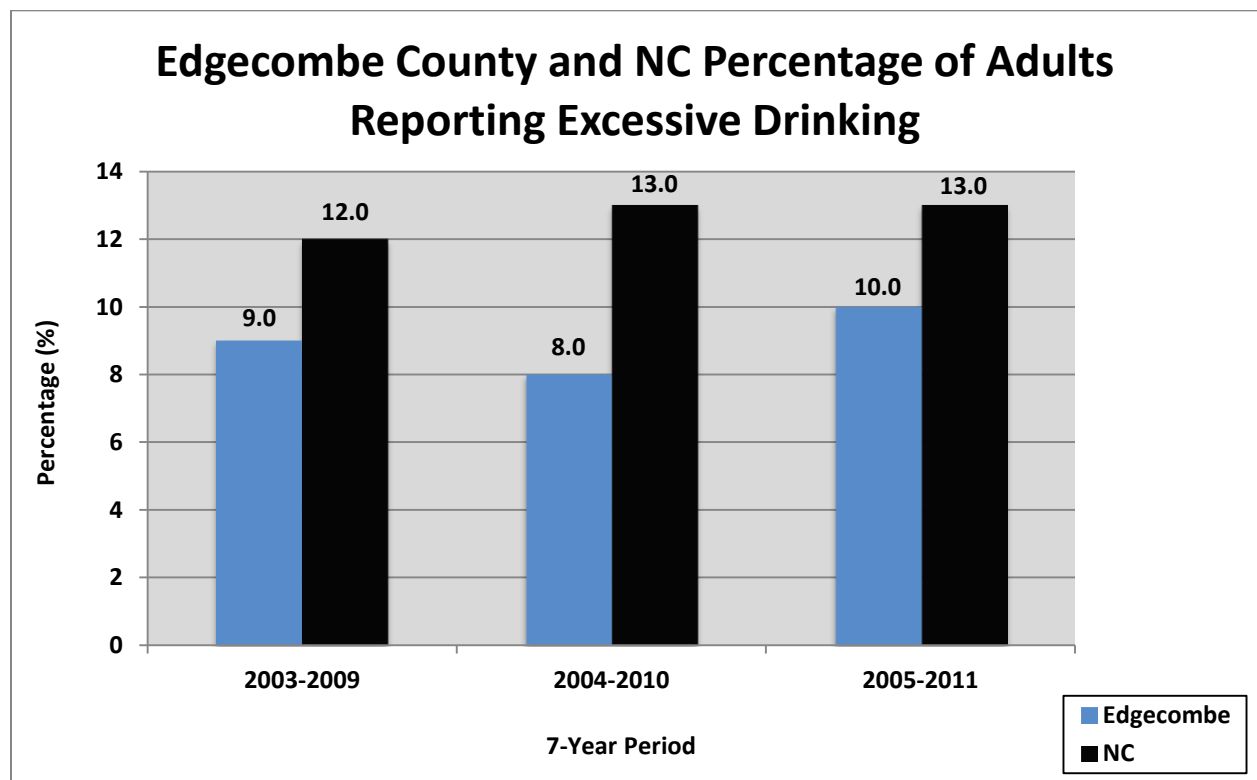


⁴⁶ NC Division of Public Health, State Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS). Available at: <http://www.schs.state.nc.us/schs/brfss/>

⁴⁷ County Health Rankings and Roadmaps. Available at: <http://www.countyhealthrankings.org/app/north-carolina/2013/edgecombe/county/outcomes/overall/snapshot/by-rank>

Excessive Drinking

The Behavioral Risk Factor Surveillance System survey conducted by the Centers for Disease Control (CDC) also collects information on excessive drinking, which is identified as either binge drinking (i.e., consuming more than 4 or 5 alcoholic beverages on a single occasion in the past 30 days for women and men, respectively) or heavy drinking (i.e., drinking more than 1 or 2 drinks per day on average for women and men, respectively). The following graph shows the percentage of adults reporting excessive drinking in Edgecombe County and North Carolina in seven-year periods from 2003-2011. Overall, Edgecombe County has experienced lower percentages of adults reporting excessive drinking than the state from 2002 to 2011. As of the 2005-2011 time period, Edgecombe County (10 percent) had three percent less adults reporting excessive drinking than the state (13 percent).^{48 49}

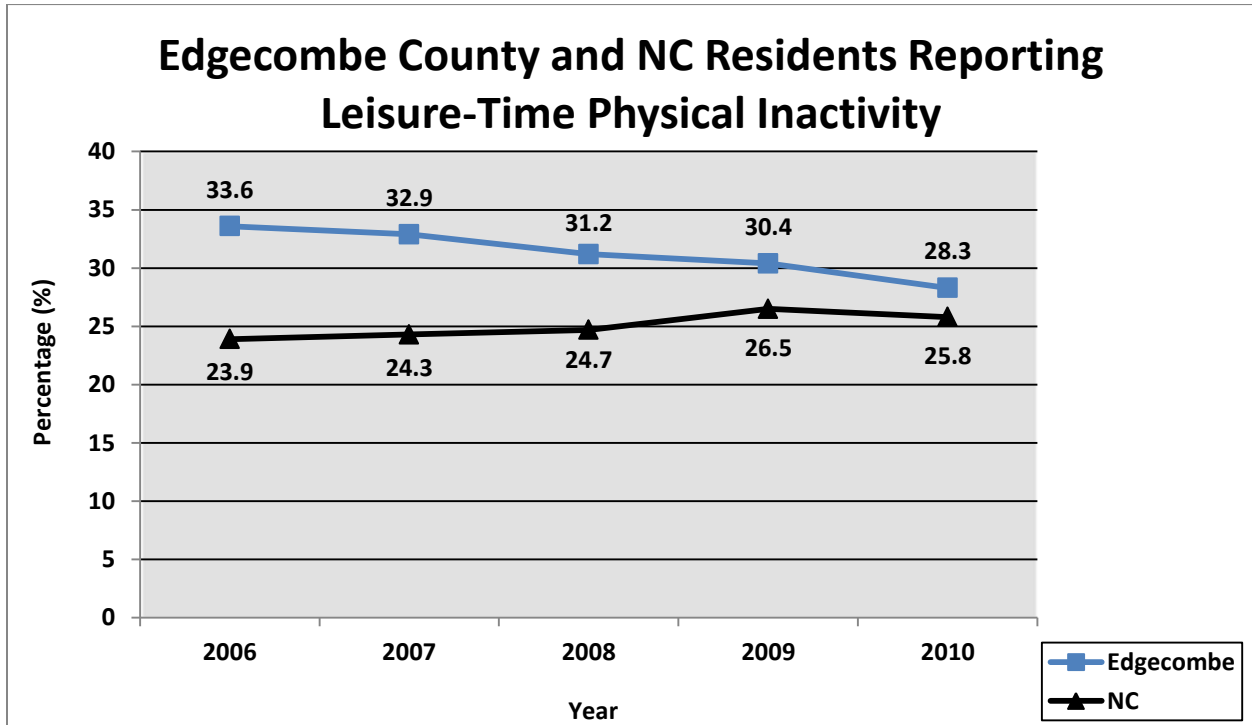


⁴⁸ NC Division of Public Health, State Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS). Available at: <http://www.schs.state.nc.us/schs/brfss/>

⁴⁹ County Health Rankings and Roadmaps. Available at: <http://www.countyhealthrankings.org/app/north-carolina/2013/edgecombe/county/outcomes/overall/snapshot/by-rank>

Exercise

The following graph depicts the percentage of Edgecombe County and North Carolina residents reporting leisure-time physical inactivity from 2006 to 2010. The percentage has decreased from 33.6 percent (2006) to 28.3 percent (2010). However, the percentage has remained higher than the state from 2006 to 2010. As of 2010, the percentage of residents reporting leisure-time physical inactivity was 2.5 percent higher in Edgecombe County than the state.^{50 51}

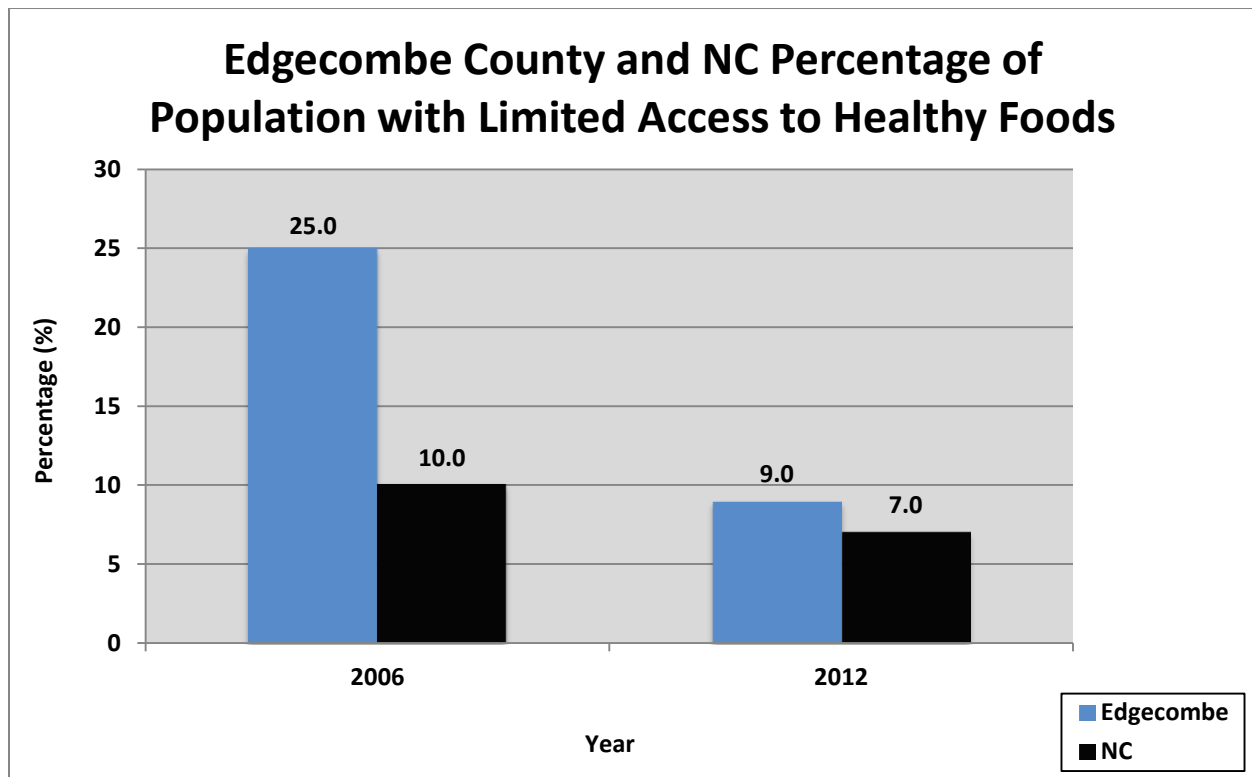


⁵⁰ NC Division of Public Health, State Center for Health Statistics, Behavioral Risk Factor Surveillance System (BRFSS). Available at: <http://www.schs.state.nc.us/schs/brfss/>

⁵¹ County Health Rankings and Roadmaps. Available at: <http://www.countyhealthrankings.org/app/north-carolina/2013/edgecombe/county/outcomes/overall/snapshot/by-rank>

Access to Healthy Foods

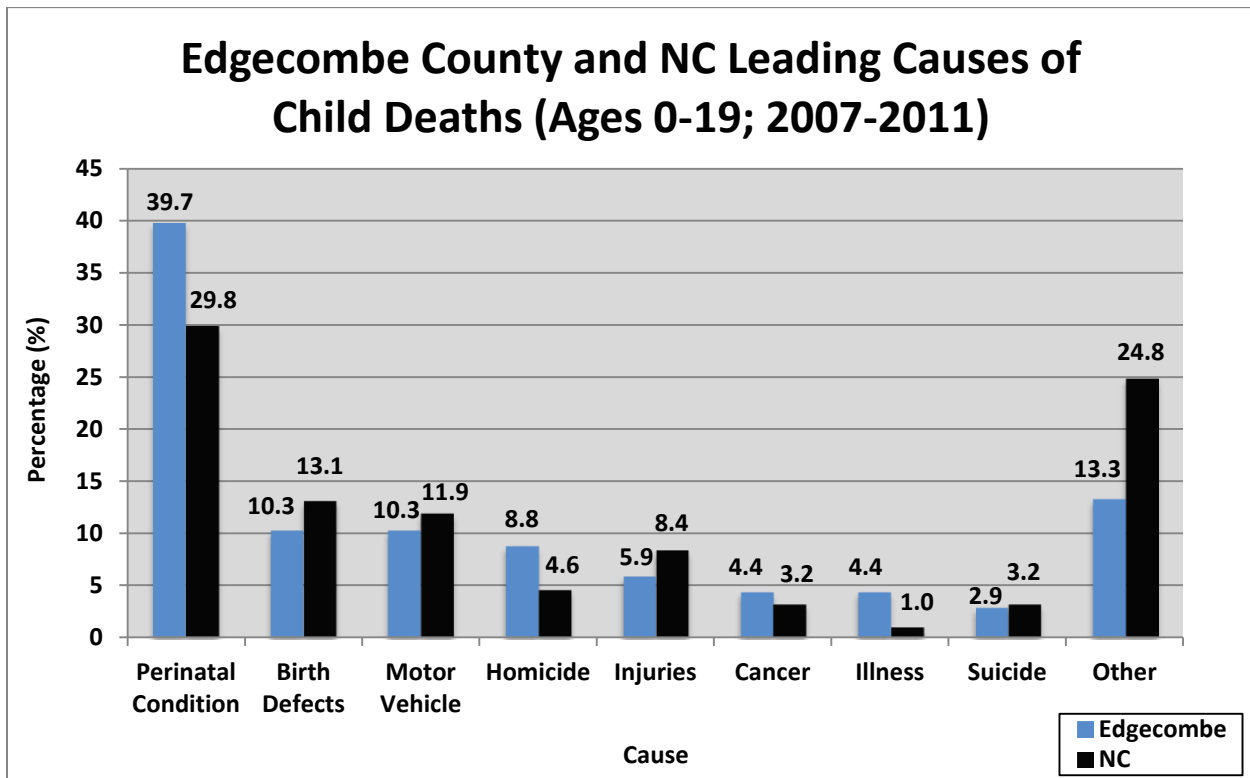
The following bar graph depicts the percentage of residents with limited access to healthy foods in Edgecombe County and North Carolina in 2006 and 2012. In 2006, one-fourth of the population in Edgecombe County reported that they had limited access to healthy foods, compared to 10 percent in North Carolina. As of 2012, the percentage of Edgecombe County residents reporting limited access to healthy foods decreased to 9 percent.⁵²



⁵² County Health Rankings and Roadmaps. Available at: <http://www.countyhealthrankings.org/app/north-carolina/2013/edgecombe/county/outcomes/overall/snapshot/by-rank>

Child Health

The following graph depicts the leading causes of child deaths ages 0 to 19 in Edgecombe County and North Carolina in the 2007-2011 time period. Perinatal conditions are the highest percentage of child deaths in Edgecombe County (39.7 percent), followed by birth defects (10.3 percent), motor vehicle (10.3), homicide (8.8), and unintentional injuries (5.9 percent). In comparison, North Carolina has about 10 percent less child deaths due to perinatal conditions (29.8 percent). Furthermore, the percentage of child deaths in North Carolina due to homicide is almost half of Edgecombe County (4.6 percent).⁵³



⁵³ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

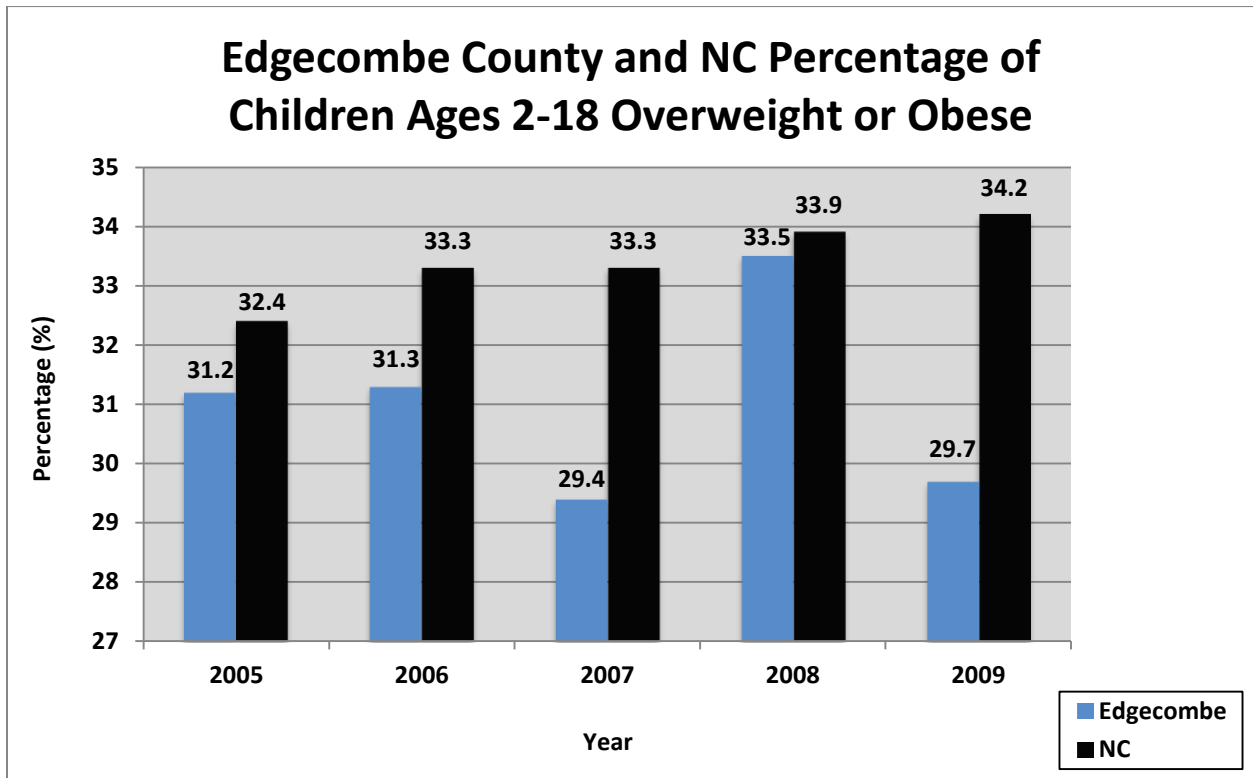
The table below reports the total number of child deaths in Edgecombe County and North Carolina by cause of death and age. The majority of child deaths in Edgecombe County occur before the age of one and are due to perinatal conditions.⁵⁴

Location (2007- 2011)	Total	Cause of Death								Age				
		Birth Defects	Perinatal Conditions	SIDS	Illness	Motor Vehicle	Homicide	Suicide	Other	Under 1	1-4	5-9	10-14	15-17
Edgecombe	59	7	27	1	10	4	4	1	5	41	5	4	2	7
NC	7,331	1,082	2,527	435	1,449	577	240	129	892	4,899	713	428	472	819

⁵⁴ NC Division of Public Health, State Center for Health Statistics, County-Level Data. Available at: <http://www.schs.state.nc.us/schs/data/county.cfm>

Childhood Obesity:

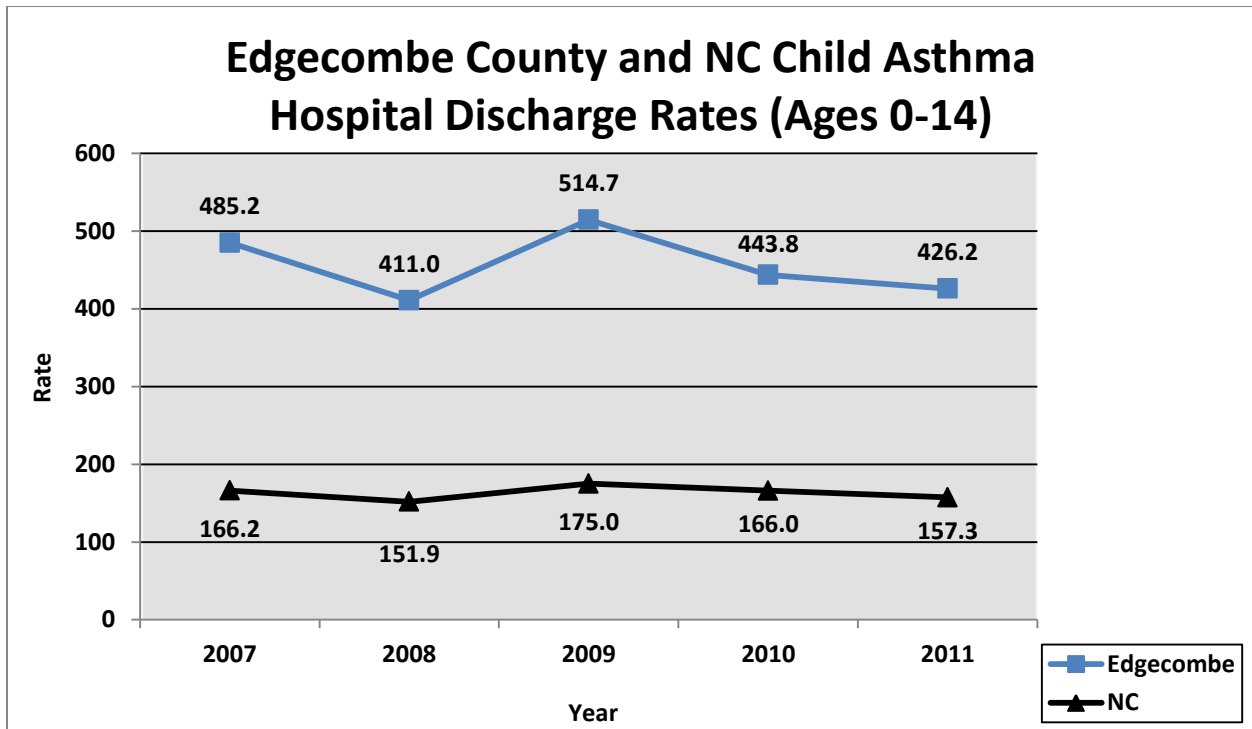
The following graph portrays the percentage of children ages 2-18 identified as overweight or obese in Edgecombe County and North Carolina from 2005 to 2009. As of 2009, the percentage of obese children in Edgecombe County was 4.2 percent lower than the state. Overall, the percentage of overweight / obese children in Edgecombe County has fluctuated from 2005 to 2009, but on average, nearly 30 percent of children ages 0-19 are not at a healthy weight.⁵⁵



⁵⁵ Eat Smart Move More NC. Available at:
<http://www.eatsmartmovemorenc.com/Data/Texts/>

Asthma:

The following graph details the percentage of children ages 0-14 discharged from the hospital with a diagnosis of asthma in Edgecombe County and North Carolina from 2007 to 2011. The rates in Edgecombe County have consistently been significantly higher than the state during this time period. As of 2011, the child asthma discharge rate in Edgecombe County was 426.2 per 100,000 population, compared to 157.3 per 100,000 population in the state.⁵⁶

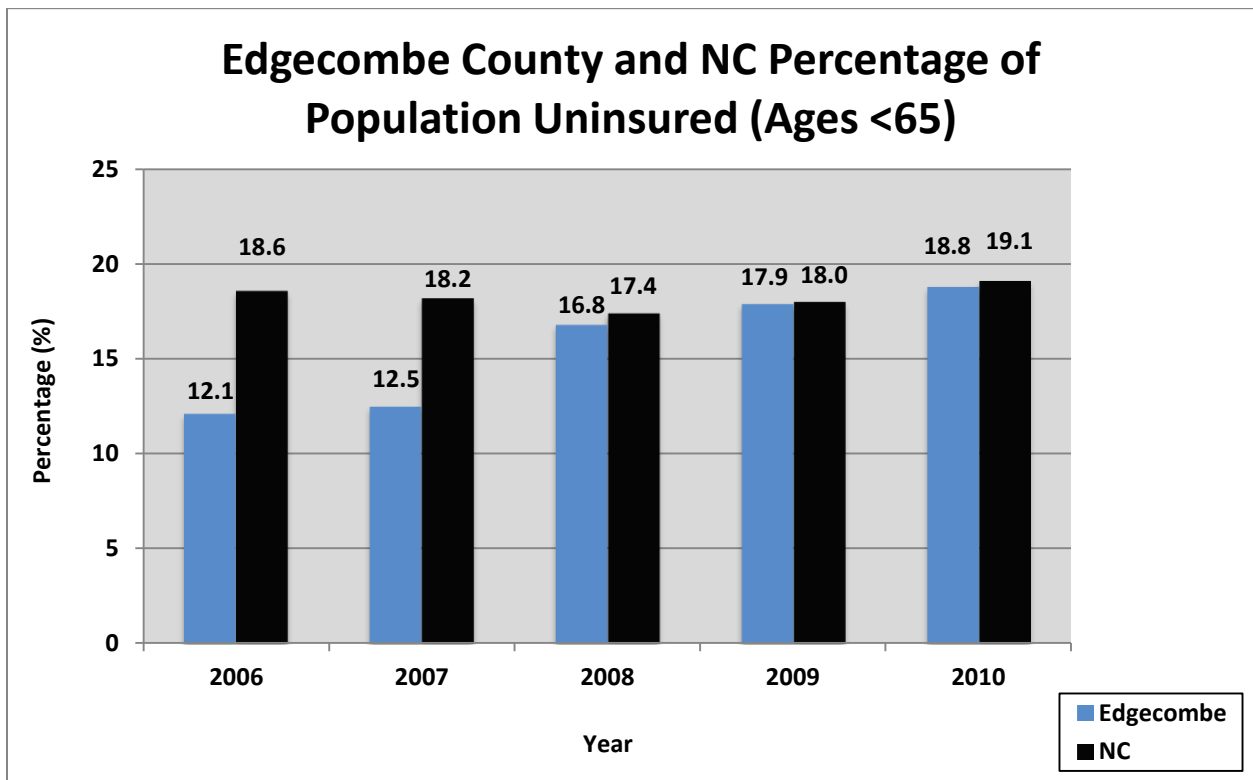


⁵⁶ NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>

Access to Healthcare

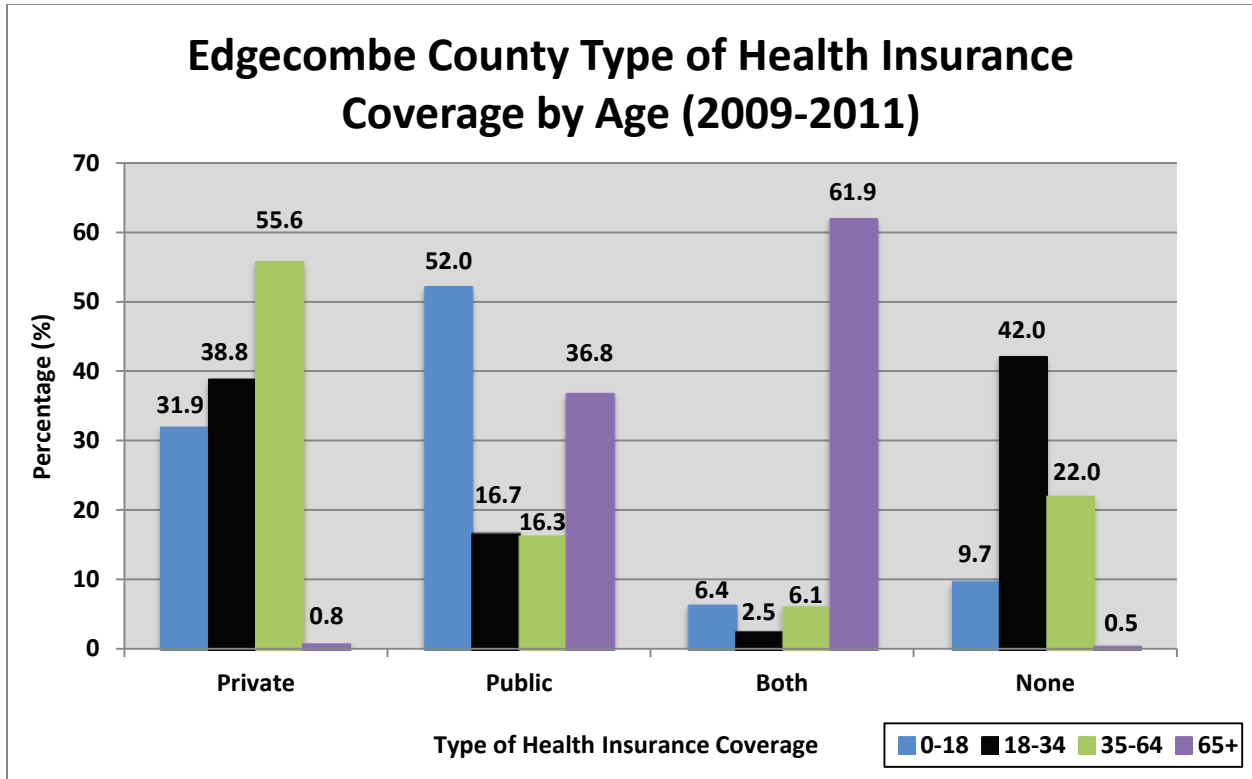
Insured/Uninsured Population

Access to healthcare has been identified as a top issue in Edgecombe County. The following graph depicts the percentage of uninsured residents in Edgecombe County and North Carolina from 2006 to 2010. The percentage of uninsured residents in Edgecombe County increased 6.7 percent from 2006 to 2010. As of 2010, the percentage of uninsured residents in Edgecombe County (18.8 percent) had nearly reached that of the state (19.1 percent).⁵⁷



⁵⁷ US Census Bureau, Small Area Health Insurance Estimates. Available at: <http://www.census.gov/did/www/sahie/>

The next graph reports the percentage of the various types of health insurance coverage (i.e., private, public, both, or none) owned by Edgecombe County residents by age group (i.e., 0-18, 18-34, 35-64, and 65 and older) in the 2009-2011 time period. In this time period, the largest portion of individuals with no health insurance were 18-34 years old (42 percent), followed by 35-64 (22 percent) and 0-18 (9.7 percent). Overall 0-18 year old residents predominantly had public (52 percent) or private (31.9 percent) insurance.⁵⁸



⁵⁸ US Census Bureau, American Fact Finder. Available at: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

Medicare/Medicaid

The following tables report the Medicaid eligible statistics for Edgecombe County and North Carolina in June 2010 and fiscal year 2010. 31 percent of the population in Edgecombe County is Medicaid eligible, compared to 17 percent for the state. Additionally, the percentage of eligibles dually enrolled in Medicaid and Medicare is slightly higher in Edgecombe County (16.8 percent) than the state (14.5 percent).⁵⁹ Taken together, the relatively higher proportion of senior citizens in Edgecombe County likely accounts for these differences with the state. The remaining Medicaid eligibles statistics are relatively similar between Edgecombe and North Carolina.

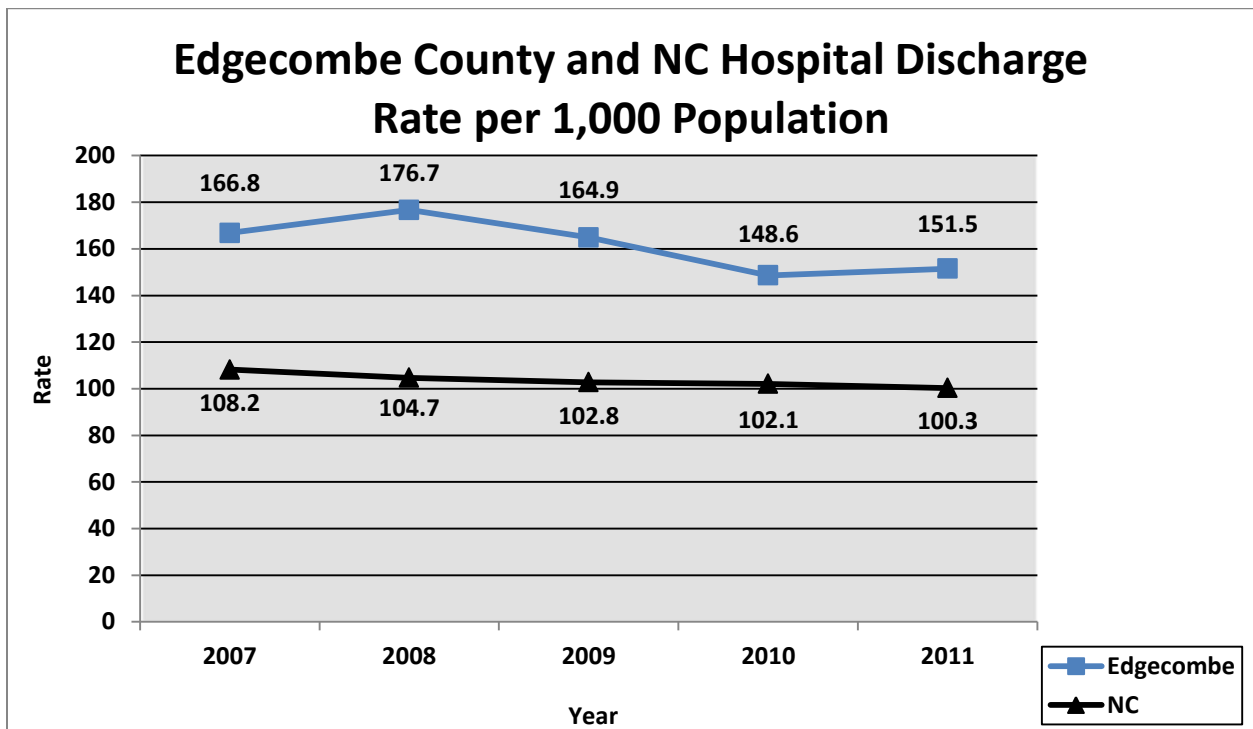
Medicaid Eligibles by Age or Group for Edgecombe County and NC in June 2010										
	Health Choice	0-5	6-11	12-20	21+ Non ABD	21+ ABD	Family Planning	Total Medicaid Population	Total Population July 2009	% of Pop.
EC	1,026	3,804	2,658	3,171	3,382	4,269	554	17,284	56,552	31%
NC	143,022	408,023	253,855	274,805	300,954	339,484	57,966	1,577,121	9,543,537	17%

Year	Statistic	Edgecombe	NC
June 2010	% of Eligibles dually enrolled in Medicaid and Medicare	16.8%	14.5%
SFY 2010	Average Annual Enrollee Cost (Adult)	\$6,917	\$7,256
SFY 2010	Average Annual Enrollee Cost (Child; 0-17 years of age)	\$2,706	\$2,811
June 2010	% of Eligibles enrolled in Community Care of NC	70%	66%

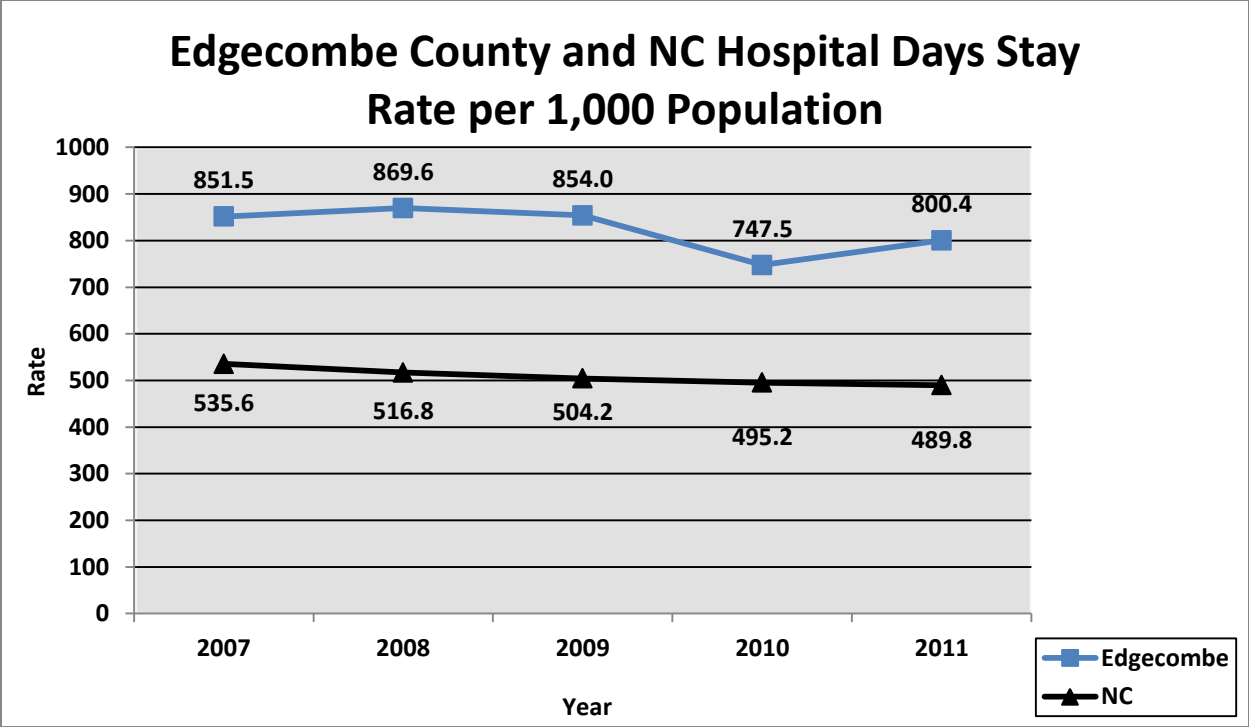
⁵⁹ NC Department of Health and Human Services, Statistics and Reports. Available at: <http://www.ncdhhs.gov/dma/pub/index.htm>

Hospital Utilization

The following graphs depict the hospital discharge rate and hospital days stay rate per 1,000 population for Edgecombe County and North Carolina from 2007 to 2011. The hospital discharge rate in Edgecombe County declined from 2008 (176.7) to 2011 (151.5). However, as of 2011, the hospital discharge rate in Edgecombe County was more than 50 discharges per 1,000 population higher than the state. Another useful statistic for hospital utilization is the days stay rate, which is shown in the next graph. It is evident that Edgecombe County residents stay in the hospital longer than North Carolina citizens. As of 2011, the days stay rate was 800.4 per 1,000 population, compared to 489.8 per 1,000 population in the state.⁶⁰



⁶⁰ NC Division of Public Health, State Center for Health Statistics, County Health Data Book. Available at: <http://www.schs.state.nc.us/schs/data/databook/>



Healthcare Providers

One critical statistic for examining access to healthcare is the number of healthcare providers and professionals within a given county. The first table below provides the ratios of primary care providers to the population for Edgecombe County, North Carolina, and the United States in fiscal year 2011-2012. This table indicates that there are almost 1,900 more people per primary care provider in Edgecombe County than the state. Furthermore, there are nearly 2,300 more people per primary care provider in Edgecombe County than the national rate.

Primary Care Provider as a Ratio of the Population (2011-2012)	
Edgecombe	3,327:1
NC	1,480:1
National Benchmark	1,067:1

The table below examines the specific types of health professionals per 10,000 population for Edgecombe County and North Carolina. There are nearly four times more physicians, three times more dentists, and two times more pharmacists per 10,000 population in North Carolina than Edgecombe County. Moreover, Edgecombe County has almost 40 nurses per 10,000 population less than the state.⁶¹

2011 Health Professionals per 10,000 Population								
Location	Physicians	Primary Care Physicians	Dentists	Pharmacists	RN's	Nurse Practitioners	Certified Nurse Midwives	Physician Assistants
EC	6.6	2.9	1.4	4.3	60.3	1.2	0.7	2.1
NC	22.1	7.8	4.3	9.5	98.6	4.1	1.6	4.0

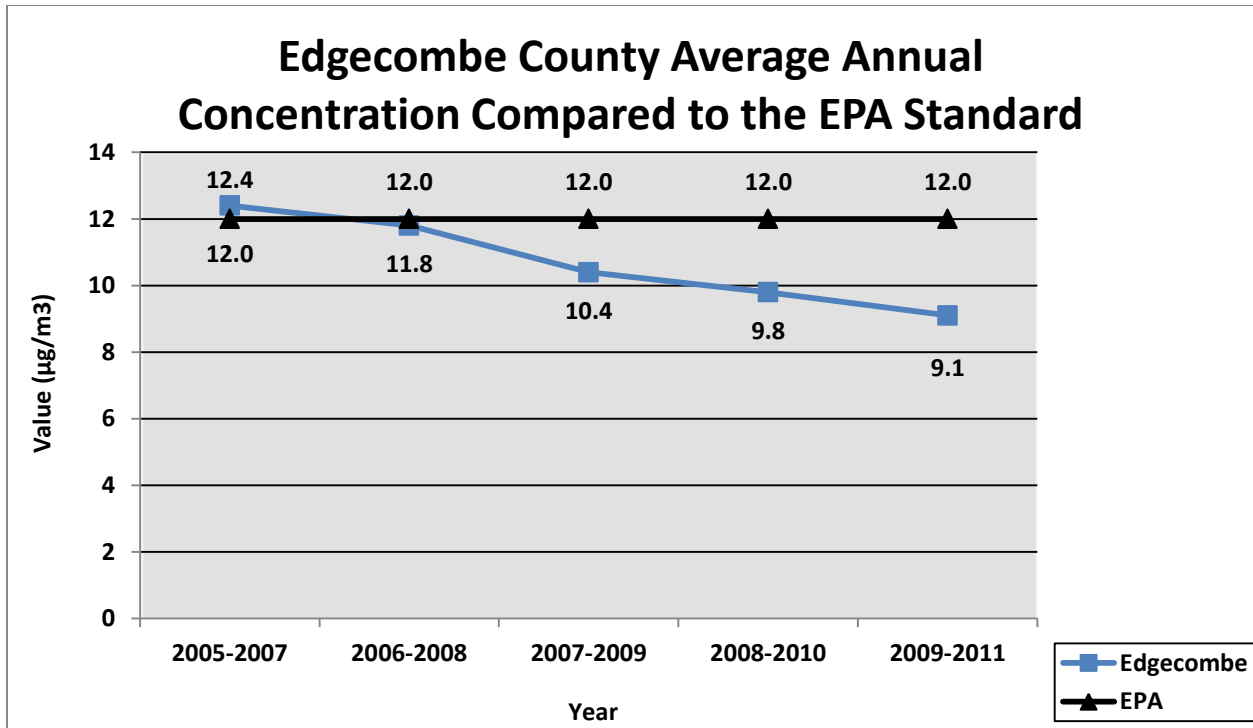
⁶¹ Cecil G. Sheps Center for Health Services Research, NC Health Professions Data System. Available at: <http://www.shepscenter.unc.edu/hp/prof2010.htm>

Environmental Health

Air Quality

The NC Division of Air Quality utilizes the Air Quality Color Code Guide (see table below) to alert the public of air quality issues related to ozone and fine particles. Air pollution levels within the range of orange, red, purple or maroon are considered exceeding the Environmental Protection Agency (EPA) standard. Furthermore, the American Lung Association provides county-level grades for air quality based on EPA standards. In 2011, Edgecombe County received a letter grade of “A” for daily particle pollution, with no “orange”, “red”, or “purple” particle days. Additionally, Edgecombe County received a letter grade of “B” for high ozone, with 2 “orange” ozone days in 2011. Finally, annual average levels of air pollution are calculated by the EPA based on air pollution levels. The chart below depicts the 3-year averages from 2005 to 2011 in annual average air quality for Edgecombe County.

Air Quality Index Levels of Health Concern	Numerical Value	Meaning
Green/Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
Yellow/Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
Orange/Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
Red/Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
Purple/Very Unhealthy	201-300	Health alert: everyone may experience more serious health effects.
Maroon/Hazardous	>300	Health warnings of emergency conditions. The entire population is more likely to be affected.



Water Quality

The United States Environmental Protection Agency maintains the “Safe Drinking Water Information System” (SDWIS) which houses data about public water systems and their EPA violations at the national, state, and county-level. The SDWIS records the number of health-based violations which include “Maximum Contaminant Level”, “Maximum Residual Disinfectant Level”, and “Treatment Technique”. A wide variety of health problems have been associated with contaminated water including birth defects, nausea, cancer, and death. The table below presents the EPA water quality statistics for Edgecombe County. In fiscal year 2012, 25 percent of the water systems in Edgecombe County were in violation, compared to 5 percent in North Carolina. Thus, 73.6 percent of the total population served by public water systems in Edgecombe County had access to contaminated water in FY 2012, compared to 2.6 percent in North Carolina.

FY	Reported Violations	Systems in Violation	Total Systems	% of Systems in Violation	Population in Violation	Total Population Served	% of Population in Violation
2010	3	2	9	22.2%	12,563	29,234	42.9%
2011	1	1	8	12.5%	2,400	29,323	8.2%
2012	9	2	8	25%	21,578	29,323	73.6%
Total	13	5	25	-	36,541	87,880	-

Peer County Comparisons

According to the CHA Guidelines, comparisons must be made between the county of interest and peer counties regarding secondary data. Peer counties are determined by their similarity in population size, density, age/race distributions, and poverty levels. The following counties have been identified as peer counties for Edgecombe County: (1) Cleveland, (2) Lenoir, (3) Rutherford, (4) Watauga, and (5) Wilson. Edgecombe County was in line with its peers on poverty rate and diabetes mortality rate and better than its peers in the percent of the uninsured population and heart disease mortality rate. Edgecombe County was worse than its peer counties on all other factors.

Domain	Indicator	Edgecombe	Peer County Comparison		
			Below Avg.	Average	Above Avg.
Education	Percent with High School Diploma or Higher	79.5			
	Percent with Associate's Degree	7			
	Percent with Bachelor's Degree or Higher	10.5			
	Drop-Out Rate	4.81			
	SAT Scores	876			
Economy	Median Annual Household Income	\$33,740			
	Per Capita Income	\$17,808			
	Poverty Rates	23.6			
	Unemployment Rate	14.7			
	Percent of Students on Free and Reduced Lunch	85			
Social	Violent Crime Rate	632.4			
	Property Crime Rate	4,068.3			
	Homicide Rate	12.3			
	Percent Population Uninsured	18.8			
	Primary Care Provider Ratio	3,327:1			
Health	Infant Mortality Rate	9.2			
	Teen Pregnancy Rate	74.8			
	Cancer Mortality Rate	255.2			
	Heart Disease Mortality Rate	215.9			
	Diabetes Mortality Rate	32.1			
	STD Rates	1642.7			
	HIV / AIDS Rates	67.2			

Healthcare Resources

For a complete listing of healthcare providers located in Edgecombe County and healthcare provider contact information, please see Appendix C.

- Christ Centered Assistance Network (Christ CAN)
- Edgecombe County Health Department
 - Tarboro Office
 - Rocky Mount Office
 - Environmental Health
- Edgecombe Community College
- Edgecombe County Office on Aging
- Edgecombe County Department of Social Services
- Edgecombe Economic Development Inc.
- Freedom Hill Community Health Center
- Helping Hands Mission
- Home Care Management Corporation
- Rock Church of Tarboro
- Salvation Army
- Tar River Mission Clinic
- Tar River Psychological Associates
- Vidant Edgecombe Hospital
- Vidant Multi-Specialty Clinic Tarboro
- Vidant Family Medicine – Pinetops
- Vidant Behavioral Health Center – Macclesfield
- Vidant Women’s Care – Tarboro
- Wee Care Pediatrics
- Family Medicine in Downtown Tarboro

Parks and Recreation Facilities

- Battle Park
- Braswell Center and Park
- Burlington Park
- E.L. Robinson Senior Center
- Englewood Park
- Hornbeam Park
- Farmington Park
- Indian Lake Sports Complex
- M. A. Ray Center and Clark Park

- Meadowbrook Park
- Rocky Mount Senior Center
- Tarboro Recreation Center
- Stith-Talbert Park
- Sunrise Park
- Sunset Park

Review of Primary Data

The following is a review of data collected from three sources including:

- Meetings with stakeholders
- Focus groups with community members
- Community survey

These three data collection methods served as the primary data source for the health assessment. This data was considered “primary” because it was collected specifically for the purpose of the assessment and includes the opinions of community members who personally participated in the assessment process. Primary data is used in order to make comparisons with the secondary data, as well as provide contextual information, in order to help determine the focus areas of this health assessment. This data may be limited in various ways, such as a brief data collection period. In turn, this data only aims to portray a snapshot of community perceptions during the specific assessment period.

Stakeholders

The community health assessment process was initiated by Vidant Edgecombe Hospital in collaboration with the Edgecombe County Health Department. Personal invitations were sent to 14 individuals affiliated with county organizations including mental health, senior health services, and agencies representing the uninsured and underinsured. Those who committed to the assessment and planning process became the Community Health Advisory Council and attended a total of three meetings between June and August 2013.

The first meeting was used to introduce the community health assessment process. The next meeting focused on an update of the assessment progress and preliminary results. The final meeting included a presentation of the results as well as a prioritization and feasibility exercise to determine focus areas.

Focus Groups

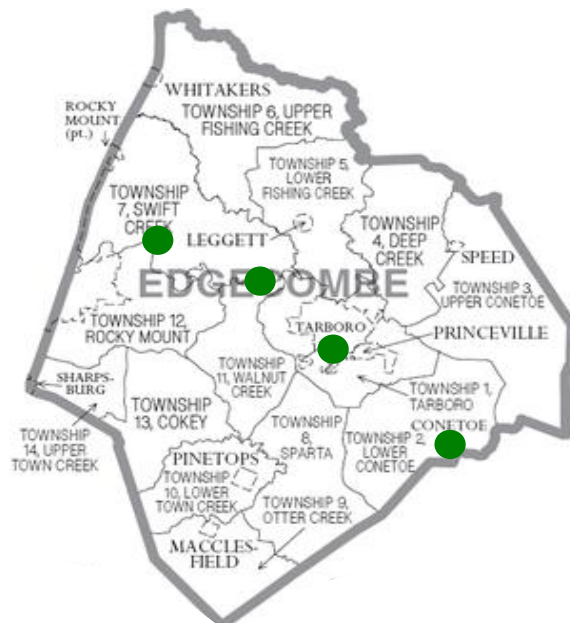
Focus groups (N = 26) with community members were conducted to solicit feedback regarding the health needs in the community. Focus group sessions were held at four different

locations across the county (see Figure 3). Furthermore, each focus group was comprised of a distinct targeted population. These included each of the following: elderly, African-American males, Hispanic ethnicity, and those representing the business sector. There were more women (62%) than men (38%) who participated in the focus groups. At least two team members conducted each one-hour session by asking a series of nine questions (see Appendix B). Finally, results were transcribed and analyzed for themes.

Focus Group Summary Table (16 females, 10 males)

Location	Date	Attendance
First Baptist Church	8/15/13	6 females, 2 males
Conetoe Church	6/26/13	5 males
Dunbar Community Center	6/13/13	6 females, 1 male
Professional Group	5/17/13	4 females, 2 males

Figure 3. Focus Group Locations



When asked, **“What do you think is the best thing about living in this community?”**, the majority of participants indicated that they most enjoyed Edgecombe County’s small town feel, agricultural aspect, and quiet atmosphere. Additionally, when asked, **“What are the serious health problems in your community”**, a variety of health conditions were listed. Specifically, participants indicated that high blood pressure, high cholesterol, obesity, diabetes, cancer, anxiety/depression, HIV/AIDS, asthma, and dental health were serious health concerns

within Edgecombe County. Furthermore, participants indicated that poor eating habits, lack of exercise, fast food, and chemicals in food were **potential causes** of the aforementioned health problems.

Next, participants were asked, **“What are the barriers to addressing or fixing these health problems?”**. The majority of participants believed factors such as a poor economy, low availability of jobs, lack of health insurance, lack of personal motivation, lack of time, poverty, and crime/safety were all barriers to addressing the serious community health problems. Additionally, a smaller sub-group indicated that language barriers also prevented fixing health problems. In contrast, participants identified the Edgecombe County Health Department, Freedom Hill, local health fairs, and the Tarboro Clinic as **current assets within the county to help address the serious health problems**.

Participants agreed that people in Edgecombe County exercise, walk, jog/run, get regular check-ups from health professionals, eat healthy, and drink water **in order to stay healthy**. Furthermore, participants believed that free/low cost gym access, nutrition and health education programs, improved access to healthcare insurance, and more parks and trails were **additional solutions to the serious health problems**. Finally, when asked, **“What groups of individuals are not receiving enough healthcare?”**, participants agreed that the elderly, uninsured, underinsured, working poor, and minority populations were not receiving enough healthcare.

Community Survey

A 29-item survey was created and distributed throughout the county from May – July 2013. The survey was made available online, as well as in paper format to capture the opinions of community members without Internet access. The purpose of the survey was to gain insight on community member opinions, as well as provide data to compliment and reinforce secondary data. Specifically, the survey targeted community members' opinions on various health-related topics. The survey took approximately 30 minutes to complete and consisted of fixed- and open-answer question types. A total of 475 community members completed the survey.

Almost all of the survey respondents lived within Edgecombe County (97.8 percent). Specifically, the majority of participants lived in Tarboro (52.7 percent) and Rocky Mount (22.2 percent). The majority of survey respondents were women (74.4 percent). Regarding racial distribution, there were slightly more White participants than African-American participants (56.0 and 41.5 percent, respectively). The remaining 2.5 percent consisted of Hispanic participants. Approximately half of the survey participants (48.8 percent) were between the ages of 40 and 59. Finally, all but 1.5 percent of participants spoke English as their primary language.

Completion of the survey data collection process was a collaborative effort of many human service agencies in Edgecombe County. This method was used to solicit input from all areas within the county as well as targeted populations. The agencies included:

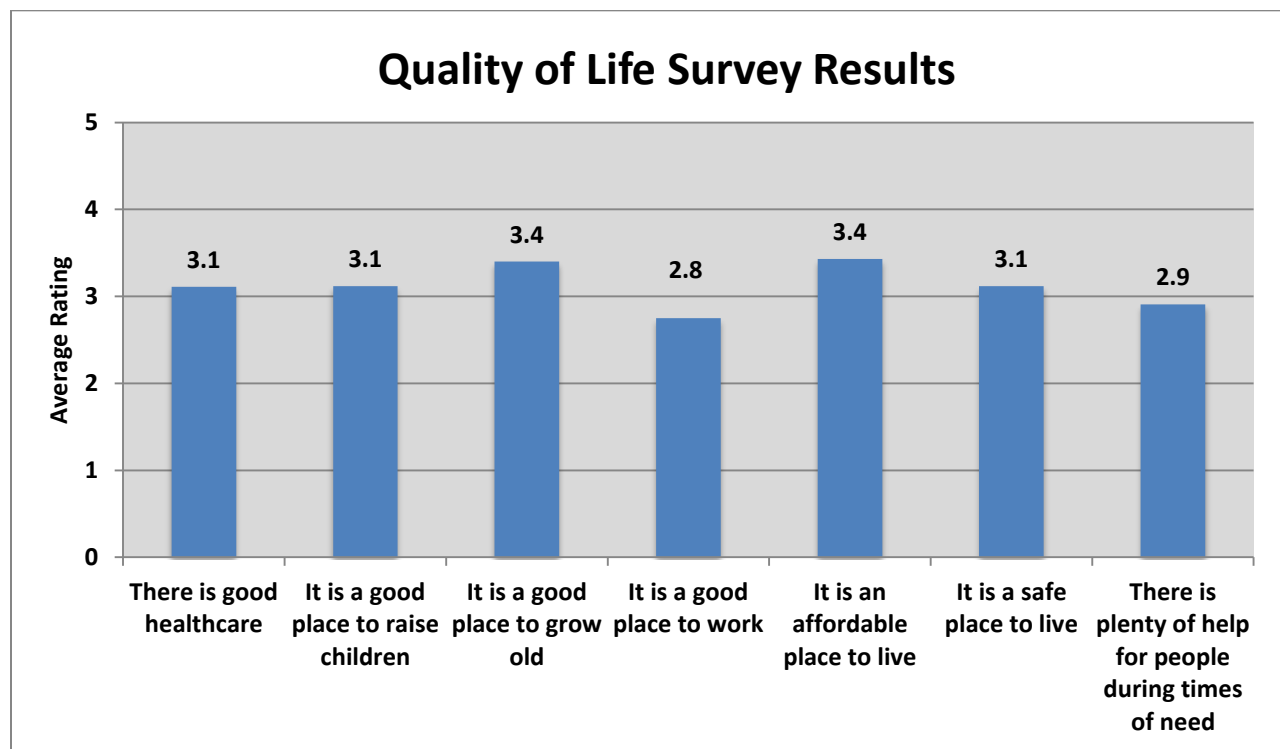
- Conetoe Missionary Baptist Church
- Crossworks, Inc.
- Dunbar Community Center
- East Carolina University
- EastPointe Human Services
- Edgecombe County Department of Social Services
- Edgecombe County Health Department
- First Baptist Church
- Mental Health America
- OIC Family Medical Center
- United Community Ministries
- Vidant Edgecombe Hospital
- Vidant Family Medicine Pinetops

Regarding participants' educational attainment, the most academically successful participants had a Graduate or Professional degree (10.1 percent). However, the largest portion of participants had a High School diploma or GED/equivalent (21.4 percent). Household income was approximately evenly distributed. The largest portion of participants had an annual household income between 50,000 and 74,999 dollars (21.4 percent). Furthermore, the largest

portion of participants indicated that their income supported two individuals (37.6 percent). Finally, over half of participants (57.1 percent) were employed full-time. However, over 10 percent of participants (11.1 percent) indicated that they were unemployed.

In order to reduce sampling bias, population calibration or “data weighting” was conducted to compensate for discrepancies between the population of survey respondents and the demographic profile of the county. Weighting procedures were conducted on demographic variables age, sex, race, income, and education. The weighting process grants underrepresented survey participants an equal “voice” as those who are overrepresented. All data included below reflects weighted survey data based on the demographics of Edgecombe County.

Participants were asked to indicate the extent to which they agreed with a variety of statements regarding the quality of life in Edgecombe County. Overall, the statements average rating of agreement was mostly neutral, ranging between 2.8 and 3.4, on a scale where 1 represented “Strongly Disagree”, 3 represented “Neutral”, and 5 represented “Strongly Agree.” The two statements with the highest level of agreement were in regard to Edgecombe County being a good place to grow old and an affordable place to live, with 55 and 54 percent of participants agreeing or strongly agreeing with the statement, respectively.



Quality of Life Survey Results

Indicators	Percent who agree or strongly agree
Affordable place to live	55
Good place to grow old	54
Good place to raise children	43
Safe place to live	43
Good healthcare	42
Help for people in time of need	35
Good place to work	31

Participants were asked to indicate a single issue that most influences the quality of life in Edgecombe County. The majority of participants (55.4 percent) indicated that low income/poverty was the single most influential issue impacting quality of life. After a substantial decrease in the percent of respondents selecting the issue, the next most influential issues were dropping out of school (13 percent), violent crime (7 percent), lack of or inadequate health insurance (5 percent), and lack of community support (5 percent).

Issue that Most Influence the Quality of Life in Edgecombe County

Issue	Percent respondents
Low income/poverty	55
Dropping out of school	13
Violent crime (murder, assault)	7
Lack of/inadequate health insurance	5
Lack of community support	5

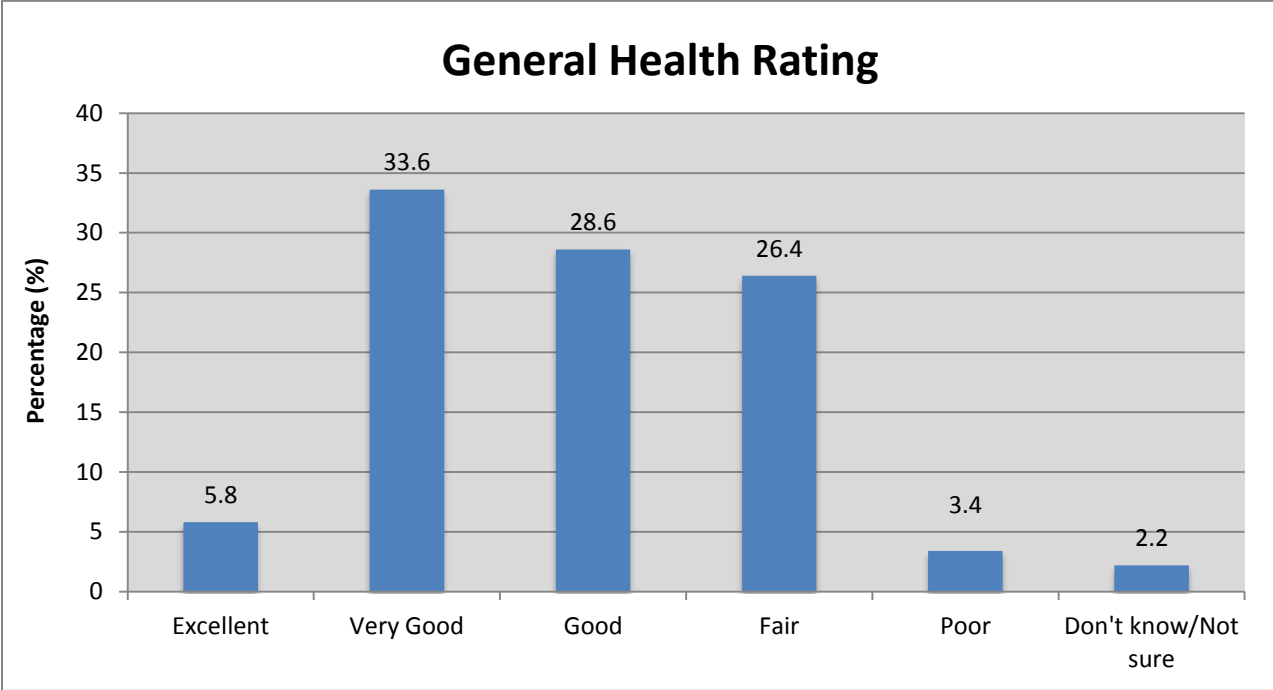
*Not all answer choices displayed, percentages sum to <100.

The survey also asked participants if they thought a variety of issues were a problem within their community. Participants could respond by indicating the issue as “No problem”, a “Minor problem”, or a “Major problem” in their community. Participants also had the option to select “I don’t know”. The issue endorsed as a problem by the largest portion of participants was employment opportunities (90.4 percent). With the exception of crime, which was endorsed as a problem by 85.3 percent of participants, most of the issues endorsed as a problem by majority of participants related to health. Specifically, overweight/obesity was seen as a community problem by 85.5 percent of participants, followed by unintended pregnancies (82.3 percent), sexually transmitted diseases (80.6 percent), substance abuse (79.2 percent), mental health (76.3 percent), and dental health (71.4 percent).

Community Issues

Issue	Percent indicating minor or major problem
Employment opportunities	90
Overweight/Obesity	86
Crime	85
Unintended pregnancies	82
Sexually transmitted diseases	81
Alcohol and drug abuse	79
Mental health	76
Poor dental health	72
Recreational programs and facilities	68
Public transportation	65
Racial/Ethnic discrimination	65
Quality education (K-12)	61
Affordable, safe housing	58
Education and training for adults	56
Animal control	49
Legal services	43
Air quality	39
Water supply and quality	39
Traffic Safety	37
Emergency preparedness	36
Food safety	28
Solid waste disposal	27

Participants were asked to indicate their general health rating. The largest portion of participants (33.6 percent) indicated that they were, in general, in very good health. Additionally, large portions of participants indicated that they were in either good (28.6 percent) or fair (26.4 percent) health. Finally, significantly smaller portions of participants indicated that they were in either excellent (5.8 percent) or poor (3.4 percent) health.



In addition to a general health rating, the survey asked participants if a doctor or health care professional had diagnosed them with a chronic disease. Nearly half of participants (49.1 percent) indicated that they had high blood pressure. Additional diseases self-reported by at least a quarter of participants include overweight/obesity (44.2 percent), high cholesterol (31.4 percent), depression/anxiety (27.7 percent), and diabetes (25.4 percent).

Self-Reported Chronic Disease

Disease	Percent reporting diagnosis
High blood pressure	49
Overweight/obesity	44
High cholesterol	31
Depression/anxiety	28
Diabetes (not during pregnancy)	25
Asthma	21
Cancer	8
Angina/heart disease	7
Osteoporosis	7
Chronic obstructive pulmonary disease	5
Stroke	4
Renal disease	3

The survey asked participants about health promoting behaviors such as exercise. Majority of participants (58 percent) indicated that they participated in exercise, lasting at least a half an hour, during a normal week.

Exercise Behaviors of Community Members

Engage in exercise	Percent respondents
Yes	58
No	40
Don't know/Not sure	2

Participants were also given the opportunity to indicate, in open-response format, their greatest health concerns. The top five concerns noted by participants included issues with affordable care (41 participants), being overweight (23 participants), blood pressure (20 participants), diet (20 participants), and diabetes (18 participants).

Greatest Health Related Concerns

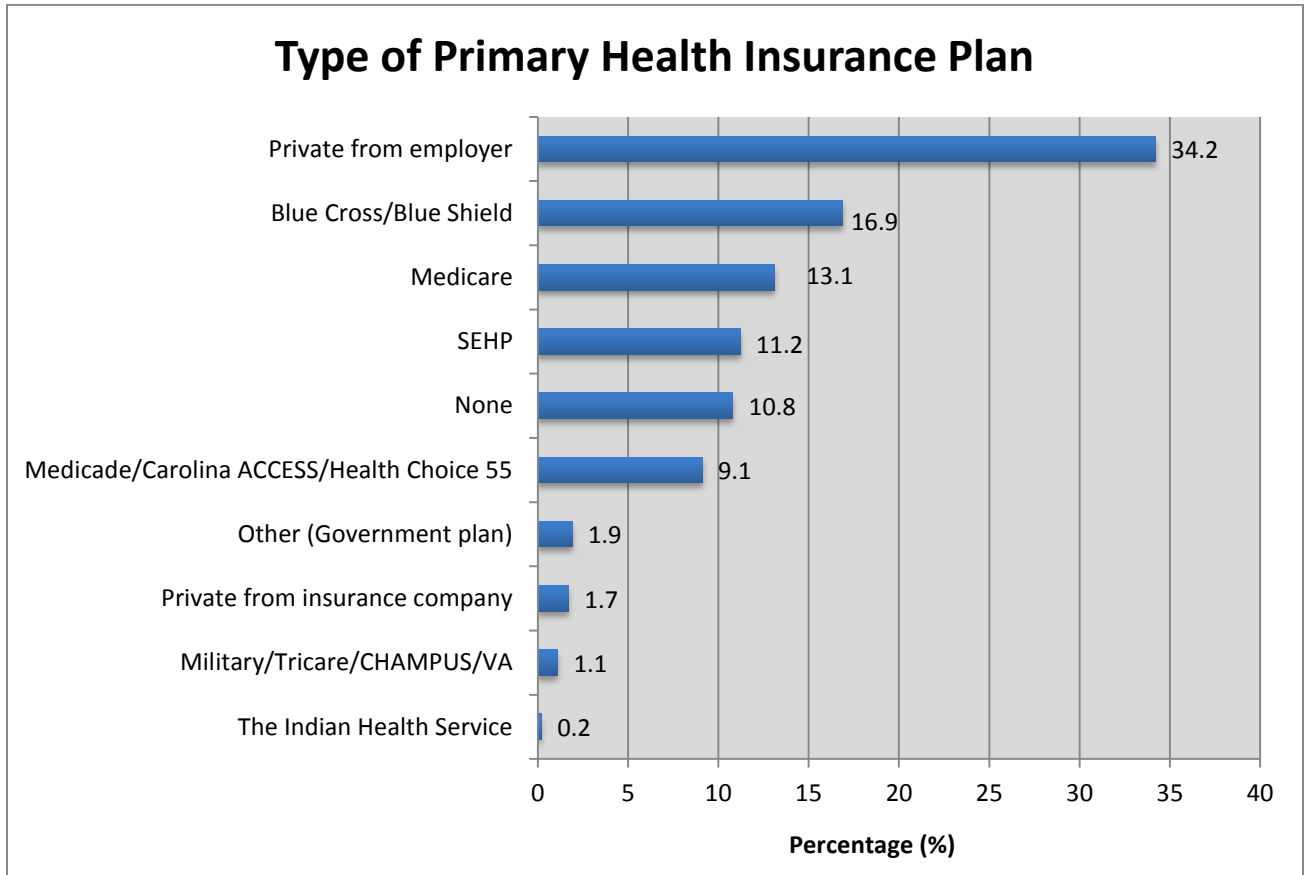
Health related concern	Number of participants
Affordable care	41
Overweight	23
Blood pressure	20
Diet	20
Diabetes	18
Cancer	17
Exercise	14
Limited access to medical help	14
Lack of health insurance	13
Dental	6

A specific concern addressed by the survey was whether or not the participant had worried about providing enough food for their family in the previous year. Although the majority of participants (59 percent) indicated that they had not worried about providing enough food for their family, a very large portion of participants (40 percent) indicated that they had.

Worried About Family's Food Supply

Worried about family's food supply	Percent respondents
Yes	40
No	59
Don't know/Not sure	1

Survey participants indicated the type of their primary health insurance plan. Most participants (34.2 percent) received their health insurance via a private plan purchased from an employer. Additional forms of health insurance endorsed by at least 10 percent of participants included Blue Cross/Blue Shield (16.9 percent), Medicare (13.1 percent), State Employee Health Plan (SEHP; 11.2 percent), or no health insurance (10.8 percent).



Participants were asked to report the last time they visited a doctor or healthcare professional for a routine physical exam or wellness checkup. The majority of participants (74.3 percent) had seen a doctor or healthcare professional within the last 12 months. An additional 15.1 percent had seen a doctor or healthcare professional between 1 and 2 years ago.

Last Visit to a Doctor or Healthcare Professional

Time	Percent respondents
Within the last 12 months	74
1-2 years ago	15
3-4 years ago	8
Never	3

Participants were asked if they, or anyone in their family, had a problem receiving healthcare needed from any type of healthcare provider or facility within the past year. Nearly a third of participants (29.1 percent) indicated that they had problems receiving necessary healthcare.

Problems Receiving Needed Healthcare

Problem receiving care	Percent respondents
Yes	29
No	68
Don't know/Not sure	3

Of the individuals who indicated having problems receiving needed healthcare, most were denied care at the dentist (14.5 percent). Additional facilities where participants were unable to receive the care they needed included the general practitioner (13.1 percent), pharmacy (8.8 percent), and eye care/optometrist (8.5 percent).

Type of Facility

Type of Facility	Percent respondents
Dentist	15
General practitioner	13
Pharmacy	9
Eye care	9
Medical clinic	7
Specialist	5
OB/GYN	3
Health department	3
Urgent care center	2
Hospital	2

*Not all answer choices displayed, percentages sum to <100.

The top three reasons for being unable to receive the necessary healthcare included having no health insurance (18.3 percent), having limited insurance that didn't cover what was needed (6.2 percent), and the cost of the deductible being too high (2.5 percent).

Reason for Prevented Care

Reason	Percent respondents
No health insurance	18
Limited insurance	6
Costly deductible	3

*Not all answer choices displayed, percentages sum to <100.

Participants self-reported adverse health behaviors in which they participated. Specifically, a quarter of participants (24.0 percent) indicated that they smoked cigarettes.

Adverse Health Behaviors

Do you currently smoke?	Percent respondents
Yes	24
No	76

A larger portion of participants (58.4 percent) indicated that they had been exposed to secondhand smoke within the past year.

Secondhand Smoke Exposure

Secondhand smoke exposure	Percent respondents
Yes	58
No	42

Of those who indicated being exposed to secondhand smoke, most (29.5 percent) were exposed in their home. Additional locations of secondhand smoke exposure included restaurants (10.5 percent) and the workplace (10.4 percent).

Location of Secondhand Smoke Exposure

Location	Percent Respondents
Home	30
Restaurants	11
Workplace	10
Schools	6
Government buildings	2
Hospitals	2
Other	18

Summary and Next Steps

Based on the results provided by the community survey, focus groups, and secondary data collection, Edgecombe County has identified the following top four health priorities:

- Chronic Disease Prevention and Management
- Access to Care
- Obesity and Weight Management
- HIV/AIDS, STDs, Teen Pregnancy

The above-mentioned priorities were selected as a result of their feasibility and impact in improving the health and well being of Edgecombe County residents. In order to address the priorities, Vidant Edgecombe Hospital will work collaboratively with the Edgecombe County Health Department. An initial step in responding to the established priorities will be to assemble a group of stakeholders and community members, who will begin drafting a Community Action Plan. The Community Action Plan will then notify the Edgecombe County Health Department about the ways in which the top priorities will be addressed. Specific goals for each of the top health priorities are listed below.

Chronic Disease Prevention and Management

- To improve outcomes and quality of life for adults with chronic illness (i.e. diabetes, heart disease, cancer, asthma)
- To improve access to healthcare especially for the uninsured/underinsured patient population.

Obesity and Weight Management

- To educate adults and children on the benefits of physical activity and nutrition and provide resources, therefore improving general wellness.

Access to care

- To improve access to healthcare especially for the uninsured/underinsured patient population.

HIV/AIDS, STDs, Teen Pregnancy

- The Edgecombe County Health Department will take the lead on HIV/AIDS, STDs, and teen pregnancy. The Edgecombe County Health Department has a grant-funded project to provide HIV testing to community residents.

- Vidant Edgecombe Hospital will collaborate with the Edgecombe County Health Department on this grant by collecting blood samples for HIV testing of patients in the emergency department. This service will be offered to patients meeting the established high risk behavior criteria and patients will have the option to opt out.
- The Edgecombe County Health Department has ongoing programs addressing HIV/AIDS, STDs and teen pregnancy. Vidant Edgecombe Hospital will provide support as needed.

Appendix A – Community Survey

Do you live in Edgecombe County?

- Yes
- No

Where do you live?

- Battleboro
- Scotland Neck
- Leggett
- Macclesfield
- Old Sparta
- Pinetops
- Princeville
- Rocky Mount
- Conetoe
- Sharpsburg
- Speed
- Tarboro
- Whitakers
- Other _____

What is your zip code?

What is your age?

- 15-19
- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60-64
- 65-69
- 70-74
- 75-79
- 80-84
- 85 or older

Are you male or female?

- Male
- Female

What is your race?

- White
- Black or African-American
- American Indian or Alaska Native
- Asian Indian
- Other Asian including Japanese, Chinese, Korean, Vietnamese and Filipino/a
- Pacific Islander including Native Hawaiian, Samoan, Guamanian/Chamorro
- Multi-racial
- Other race not listed here _____

Are you of Hispanic, Latino or Spanish origin?

- Yes
- No
- Don't know/not sure

Is English your primary language?

- Yes
- No - What is your primary language? _____

What was your household income last year?

- Less than \$10,000
- 10,000 to 14,999
- 15,000 to 24,999
- 25,000 to 34,999
- 35,000 to 49,000
- 50,000 to 74,999
- 75,000 to 99,999
- 100,000 or more

How many people does this income support?

What is the highest level of schooling you have completed?

- Less than 9th grade
- 9-12th grade, no diploma
- High school graduate (or GED/equivalent)
- Associate degree or vocational training
- Some college (no degree)
- Bachelor's degree
- Graduate or professional degree
- Other _____

What is your employment status? (Check all that apply)

- Employed full-time
- Employed part-time
- Retired
- Armed Forces
- Unemployed for 1 year or less
- Disabled
- Student
- Homemaker
- Self-employed
- Unemployed for more than 1 year

What is your primary health insurance plan?

- The State Employee Health Plan
- Blue Cross and Blue Shield of North Carolina
- Other private health insurance plan purchased from employer or workplace
- Other private health insurance plan purchased directly from an insurance company
- Medicare
- Medicaid or Carolina ACCESS or Health Choice 55
- The military, Tricare, CHAMPUS, or the VA
- The Indian Health Service
- Other (government plan)
- No health plan of any kind

Please indicated how much you agree or disagree with each of the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is good healthcare in Edgecombe County	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edgecombe County is a good place to raise children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edgecombe County is a good place to grow old	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edgecombe County is a good place to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edgecombe County is an affordable place to live	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Edgecombe County is a safe place to live	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is plenty of help for people during times of need in Edgecombe County	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your opinion, does your community have a problem with any of the concerns listed below?

	No problem	Minor Problem	Major Problem	I Don't Know
Traffic safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affordable, safe housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Employment opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreational programs and facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality education (K-12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education and training for adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water supply and quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Racial/ethnic discrimination	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Air quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Animal control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solid waste disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emergency preparedness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alcohol and drug abuse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor dental health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sexually transmitted diseases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unintended pregnancies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overweight/obesity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mental health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In your opinion, which one issue most affects the quality of life in Edgecombe County?

- Pollution (air, water, land)
- Dropping out of school
- Low income/poverty
- Homelessness
- Lack of/inadequate health insurance
- Hopelessness
- Discrimination/racism
- Lack of community support
- Elder abuse
- Child abuse
- Domestic violence
- Violent crime (murder, assault)
- Theft
- Rape/sexual assault
- Other _____
- None

Would you say that, in general, your health is...

- Excellent
- Very Good
- Good
- Fair
- Poor
- Don't know/not sure

Has a doctor, nurse, or other health professional ever told you that you have any of the health conditions below?

	Yes	No	Don't know/not sure
Asthma	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Depression or anxiety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High blood pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High cholesterol	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diabetes (not during pregnancy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Osteoporosis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overweight/obesity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Angina/heart disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stroke	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Renal disease	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chronic obstructive pulmonary disease (COPD)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

During a normal week, other than in your regular job, do you engage in any physical activity or exercise that lasts at least a half an hour?

- Yes
- No
- Don't know/not sure

In the previous 12 months, were you ever worried about whether your family's food would run out before you got money to buy more?

- Yes
- No
- Don't know/not sure

What are your greatest health related concerns you have for your family right now?

About how long has it been since you visited a doctor or healthcare provider for a routine physical exam or wellness checkup? Do not include times you visited the doctor because you were sick or pregnant.

- Within the last 12 months
- 1-2 years ago
- 3-5 years ago
- I have never had a routine physical or wellness checkup

During the past 12 months, did you or anyone in your family ever have a problem getting the healthcare you needed from any type of healthcare provider or facility?

- Yes
- No
- Don't know/not sure

What type of provider or facility did you or your family members have trouble getting healthcare from? (Check all that apply)

- Dentist
- General practitioner
- Eye care/optometrist/ophthalmologist
- Pharmacy/prescriptions
- Pediatrician
- OB/GYN
- Health department
- Hospital
- Urgent care center
- Medical clinic
- Specialist (please specify) _____

Which of these problems prevented you or your family member from getting the necessary healthcare? (Check all that apply)

- No health insurance
- Insurance didn't cover what I/we needed
- My/our share of the cost (deductible/co-pay) was too high
- Doctor would not take my/our insurance or Medicaid
- Hospital would not take my/our insurance
- Pharmacy would not take my/our insurance or Medicaid
- Dentist would not take my/our insurance or Medicaid
- No way to get there
- Didn't know where to go
- Couldn't get an appointment
- The wait was too long
- Other (please specify) _____

Do you currently smoke?

- Yes
- No

If you wanted to stop smoking, what could help? (Check all that apply)

- Phone line support (Quit Line)
- Support group
- Individual counseling
- Other (please specify) _____

In the past 12 months, have you been exposed to second hand smoke?

- Yes
- No

Where were you exposed to second hand smoke? (Check all that apply)

- Home
- Workplace
- Hospitals
- Restaurants
- Schools
- Government buildings
- Other (please specify) _____

Appendix B – Focus Group Questions

1. What is the best thing about living in this community?
2. What are the serious health problems in your community?
3. What are the causes of these problems?
4. What are the barriers to addressing or fixing these health problems?
5. What are the current assets within the county to help address these problems?
6. What do people do to stay healthy?
7. What could be done to solve these problems?
8. What other groups are not receiving enough healthcare?

Appendix C – Healthcare Providers Located in Edgecombe County

- Carolina Regional Orthopedics, PA
2906 N. Main St.
Tarboro, NC 27886
(252)823-7212
- Edgecombe County Health Department
Tarboro Office
122 East Saint James St.
Tarboro, NC 27886
(252)641-7511

Rocky Mount Office
155 Atlantic Ave.
Rocky Mount, NC 27801
(252)985-4100

Environmental Health
201 Saint Andrew St.
Tarboro, NC 27886
(252)641-7573
- Eye Care Center of Tarboro
807 Western Blvd.
Tarboro, NC 27886
(262)823-3202
- Family Medicine in Downtown Tarboro
107 W. Saint John St.
Tarboro, NC 27886
(252)823-4300
- Freedom Hill Community Health Center
162 NC Highway 33 East
Princeville, NC 27886
(252)641-0514
- OIC Family Medical Center
111 S. Fairview Road
Rocky Mount, NC 27801
(252)446-3333
- Rural Health Group at Whitakers
105 SE Railroad St.
Whitakers, NC 27891
(252)437-2171
- Tarboro Eye Associates
2807 N. Main St.
Tarboro, NC 27886
(252)823-8295
- Tarboro Internal Medicine
2704 N. Main St., Suite A
Tarboro, NC 27886
(252)823-0808
- Vidant Edgecombe Hospital
111 Hospital Dr.
Tarboro, NC 27886
(252)641-7700
- Vidant Family Medicine – Pinetops
1473NC 42-43 West
Pinetops, NC 27864
(252)827-5231
- Vidant Multi-Specialty Clinic
101 Clinic Dr.
Tarboro, NC 27886
(252)823-2105
- Vidant Women’s Care – Tarboro
2704 N. Main St.
Tarboro, NC 27886
(252)823-6333
- Wal-Mart Vision Center
110 River Oaks Dr.
Tarboro, NC 27886
(252)824-1864
- Wee Care Pediatrics
210 E. Thomas St.
Rocky Mount, NC 27804
(252)210-9326

Dental Care:

- Dr. D. Badgett
211 Trade St
Tarboro, NC
252-823-4238
- Dr. K. Beamon
801 Western Blvd.
Tarboro NC
252-823-5739
- Edgecombe Dental
122 E. St James St
Tarboro NC
252-641-1331
- Harrold and Associates Dental Care
105 Wayfarer Ct
Rocky Mount NC 27801
252-443-0048
- Dr. T. Knox
3401 Main Street
Tarboro NC
252-823-7026
- Dr. J. Price
104 Hospital Dr.
Tarboro, NC
252-823-0551
- Dr. B. Saunders
205 W. Burnette St.
Pinetops, NC 27664
252-827-4028
- Dr. J. Taylor
104 Hospital Dr.
Tarboro, NC
252-823-0551
- Dr. Ward
112 W. St. John St
Tarboro, NC 27886
252-823-3864
- Dr. D. Warren
801 Western Blvd
Tarboro, NC
252-823-2753

Mental Health:

- Epiphany Mental Health Services
Tarboro Office
99 S. Main St.
Tarboro, NC 27886
(252)824-8301

Rocky Mount Office
916 Branch St.
Rocky Mount, NC 27801
(252)985-0078
- Tarboro Pediatric Psychology
511 Saint Andrew St.
Tarboro, NC 27886
(252)823-6187
- Tar River Psychological Associates
118 E. Saint James St.
Tarboro, NC 27886
(252)823-2927
- Vidant Behavioral Health – Macclesfield
201 West Edgecombe St.
Macclesfield, NC 27852
(252)827-8101

Appendix D – Vidant Edgecombe Hospital’s Community Health Implementation Plan

Vidant Edgecombe Hospital's Community Health Implementation Plan



VIDANT HEALTH™

FY 2013-2014

Executive Summary

Vidant Edgecombe Hospital is a full service, 117-bed, not-for-profit community hospital located in Tarboro, NC serving Edgecombe County and surrounding communities. The hospital is part of Vidant Health (formerly University Health Systems of Eastern Carolina); a regional health system serving 29 counties in eastern North Carolina. The health system's mission, "To enhance the quality of life for the communities and people we serve, touch and support" drives a system of care for healthier communities beyond the traditional walls of our facilities.

Description of Community

The primary service area for Vidant Edgecombe Hospital encompasses Edgecombe County, North Carolina which is located just east of the I-95 corridor in eastern North Carolina. Municipalities within Edgecombe County include Rocky Mount, Pinetops, Conetoe, Whitakers, Macclesfield, Leggett, Sharpsburg, Princeville and Tarboro.

As of July 2012, the estimated population of Edgecombe County was down to 56,085 from the April 2010 population count of 56,552. This is a loss of 0.8% with a net migration of -1.0%. It is important to note that in September 1999, flooding from Hurricane Floyd destroyed large sections of the county and many residents were displaced. The population of Edgecombe County has been fluctuating since that time.

According to 2012 data from the U.S. Census bureau, the majority of Edgecombe County citizens are African-American (57.6 percent), whereas Caucasians represent 36.5 percent of the population. U.S. Census data also shows the Hispanic population in Edgecombe County has grown from 2.8 percent in 2000 to 3.9 percent in 2012.

American Indian, Alaskan Native, Asian, Pacific Islander or persons reporting two or more races represent the remaining Edgecombe County population. Overall, the race distribution in Edgecombe County is quite different from that of North Carolina. In North Carolina, 62.7 percent of the population is Caucasian and 22.0 percent is African-American. North Carolina's percent population of Hispanic origin is more than double that of Edgecombe County at 8.7 percent.

As of 2011, the median household income of Edgecombe County was \$33,740 compared to the state median household income of \$44,942 with a per capita income in Edgecombe County of \$17,808 compared to the state which was \$27,915. Edgecombe County's poverty rate of 23.6% was higher than the state rate of 17.2%. The unemployment rate in Edgecombe County has also been substantially higher than that of the state average. At the end of 2012, the unemployment rate of Edgecombe County was 14.7%, significantly higher than the state rate of 9.5%.

Who Was Involved

The community health assessment process was initiated by Vidant Edgecombe Hospital in collaboration with the Edgecombe County Health Department. To ensure input from persons with a broad knowledge of the community, personal invitations were sent to organizations representing the county including mental health, senior health services, and agencies representing the uninsured and underinsured. Those who committed to the assessment and planning process became the Community Health Advisory Council and attended meetings beginning in June 2013. The 2013 Community Health Advisory Council included the following members:

- Meredith Capps – Edgecombe County Health Department
- Michele Cherry – Vidant Edgecombe Hospital
- Deborah Pittman Coley – Office on Aging
- Michelle Etheridge – Edgecombe County Health Department
- Eric Evans – Edgecombe County Manager's Office
- Erin Grimsley – Vidant Edgecombe Hospital
- Patrick Heins – Vidant Edgecombe Hospital
- Kim Hickerson – EastPointe Human Services (mental health)
- Karen Lachapelle – Edgecombe County Health Department
- Tiffany Lee – Edgecombe County Resident
- Bridgett Cuthbertson Luckey – OIC Family Medical Center (FQHC)
- Heather Pachnar – Vidant Edgecombe Hospital
- Susan Rogerson – Edgecombe County Health Department
- Dr. Jim Winslow – Vidant Multispecialty Clinic

The hospital contracted with East Carolina University to conduct qualitative and quantitative data analysis. The data collection included primary and secondary data. A thorough survey was distributed throughout the county and also made available online from May - July 2013. Approximately 500 surveys were completed and four listening groups were conducted.

Completion of the primary data collection was a collaborative effort of many human service agencies in Edgecombe County. The agencies included:

- Conetoe Missionary Baptist Church
- Crossworks, Inc.
- Dunbar Community Center
- East Carolina University
- EastPointe Human Services (mental health)
- Edgecombe County Department of Social Services

- Edgecombe County Health Department
- First Baptist Church
- Mental Health America
- OIC Family Medical Center
- United Community Ministries
- Vidant Edgecombe Hospital
- Vidant Family Medicine Pinetops

The secondary data collection included an exhaustive search of national, state and local data. Some of the sources cited include:

Demographic:

- US Census Bureau (<http://www.census.gov>)

Education:

- NC Public Schools (<http://www.ncpublicschools.org/>)

Social:

- NC Department of Justice
(<http://crimereporting.ncdoj.gov/Default.aspx>)

Economic:

- Office of State Budget and Management (www.osbm.state.nc.us)

Health:

- NC State Center for Health Statistics (www.schs.state.nc.us)
- NC Department of Health and Human Services (www.ncdhhs.gov)
- County Health Rankings and Roadmaps
(<http://www.countyhealthrankings.org>)

Based on a thorough review of the primary and secondary data collected, the Community Health Advisory Council identified the following top four health priorities for Edgecombe County:

- Chronic Disease Prevention and Management
- Access to Care
- Obesity and Weight Management
- HIV/AIDS, STDs, Teen Pregnancy

Vidant Edgecombe Hospital's Community Benefits Grants & Health Initiatives Program

Vidant Health wants to do more for people to improve their health before they reach the point of having to be hospitalized. In 1998, Pitt County Memorial Hospital (now Vidant Medical Center) made a substantial donation to the Pitt Memorial Hospital Foundation (now Vidant Health Foundation) to establish the Community Benefit and Health Initiatives Grants program. In 2006 the program extended its outreach by establishing a Regional Community Benefits Grants program which works with Vidant Health regional hospitals to distribute grants to their communities.

The goal of the program is to support outreach projects that focus on wellness and prevention strategies. The Community Benefit Grants program provides funding and assistance to nonprofit organizations and government agencies to support programs in the community, making them available and more accessible to people needing the programs/services. Since its inception, Vidant Edgecombe Hospital has committed \$670,833.

Vidant Edgecombe Hospital established a committee of local community members to review letters of intent and grant applications from nonprofit organizations and government agencies in Edgecombe County and neighboring Nash County. Members of the committee include the Edgecombe County Health Director, the Executive Director of United Way Tar River Region, two local physicians, the Assistant County Manager of Edgecombe County, an Edgecombe County resident, and the President of Vidant Edgecombe Hospital. The committee recommends funding to local organizations once per year.

The committee's focus areas are aligned with the health priorities identified in the 2013 CHNA and include:

- Chronic Disease Prevention and Management
- Access to Care
- Physical Activity and Nutrition

Implementation Plan

Initiative: Chronic Disease Prevention and Management

Goal: To improve outcomes and quality of life for adults with chronic illness (i.e. diabetes, heart disease, cancer, asthma)

Strategies:

1. Collaborate with local agencies and local industry to conduct community-based health screenings for heart disease, stroke, diabetes and cancer.
2. Promote at least three nationally recognized health events such as breast cancer awareness, women's heart health, stroke awareness and diabetes.
3. In conjunction with other community partners, sponsor Breast Cancer Awareness and Prevention activities in October. Conduct breast cancer screenings at an annual health fair hosted at Vidant Edgecombe Hospital. Participate in Vidant Health's annual Pink Power initiative.
 - a. Continue the Breast Lay Health Advisor program to provide community education and outreach throughout the year.
 - b. Expand the Lay Health Advisor program to provide lay navigation to all cancer patients.
 - c. Apply for grant funding to address breast cancer.
4. Sponsor Women's Heart Truth event in February. Event will feature a luncheon with an informational and inspirational speaker, health screenings and women's heart health education.
5. Continue existing and establish new support groups for individuals with chronic illness.
 - a. Continue to support Bosom Buddies cancer support group for women.
 - b. Continue to offer Look Good Feel Better to female cancer survivors.
 - c. Continue the Lotus Survivor support group to provide Edgecombe County breast cancer patients and/or survivors with opportunities to strengthen recovery.
 - d. Implement at least one other chronic disease support group.
6. Provide support and/or funding to the following programs through the Community Benefits Grants & Health Initiatives program:
 - a. The Sweet Relief Program with Crossworks, Inc. for diabetes self-management,
 - b. The East Carolina University Brody School of Medicine's program to improve respiratory health among high risk children with asthma in Edgecombe County,

- c. Chronic Disease Self-Management program with the Edgecombe County Health Department through the Vidant Health Community Benefits Grants Initiative,
 - i. Continue to provide the Chronic Disease Self-Management program with in-kind use of the gym and pool,
 - ii. Provide support for diabetes nurse at Edgecombe County Health department,
- d. Diabetes Testing Supplies program with Tar River Mission Clinic,
- e. and other qualified program applicants focusing on chronic disease prevention.

Initiative: Access to Care

Goal: To improve access to health care especially for the uninsured/underinsured patient population.

Strategies:

1. Continue commitment to providing quality health care to everyone who seeks our services.
2. Continue to provide financial counselors who can assist with determining if patients qualify for Medicaid and in applying for other government-assisted programs.
3. Continue to offer charity care to our patients who are unable to pay due to financial hardships.
4. Continue to work with Vidant Physician Recruitment office to help recruit additional primary care physicians to the community.
5. Assist Vidant Medical Group and local primary care practices as they work towards implementing the patient-centered medical home model of care which will provide greater access to needed services, better quality of care, greater focus on prevention, as well as early identification and management of health problems.
6. Continue to work with the Edgecombe County Stakeholders to identify and address gaps and barriers of access to care for the uninsured and underinsured residents of Edgecombe County. Collaborate with the health committee of the Twin Counties Visioning effort to address health care concerns in the community.
7. Develop and implement a committee of Federally Qualified Health Care Centers to focus on access to care for uninsured and underinsured residents.
 - a. Focus on educating the community about availability of services for the uninsured and underinsure.
 - b. Establish memoranda of agreement for services for the hospital and each FQHC in the county.
8. Collaborate with the Edgecombe County Health Department to provide education and outreach on
9. Accept and review applications through the Community Benefits Grants & Health

Initiative program from qualified applicants that are addressing access to care. Provide support and/or funding to appropriate organizations.

Initiative: Physical Activity and Nutrition

Goal: To educate adults and children on the benefits of physical activity and nutrition and provide resources, therefore improving general wellness.

Strategies:

1. Participate in at least two community events/health fairs and offer at least one of the following screenings depending upon the event – blood pressure, blood sugar and body mass index. Provide educational information about nutrition and physical activity.
2. Sponsor at least one community event that targets children’s health and specifically promotes health eating and physical activity for children.
3. Sponsor at least one community event that targets the Hispanic/Latino community and offer at least one of the following screenings depending upon the event – blood pressure, blood sugar and body mass index. Provide educational information about nutrition and physical activity
4. Promote healthy eating and educate visitors on making healthy choices by providing calorie and other nutritional information at the point of service in the hospital cafeteria. This includes snack and vending machines. We will continue to offer discounted rates on the healthy foods served in our hospital cafeteria.
5. Provide support and/or funding for the following programs through the Community Benefits Grants & Health Initiative Program:
 - a. Triple Play Physical Activity Program with the Boys & Girls Club of Nash/Edgecombe Counties through the Vidant Health Community Benefits Grants & Health Initiatives program,
 - b. Fitness is Child’s play physical education program at G. W. Bulluck Elementary School,
 - c. The Expanded Food and Nutrition Program through the NC Cooperative Extension – Edgecombe County office,
 - d. Town of Tarboro FIT Club exercise and nutrition program,
 - e. Change Initiative with Conetoe Chapel Missionary Baptist Church
 - i. Provide in-kind support to help expand community garden program to other churches in Edgecombe and Nash counties
 - ii. Assist with grant writing efforts for sustainable outreach,
 - f. and other qualified program applicants focusing on physical activity and nutrition.

Priority Health Need Not Addressed by Implementation Plan

One community health need identified by the community health needs assessment is not specifically addressed in the hospital’s implementation plan. However, Vidant

Edgecombe will work collaboratively with the Edgecombe County Health Department to address the following priority:

HIV/AIDS, STDs, Teen Pregnancy

- The Edgecombe County Health Department will take the lead on HIV/AIDS, STDs, and teen pregnancy. The Edgecombe County Health Department has a grant-funded project to provide HIV testing to community residents. Vidant Edgecombe Hospital will collaborate with the Edgecombe County Health Department on this grant by collecting blood samples for HIV testing of patients in the emergency department. This service will be offered to patients meeting the established high risk behavior criteria and patients will have the option to opt out.
- The Edgecombe County Health Department has ongoing programs addressing HIV/AIDS, STDs and teen pregnancy. Vidant Edgecombe Hospital will provide support as needed.