

Chatham County 2010 Community Health Assessment

Determining the health priorities of Chatham residents

Final Report
December 6, 2010

**Prepared by
Chatham County Community Health Assessment Team**



Table of Contents

Introduction i
Data Limitations. ii
Executive Summary iv
Community Profile
 History 1
 Chatham County Courthouse 1
 Geography 4
 Population 8
 Education 11
 Housing 12
 Economic Characteristics 15
 Industry 15
 Household Income and Poverty 16
Quality of Life
 Economy/Jobs 20
 Recreation 21
 Transportation 25
 Crime 26
 Social Networks 27
 Resources 29
 Immigration Issues 31
Chatham County Health Trends
 Mortality
 Birth Rates 33
 Death Rates 41
 Heart Disease 43
 Cancer 45
 Cerebrovascular Disease 48
 Diabetes 49
 Chronic Lower Respiratory Diseases 51
 Alzheimer’s Disease 52
 Pneumonia and Influenza 54
 Unintentional Injuries 56
 Unintentional Motor Vehicle Injuries 58
 Suicide 60
 Morbidity
 Sexually Transmitted Diseases 62

Chatham County Public Health Department 2010 Community Health Assessment

Communicable Diseases	64
Cancer Incidence	65
Mental Health and Substance Abuse	66
Obesity	67
State of Health Care	
Chatham Hospital	70
Juvenile Justice Center	70
Health Care Provider Resources	70
Uninsured	71
Hospital Usage	72
2010 Health Care Bill	73
Barriers to Health Care	74
Physical Environment	
Air Quality	76
Lead Testing	77
Water Quality	79
Food Establishment Regulations	81
Preparedness	
2009 H1N1 Outbreak	82
Vulnerable Populations	83
Emerging Issues	
Economic Development	84
Technology	84
Widening Income Gap	85
Community Health Assessment Priorities	
CHA Process	86
Finalizing Priorities	86
Health Priorities	88
Next Steps	89
References	90
Appendices	
Appendix A: Community Resource List	A
Appendix B: Community Member Interview Guide	I
Appendix C: Service Provider Interview Guide	N
Appendix D: Focus Group Guide	S
Appendix E: Community Opinion Survey	W

Chatham County Public Health Department 2010 Community Health Assessment

Appendix F: Community Opinion Survey Results AA
Appendix G: Alison Mendoza Report on Interview Results RR
Appendix H: Chatham County 2008-2009 Community Survey YY
Appendix I: United Way Community Needs Survey CCC

Chatham County Youth Health Behavior Report Table of Contents

Executive Summary 2

Introduction 4

 Methods 4

YHBS Results and Analysis 8

 Student Characteristics 8

 Obesity 11

 Injury and Violence. 18

 Substance Abuse. 25

 Sexual Behavior. 37

Conclusion. 44

References. 45

Appendices. 54

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Introduction

The Chatham County Community Health Assessment is required by the state and completed every four years to identify major health issues and quality of life factors that affect the health of a population. Community members, public health agencies, community leaders, non-profit organizations, county government and the school system work collaboratively to gather and analyze data. The information is used to determine priority areas and then shared with the public. The final step is deciding which resources in the community will be used to address these issues.

The 2010 Community Health Assessment includes a Youth Health Behavior Survey (YHBS) Report and a Health Disparities Report. While the reports appear as part of this document, they are also stand-alone papers.

Chatham County began preparing for the Community Health Assessment in September 2009 by developing a community health assessment team to inform and guide the process, identify primary data collecting tools, and to gather information for the assessment.

The purpose of the Community Health Assessment is as follows.

Goals

1. Equip local partnerships and community members with the skills and tools needed so they can assess the health of their communities
2. Identify factors that affect the health of a population and determine the availability of resources within the community to adequately address these factors.
3. Tailor effective public health programs and policies.
4. Evaluate the impact of such interventions.
5. Advocate for policy and environmental level changes.
6. Share health status results and information with the community.

As part of the process, the Youth Health Behavior Survey (YHBS) was conducted in March 2010 by Chatham County Schools in collaboration with the Chatham County Public Health Department. The purpose of the survey was to collect information on youth health behaviors that contribute to morbidity and mortality for youth in grades 6-12. Chatham County agencies can use the information as a planning tool for community and school based efforts that will reduce problem behaviors.

The Executive Summary will further detail the process used in the Community Health Assessment.

Data Limitations

Health Statistics

The majority of the health statistics in this report was obtained from the State Center of Health Statistics and the United States Census Bureau. Caution should be used when interpreting data with less than 20 cases from the State Center of Health Statistics due its unreliability.

The State Center for Health Statistics states the following about its data:

Rates presented here utilize the North Carolina State Demographer's Office population estimates. Population estimates are periodically modified based on the best available information. Therefore, rates presented in this report may vary over time as revised population estimates become available. Data may include revisions and, therefore, may differ from data previously published in this report and other publications.

The State Center for Health Statistics released data for 2009 during the completion of this report. Updated data on health indicators will be available in the 2010 Chatham State of the County Health report.

Data for the State Center for Health Statistics are based on the 2000 population.

U.S. Census data was used for the 2006-2008 American Community Survey and 2000 decennial census. Data is collected differently on each Census survey and may not be entirely comparable.

Data for non-decennial years are model-based estimates and not exact counts. Data from the 2010 census was not available in time for inclusion in this report.

Interviews, Focus Groups, and Community Opinion Survey

Qualitative data obtained during focus groups and interviews may contain participant bias. The responders may have answered questions in a way he/she thought would sound better or the interviewer would feel was favorable.

The Latino population is underrepresented in focus groups and interviews due to limited bicultural and bilingual resources within the health department available for the Community Health Assessment process.

The Community Opinion Survey may have a response bias. Those who answered the survey may have different characteristics such as motivation, educational background, or concern for the community than those who did not respond. The survey also used a convenience sample of residents who could be reached at various community events and meetings. Community Opinion Survey results show that women were overrepresented. African-Americans and Hispanics were underrepresented according to the latest Census

estimates. Results from the Community Opinion Survey are not generalizable to the entire community. The results reflect the opinions of those who completed the survey.

YHBS

For ease of YHBS implementation, convenience sampling was used for the 2010 Chatham County Youth Behavior Survey (CCYHBS), which does not yield a scientifically selected sample. All Chatham County schools participated in the survey with the exception of private and charter schools.

The Youth Health Behavior Survey is self-reported which limits information on how and why students participate in certain behaviors. This may be skewed based on how accurately students replied to questions.

The Centers for Disease Control and Prevention (CDC) Morbidity and Mortality Weekly Report states the following regarding self-reporting bias:

First, all YRBS data are self-reported, and the extent of underreporting or overreporting of behaviors cannot be determined, although measures described in this report demonstrate that the data are of acceptable quality. Second, the national, state, and local school-based survey data apply only to youth who attend school and, therefore, are not representative of all persons in this age group. Nationwide, of persons aged 16–17 years, approximately 6% were not enrolled in a high school program and had not completed high school.

About 77% of middle school students and about 47% of high school students in Chatham County participated in the 2010 CCYHBS. While the middle school response rate would be acceptable in terms of the CDC's requirements, the high school response rate would not because it is below the 60% accepted response rate.

The data presented in this report are not generalizable to the entire 6th-12th grade population of Chatham County. These data truly reflect only the group of students who took the survey, however they do give a general idea of the health and health behaviors of Chatham County's students.

County Information

The Chatham County Public Health Department has knowledge of resources, services, programs, agencies, organizations, laws, and other information included in this Community Health Assessment. The report is as comprehensive as possible, but some information regarding work being done in the community may have been left out due to unfamiliarity on the part of the health department.

The data in this Community Health Assessment report should be viewed with the above limitations in mind.

Executive Summary

In September 2009, the Chatham County Public Health Department led an effort to begin the health assessment process. Members were from a variety of agencies and organizations such as Chatham County government, Chatham County Schools, Chatham Hospital, Family Violence and Rape Crisis Services, Hispanic Liaison, Partnership for Children, Piedmont Health Services, and community members. An intern from the University of North Carolina at Chapel Hill also worked extensively on the Community Health Assessment process throughout the Summer and Fall of 2010. All worked together to collect data and share information with the public.

Community Health Assessment Process

The health assessment team began meeting in September 2009 to become oriented with the Community Health Assessment process and develop shared outcomes. The team used the Fall months of 2009 to develop data collecting instruments such as interview and focus group guides and the community survey. Chatham County Schools and the health department worked during the winter of 2009 to complete the CCYHBS survey.

At the beginning of 2010, members of the steering team participated in focus group and interview facilitation trainings. Between March and the end of June, trained steering team members conducted 41 interviews with key informant community members and service providers on topics of strengths, needs, resources, and concerns about Chatham County. Three focus groups with 36 Chatham residents were also completed during this time.

From the end of March until the end of June, 695 Community Opinion Surveys were collected online using www.surveymonkey.com and via hard copy. The paper version was given out at community events, health department sites, local hospital, libraries, and through members of the task force. Notice of the survey was shared with the community through the local newspaper, radio station, and Chatham Chatlist, a community listserv.

Finalizing Priorities

Health department staff generated a list of the top 15 health and quality of life issues based on results from the Community Opinion Survey. Of the top fifteen, ten issues were easily defined by Chatham County residents taking the survey. The deciding factor for issues ten through fifteen was that they were more frequently discussed than other lower ranking issues during the key informant interviews.

Fact sheets were assembled for each of the 15 issues to help determine feasibility of addressing the issue. These fact sheets were based on information from the key informant interviews, resources from Chatham County Public Health Department, and reliable online sources such as the Centers for Disease Control and Prevention (CDC) and the United States Department of Health and Human Services (US DHHS). Fact sheets helped answer the questions of extent of community concern, resources currently available, effective multi-level public health strategies to address the issue, and challenges.

Secondary data was collected for each of the 15 issues to help determine the magnitude and severity of the problem. These data were collected from a variety of sources, including the CDC, the Behavioral Risk Factor Surveillance Survey, and Chatham County public records. The secondary data helped answer the questions about the magnitude of the problem, the degree of the problem in Chatham County in relation to North Carolina state averages and to what extent a disparity exists between different groups on this issue.

A prioritization scoring worksheet was drafted based on input from members of the Chatham County health assessment steering team, public health administration and practice guidelines from textbooks, the Healthy Carolinians Community Assessment Guidebook, the Minnesota Department of Health Community Health Assessment and Action Planning workbooks, and the Maryland Healthy People 2010 Toolkit.

At the September 14, 2010 Community Health Assessment prioritization meeting, members of the steering team used the fact sheets, secondary data, and group discussion, to assign scores to each issue. A cumulative total for each issue was divided by the number of people scoring that issue to reach an average. Based on the average scores, the 15 issues were narrowed to the top 10 issues. Those top 10 issues were then ranked in order according to their scores. The highest average score was ranked number one and the lowest at number ten.

2010 Quality of Life Issues

1. Obesity
2. Physical Inactivity
3. Affordable Housing
4. Hunger
5. Lack of Safe Areas to Walk/Bike
6. Lack of Adequate/Affordable Health Insurance
7. Diabetes
8. Transportation
9. Jobs/Adequate Employment
10. Inadequate Systems (Water/Sewer)

The next list includes the health priorities from the original list. At the October 12th, 2010 Community Health Assessment meeting, the steering team changed “Lack of Safe Areas to Walk/Bike to “Safe Areas to Walk/Bike.” The committee then made this priority a subset of “Physical Inactivity.”

Chatham County Public Health Department 2010 Community Health Assessment

Here are the top health priorities for 2006 as compared to the final 2010 list:

<u>2006</u>	<u>2010</u>
1. Alcohol and Other Drug Use	1. Obesity
2. Lack of Affordable Health Insurance	2. Physical Inactivity Safe Areas to Walk/Bike
3. Obesity	3. Lack of Adequate/Affordable Health Insurance
4. Water Quality	4. Diabetes
5. Unsafe Sex/Unintended Pregnancy	
6. Family Violence	
7. Affordable Health Care	
8. Recreation	
9. Diabetes	

At the same October 12th meeting, the Community Health Assessment steering team voted to address obesity, physical inactivity and safe areas to walk/bike subset, and diabetes.

There are differences between the 2010 and 2006 lists of priorities. The 2010 list is much shorter with four health priorities compared to nine in 2006. Issues such as poverty and water quality were not top priorities in 2010 because addressing the issues were seen as not being feasible. Three priority areas from 2006 made the list in 2010. Those areas are obesity, lack of adequate/affordable health insurance, and diabetes.

Issues which are getting a significant amount of attention politically and in the media such as affordable health care did not make the top 10 priority list. These issues are still viewed as important.

Health Priorities

The top Chatham County health priorities are examined in greater detail with quotes from Chatham County residents and statistics.

The priorities for the 2010 Chatham County Community Health Assessment were finalized at a CHA Steering Team meeting held on September 14, 2010.

1. **Obesity.** Almost one-quarter of adults in Chatham County are obese, and residents recognize the magnitude of this issue. 49.6% of residents stated obesity as “a big problem.”
2. **Physical inactivity.** One resident described the importance of physical activity for youth: “They could use different attractions for kids, something that would interest them, like updating on the basketball courts, the tennis courts...more playground equipment. I think that would entice more people to come to our park.”

3. **Affordable housing.** One community member stated, “The average house in Chatham now may be \$300,000. So, even for say, some law enforcement person, the school teacher...that’s not even affordable.”
4. **Hunger.** “[One] problem, right now, being economic-driven, we have a lot of hungry people in Chatham County. And I think your food pantries really show that, that they are working overtime to get food to some of these households,” explained one service provider.
5. **Lack of safe areas to walk and bike.** “Quite a few folks that live in the surrounding area [around Briar Chapel] don’t have good walkable type streets or access to that,” said one community member.
6. **Lack of adequate/affordable health insurance.** Almost one-quarter of Chatham County residents ages 0-64 are uninsured. (24.6% in 2007) Furthermore, African-Americans are more than one and a half times and Native Americans are almost twice as likely to lack health insurance as Caucasians.
7. **Diabetes.** “We have a lot of childhood obesity and a lot of patients that have diabetes very early in life,” says one clinic service provider as he described patients’ health issues. African Americans are almost twice as likely as Caucasians to have been diagnosed with diabetes.
8. **Transportation.** One community member explains how lack of transportation can have far-reaching effects in terms of health and education: “There’s a lot of families that either can’t drive, can’t access a driver’s license because of the social security requirement, and so left with another transportation system, it’s hard to get to doctor’s appointments, to get to school meetings.”
9. **Lack of jobs/adequate employment.** Lack of jobs was the most discussed community concern in the CHA interviews. Lack of jobs and adequate employment was also #1 on residents’ list of top three concerns for the county. The Chatham County unemployment rate stood at 8.1% for 2009.
10. **Inadequate water/sewer systems.** Though water and sewer lines are expensive to install, they are integral for fostering economic growth in the county. Residents of Chatham County are more likely to lack complete plumbing facilities (.7%) than residents of North Carolina at large (.4%).

Next Steps

After the completion of the report, the Community Health Steering Team will distribute the report in the following ways:

- Hold a community forum;
- Email/mail the Executive Summary to those interested who participated in the focus groups and interviews;

Chatham County Public Health Department 2010 Community Health Assessment

- Place the Community Health Assessment report at local libraries and health department sites;
- Place the Community Health Assessment on the Chatham County Public Health Department website and the health department blog at www.chathampublichealth.com; and
- Results will be made available to the local newspaper, the Chatham News and community listserv, Chatham Chatlist.

A draft of the executive summary was presented to the Board of Health at the October 25th meeting in order to receive feedback from board members.

The final results were shared with the Board of Health at the November 23rd meeting. The Board of Health will use the information to assist in the development of action plans and for health planning.

Community Profile



History

Settlers from Europe came to the area in the mid-1700s. Early pioneers traveled routes from the south through the Cape Fear River Valley and also from the North.

The bill for creating Chatham County was introduced to the Colonial Assembly on December 5, 1770. The bill became effective when Chatham County was officially established on April 1, 1771. The land that Chatham now sits on was once part of Orange County, which lies to the north. The county was named after the first Earl of Chatham, William Pitt, who was a true defender of American rights. Pittsboro then became the county seat and was named after England's Prime Minister, the younger William Pitt. Because of its prime location and burgeoning industry, Chatham County began to grow.¹

In Chatham County's infancy, the government was run by justices of the peace. For some time these justices appointed other county positions such as sheriff, coroner, county attorney, and surveyors among others.

The 1868 rewritten state constitution changed the way Chatham County government was conducted. From this year on, a five member Board of Commissioners was instituted. The county was divided into townships and major changes were made to the court system. As of 1894, justices of the peace no longer had any role in government.¹

Chatham County Courthouse

Much of the history of Chatham County's government took place in the courthouse located in Pittsboro's traffic circle. The three-story brick courthouse was built in 1881. The total cost for construction at that time was \$10,000. The courthouse was renovated several times throughout its history.

The interior of the courthouse was completely remodeled in the 1950s for \$130,000, most of which refurbished the courtroom. "The courtroom was decorated with mahogany imported from the Philippines."² Major renovations occurred in the early 1990s. The last major change took place in 2000 when clocks were added to the courthouse cupola.

Chatham County was in the process of updating and repairing the courthouse in the spring of 2010. Jobs included "replacing windows; repairing masonry and stucco and replacing wood siding and trim."³ Scaffolding surrounded the building and the clock tower was covered in construction material. The County had contracted with the

Chatham County Public Health Department 2010 Community Health Assessment

Progressive Contracting to do the work. Approximately \$415,000 was budgeted for the months-long project.

On Thursday, March 25th, 2010, a contractor with Progressive Contracting was using a soldering iron to repair gutters. The iron sent sparks into the eaves of the building which quickly spread across the attic and into the clock tower. Wind and the courthouse's pine helped fuel the fire.

The courthouse was seen as the heart of Chatham County. Grace Heilman, longtime Pittsboro resident said, "What a tragedy. Here's a community landmark that surely will be missed."⁴

Another resident, Ronald Garcia-Fogarty, shared that, "This is a very sad day. I am completely shocked. There is a lot of history in that building. I just hope that they can put it out before all the history is ruined."⁴

According to the April 1st edition of the Chatham News and Record, the timeline of the courthouse fire is as follows:⁵

- **4:43pm**- Pittsboro Fire Department receives word about smoke at the courthouse. Fire department soon arrives to find smoke rising from the attic area. Within minutes backup fire departments start arriving from Siler City, North Chatham, Moncure, Deep River, Parkwood, Goldston, Bonlee, Bennett, and Silk Hope.
- **5:16pm**- Firefighters merge efforts as Siler City and North Chatham ladder trucks aim water from above the structure.
- **6:00pm**- Fire looks to be contained but it continues to burn.
- **7:00pm**- Blaze starts back up. Firefighters start transporting water via tanker trucks from a water source near the old Ford dealership.
- **8:00pm**- Ladder trucks continue to spray water from above.
- **10:00pm**- Red Cross announces that food will be brought in for emergency personnel.
- **12:00am**- Fire is still being contained
- **1:30am**- Clock tower collapses, falling into the courtroom. Pittsboro Fire Chief, Daryl Griffin, says blaze finally under control.



The Chatham County Courthouse: 2009
Courtesy of Debra Henzey



The courthouse and clock tower burn.
March 25, 2010, Courtesy of Paul Messick



Courthouse fully engulfed.
March 25, 2010, Courtesy of Paul Messick



Courthouse fully engulfed.
March 25, 2010, Courtesy of Kelcy Walker



Bystanders watch the courthouse burn.
March 25, 2010, Courtesy of Kelcy Walker



Courthouse post fire
March 2010, Courtesy of Paul Messick

Chatham County Public Health Department 2010 Community Health Assessment

The Chatham Historical Museum was located on the first floor of the courthouse. The museum held irreplaceable documents such as books, pictures, maps, and records. By luck, many artifacts were untouched by fire damage. Others were only wet from water used to put out the fire.

The Chatham Historical Association salvaged a majority of the items from the courthouse and saved them through an air drying process. The Chatham Historical Association found a new home in May 2010 on East Street, near downtown Pittsboro. The museum is once again open to educate the public on the history of Chatham County.

Following the fire, Chatham County Board of Commissioners met on Wednesday, March 31, 2010 to decide on what to do with the remains of the courthouse. A unanimous decision passed to rebuild the courthouse.

The Board of Commissioners appointed a task force comprised of 21 Chatham County residents to discuss how the rebuilt space should be used. Input from the public was included in the final recommendations from the task force.

A report from the task force released in September 2010 recommended the following:

- Keeping the second floor courtroom judicial function. The courtroom should be built to look as it did before the fire.
- The Chatham County Historical Society should remain on the first floor.
- A Visitor's Center should be established on the first floor.⁶

County insurance mandates the courthouse be rebuilt by March 2013.

Geography

Chatham County is known as the "Heart of North Carolina" because it is positioned geographically in the middle of the state. The county covers more than 707 square miles located near two of the state's largest centers of population and commerce, the Triangle Region and the Piedmont Triad.

Chatham County's location near Research Triangle Park, four major universities, and the industry of the Greensboro/High Point area make it very attractive to newcomers.



Chatham County Public Health Department 2010 Community Health Assessment

Chatham County is split by US 15-501, which runs from north to south through the county and US-64 which runs from east to west. The US 15-501 highway is a main artery that leads to Chapel Hill to the north and Sanford to the south. US-64 crosses over Jordan Lake in the eastern section of the county and leads to Randolph County on the western border. Other major roads in Chatham County include US-421, NC-87, NC-902, and NC-751, and US-1.



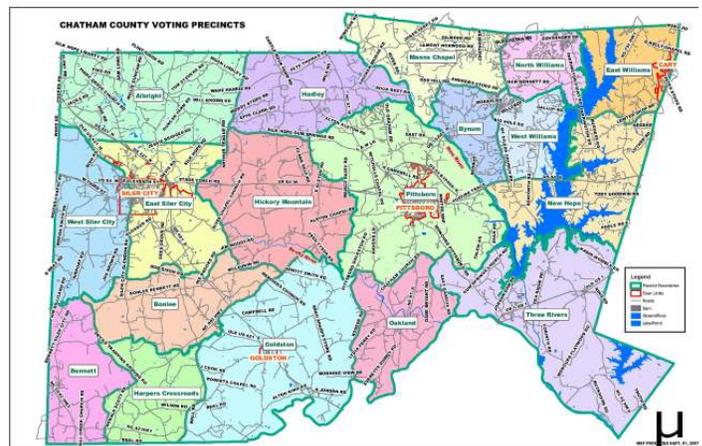
Courtesy of www.chathamwebbuilders.net/

Chatham County has thirteen townships. Townships are segments of the county used for the U.S. Census and other functions. These townships are not actual towns or political subdivisions.

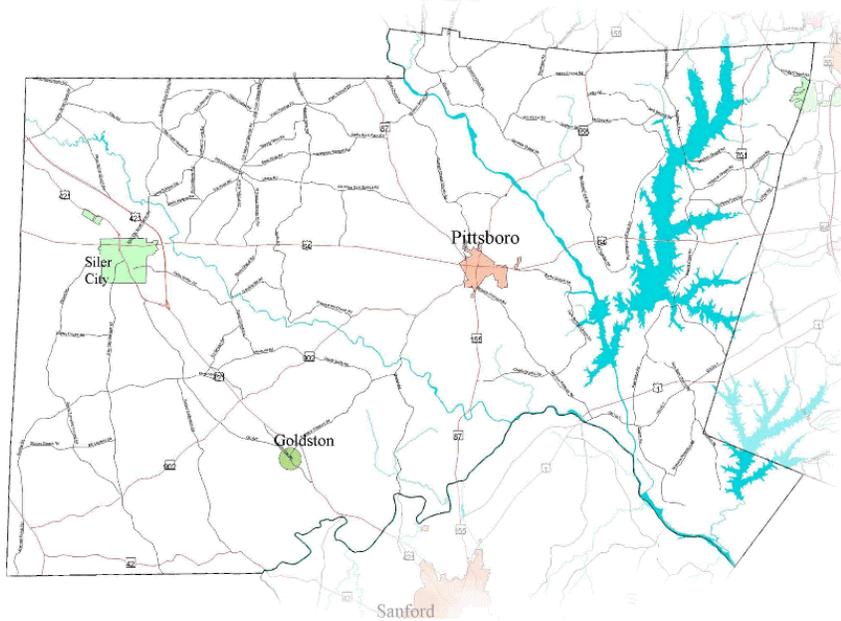


Courtesy of www.commons.wikimedia.org

When it is time for Chatham County residents to decide an election, votes are cast in 18 different voting districts. Districts are based on population size.



Courtesy of Chatham County Board of Elections



Chatham County Map with Municipalities

(Courtesy of http://www.durham-nc.com/visitors/maps/chatham_county.php)

Chatham County has three incorporated towns- Pittsboro, Siler City, and Goldston. There is a fourth municipality which consists of a small portion of Cary residents that live within the Chatham County boundary. The majority of Cary residents live in Wake County. One community member felt that, **“There’s four distinct areas I think of Chatham County and that’s the western part, the far northeast/Chapel Hill, Pittsboro, and then the southwest corner...There’s different mentalities, different cultures.”**

Pittsboro

Pittsboro, established in 1787, is the county seat of Chatham. Most county offices such as the courts, sheriff’s office, and manager’s office are located here. Pittsboro is well known for its traffic circle at the center of town which once held the historic courthouse. According to July 2009 estimates from State Demographics of North Carolina, Pittsboro has 2,443 residents. This represents an almost 10% growth in population since April 2000.⁷

Policies are created by the mayor and five-member Board of Commissioners. The downtown area is home to several antique and specialty shops, local eateries, and art stores and galleries. Other businesses in town include bed and breakfasts, software and biofuel research firms, and farms. Pittsboro is convenient to Chapel Hill and Sanford by US-15/501 and is 35 miles west of the North Carolina state capitol, Raleigh.

During a community interview, one Chatham resident shared about the growing city of Pittsboro, **“It used to be very I guess friendly, small, everyone knew everybody. It’s absolutely not that now...Much larger, much larger and that’s in a good way.”**

Another community resident describes the feel of Pittsboro as, **“I guess it could be considered to be more progressive and certainly has a different way of thinking than western Chatham County or Siler City, which is a more traditional community, I think.”**

Siler City

Siler City is located 17 miles west of Pittsboro on US-64 on the western side of Chatham County. It was founded in 1887 and is Chatham County’s largest town with an estimated 2009 population of 8,713 according to State Demographics of North Carolina.⁷ Siler City is home to a large Latino population that has increased 66% between 2000 and 2008.¹¹ Many migrated to the Siler City area to work in local plants. The downtown has many shops, restaurants, art galleries, and an art incubator. Other businesses located in Siler City are the county’s only hospital and a large poultry plant. Siler City is governed by a mayor and seven town commissioners. Siler City is accessible to Asheboro on US-64 and Greensboro by way of US-421.

One Siler City resident interviewed felt that the town is, **“A place that is very diverse. There’s a lot of children, a lot of youth, a lot of senior citizens. Definitely a good mix of different races from Latino, Black, Caucasian. Very active. A good place to live.”**

Goldston

Goldston is the smallest of the three incorporated towns in Chatham County with a State Demographics 2009 estimated population of 361 residents.⁷ Goldston lies in the southwest corner of the county, 12 miles from Pittsboro and 17 miles from Siler City. Goldston has a mayor and town board but no paid full-time staff. The downtown area includes stores, restaurants, and a Veteran’s Memorial.

A community member remarked on living in Goldston, **“It’s a small community. Everybody basically knows each other, they’re friendly.”**

Northern Chatham

Northern Chatham is an area of the county that is located closest to the Orange County line. This section of the county is home to Fearrington Village and Galloway Ridge, upscale retirement communities. Many of the retirees in this part of the county are college educated and have moved from other cities from across the country. One Fearrington resident said of their community, **“Fearrington is a very highly educated community with mostly non-southerners.”** Another community member stated, **“They say there are more doctorates in this community than anywhere else in the country.”** There are also several high end developments such as Hills of Rosemont, Governor’s Club, and the Preserve at Jordan Lake with homes starting in the mid-\$300,000 range.

Chatham County Differences

There are distinct differences in various parts of the county. One issue in Chatham County is the separation between the eastern section of Chatham and western due to their distance and other factors such as rural vs. urban lifestyles, and newcomers to the county and longtime residents. One community member shared, **“There’s a real disconnect between eastern Chatham and western Chatham....Lots of people that do lots of stuff here in the eastern part of Chatham and have no idea what’s going on in Siler City and have no inkling whatsoever what’s happening in Bennett or Bonlee or rural parts of Chatham County.”**

“There’s a real disconnect between eastern Chatham and western Chatham.”

Chatham County has also seen an influx of new residents in the last decade due to an increase in new residential developments. One Chatham resident stated during an interview, **“I think the old [timers] people have to understand that, yeah, that we can get some new ideas from the outside. The newcomers need to realize...you have to understand the history and culture of this community.”** Another resident shared their view on the situation. **“The increase in the number of people and where they live is primarily in the northeastern part of the county...And so that’s changed the demographics of that area.”**

Chatham County is extremely varied geographically and population-wise. All of these differences make Chatham unique.

Population

Race and Ethnicity

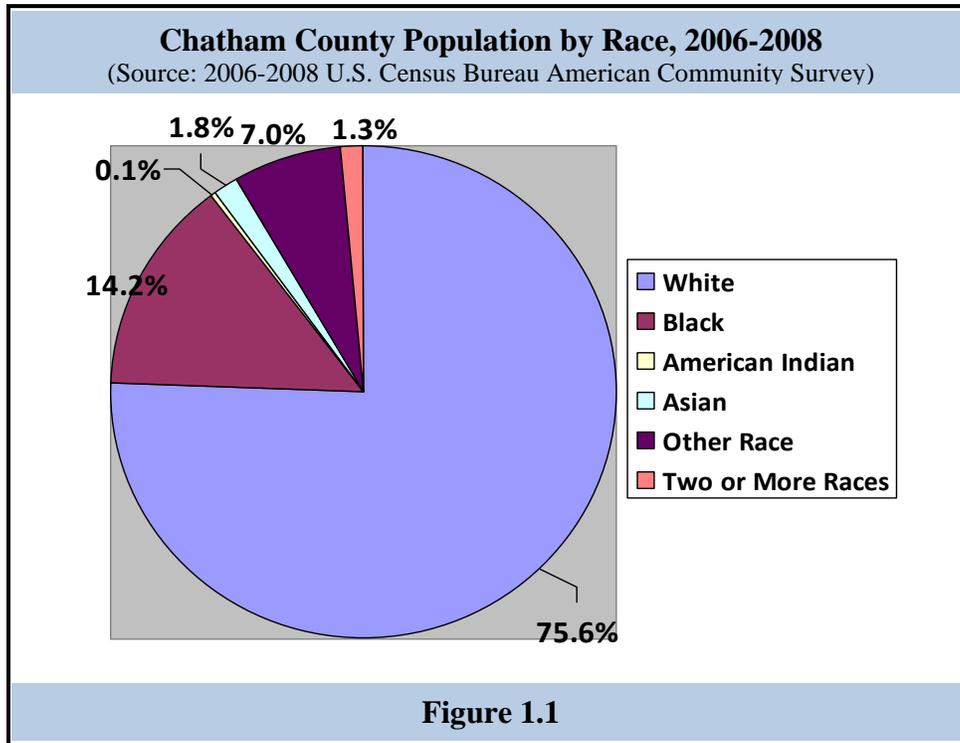
The U.S. Census Bureau estimates that between April 2000 and July 2009, the population of Chatham County increased by 31.3% from 49,329 to 64,772 residents.⁸ The 2006-2008 U.S. Census Bureau American Community Survey states that a majority (75.6%) of the population is white. Blacks make up 14.2%. Other races make up 7.0% of the total Chatham County population and people of two or more races account for approximately 1.3% of residents. Chatham County has a larger White population than the state (70.3%) but a smaller Black or African American population by 7%.⁹

The Hispanic population consists of 12.4% of all Chatham County residents. Race and Hispanic ethnicity are separate, although Hispanic origin is often reported as race. One can be Hispanic and also of another race. The U.S. Census Bureau states that,

“The federal government considers race and Hispanic origin to be two separate and distinct concepts. For Census 2000, the questions on race and Hispanic origin were asked of every individual living in the United States. The question on Hispanic origin asked respondents if they were Spanish, Hispanic, or Latino. The question on race asked respondents to report the race or races they considered themselves to be.”¹⁰

Between 1990 and 2000, the Pew Hispanic Center reported a 741% increase in the Chatham County Hispanic/Latino population. This population continues to grow, but at a slower rate. For the 2000-2008 time period, the Pew Hispanic Center estimates that the Chatham County Hispanic/Latino population grew by 66%.¹¹

It is widely believed that the Hispanic population is severely underreported because of immigration status and is actually much higher. One Siler City resident interviewed believed that, **“There’s been a huge influx of Latino population in the last few years...Definitely the Latino population has more than quadrupled in the past few years.”**



The “Other Race” category is defined as “all other responses not included in the “White”, “Black or African American”, “American Indian and Alaska Native”, “Asian” and “Native Hawaiian and Other Pacific Islander” race categories described above. Respondents providing write-in entries such as multiracial, mixed, interracial, Wesort [people of American Indian descent], or a Hispanic/Latino group (for example, Mexican, Puerto Rican, or Cuban).”¹²

Age

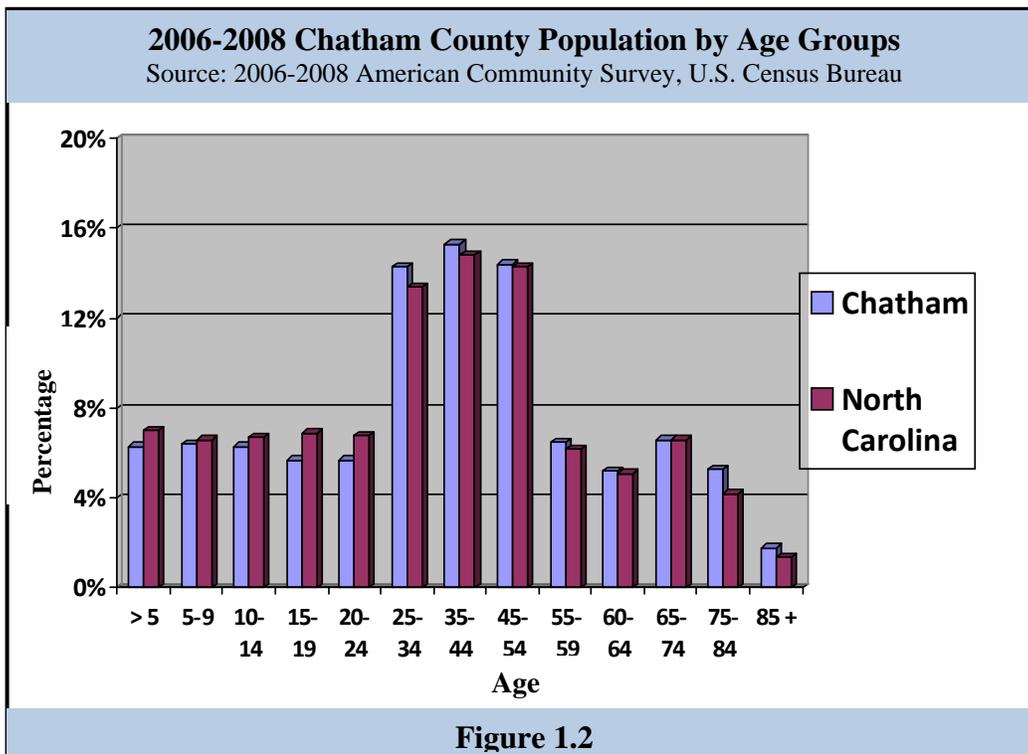
According to the U.S. Census Bureau’s 2006-2008 American Community Survey, Chatham County’s residents are slightly over half (51.4%) female and 48.6% male. The age make-up of the county is similar to North Carolina’s in most age groups. The major difference between Chatham County and North Carolina regarding ages is the 65 and older age group.

Chatham County continues to attract retirees due to the mild climate and a vast number of recreational, cultural, educational, and dining options in the surrounding area. The nearby cities of Durham and Chapel Hill have been on “Best Places to Retire lists” by www.cnnmoney.com¹³ and www.topretirements.com¹⁴, respectively due to these factors. Chatham County is also home to retirement communities such as Galloway Ridge and Carolina Meadows.

The 2006-2008 American Community Survey indicates that Chatham County has approximately 13.7% residents who are 65 or older, with the biggest discrepancy in the 75+ category. This difference may account for Chatham’s median age of 38.3 years being 1.5 years older than the median age of North Carolina residents (36.8).¹⁵

The Chatham County trend of having a larger senior population than North Carolina has continued since the 2000 Census. In 2000, approximately 15% (15.2) of Chatham’s total population consisted of individuals 65 and older. This was over 3% higher than the state percentage of 12%. Chatham County’s median age in 2000 of 38.8 was also higher than North Carolina’s by 3.5 years.^{16, 17} Although the percentage of the 65 and older population in Chatham County has decreased from 15.2% to 13.7% between 2000 and 2008, the numbers remain above North Carolina’s.^{9, 16}

Another population group where the numbers have changed between Chatham County and North Carolina is among the 20-34 year old population. In the 2006-2008 American Community Survey data, about 20% of the Chatham County and North Carolina populations were between the ages of 20 and 34.⁹ This was not the case in 2000. In that year, Chatham County’s young adult population (19.5%) fell below the state by almost 3%. The Chatham County percentage of the 20-34 year old age group has stayed nearly the same, but the state’s rate has fallen nearly to Chatham County levels.¹⁷ See Figure 1.2.



Chatham County Public Health Department 2010 Community Health Assessment

There are five K-5 schools, five K-8 schools, three middle schools, and four high schools for Chatham youth. Margaret Pollard Middle School was the most recent school to open during the 2010-2011 school year. The school serves sixth, seventh, and eighth graders. Approximately 83.5% of Chatham County residents have graduated from high school or higher.¹⁹ This is very close to the state rate of 82.9%.²⁰

Chatham County is also home to five additional schools, not part of the Chatham County Schools system. Auldern Academy is a boarding school for 9th-12th grade girls located near Pittsboro. Woods Charter School is open to students in grade one through twelve, and founded by parents. Chatham Charter School in Siler City teaches kindergarten through eighth grade youth. Our Neighborhood School is one of two private schools in Chatham County. It serves students in grades kindergarten through twelve. Community Independent School, in northern Chatham near Pittsboro, educates youth in preschool through sixth grade.

Central Carolina Community College (CCCC) is a two-year public school with Chatham County campuses in Pittsboro and Siler City. Other Campuses are located in Lee and Harnett counties. CCCC offers Associate degrees that can lead to bachelor's degrees at four-year institutions, two-year Associate degrees, and one-year certificates or diplomas.

The Pittsboro campus specializes in programs in sustainability programs such as Sustainable Agriculture, Alternative Energy Technology, Green Building and Renewable Energy, Ecotourism, and Natural Chef Culinary Arts. These programs are housed in the Sustainable Technologies Center, a new building which represents the latest in green building technology. The Chatham County Small Business Center is also located at the Pittsboro campus. A newly opened (September 2010) 24,000 square-foot library serves CCCC college students and faculty and community members.

Central Carolina's Professional Arts and Crafts program is housed in a facility in Siler City. Students and faculty alike host exhibits in the gallery. A new CCCC Siler City Center with classroom, office, and vocational lab space will open in January 2011 in the Central Carolina Business Park near Chatham Hospital.

Housing

The majority (69.7%) of homes in Chatham County are single, detached units.²² Of the total housing units in Chatham, homes tend to be newer, more expensive, and owned more often than North Carolina housing as a whole.

Over three-fourths (76.5%) of homes in Chatham County are owner occupied.²² This percentage tops the state percentage of 68.1% by nearly 8.5 percentage points.²³

Of the available housing units in Chatham County, slightly more than one out of five (21.7%) have been built since the year 2000 which also exceeds the state rate of 16.1%.^{22,23} Chatham also has fewer older homes built in 1979 or earlier than across the state.²³

Chatham County Public Health Department 2010 Community Health Assessment

The median home value of Chatham County homes is \$180,700, which is \$35,100 more than the North Carolina average.^{22, 23} The difference in home values between Chatham County and the state is likely due to the high end housing in Chatham. Nearly one-fifth (17.5%) of owner occupied units are valued between \$300,000 and \$499,000 and over 8% are valued between \$500,000 and \$999,999.²¹ The state has about 10% of its total owner occupied units valued between \$300,000 and just under a half million dollars, which is over 7% lower than Chatham. Only 4.3% of the state's total owner occupied dwellings are worth \$500,000-\$999,999.²³

CHATHAM COUNTY AVERAGE RESIDENTIAL PROPERTY VALUE BY CENSUS BLOCK

Source: 2010 Chatham County Tax Office

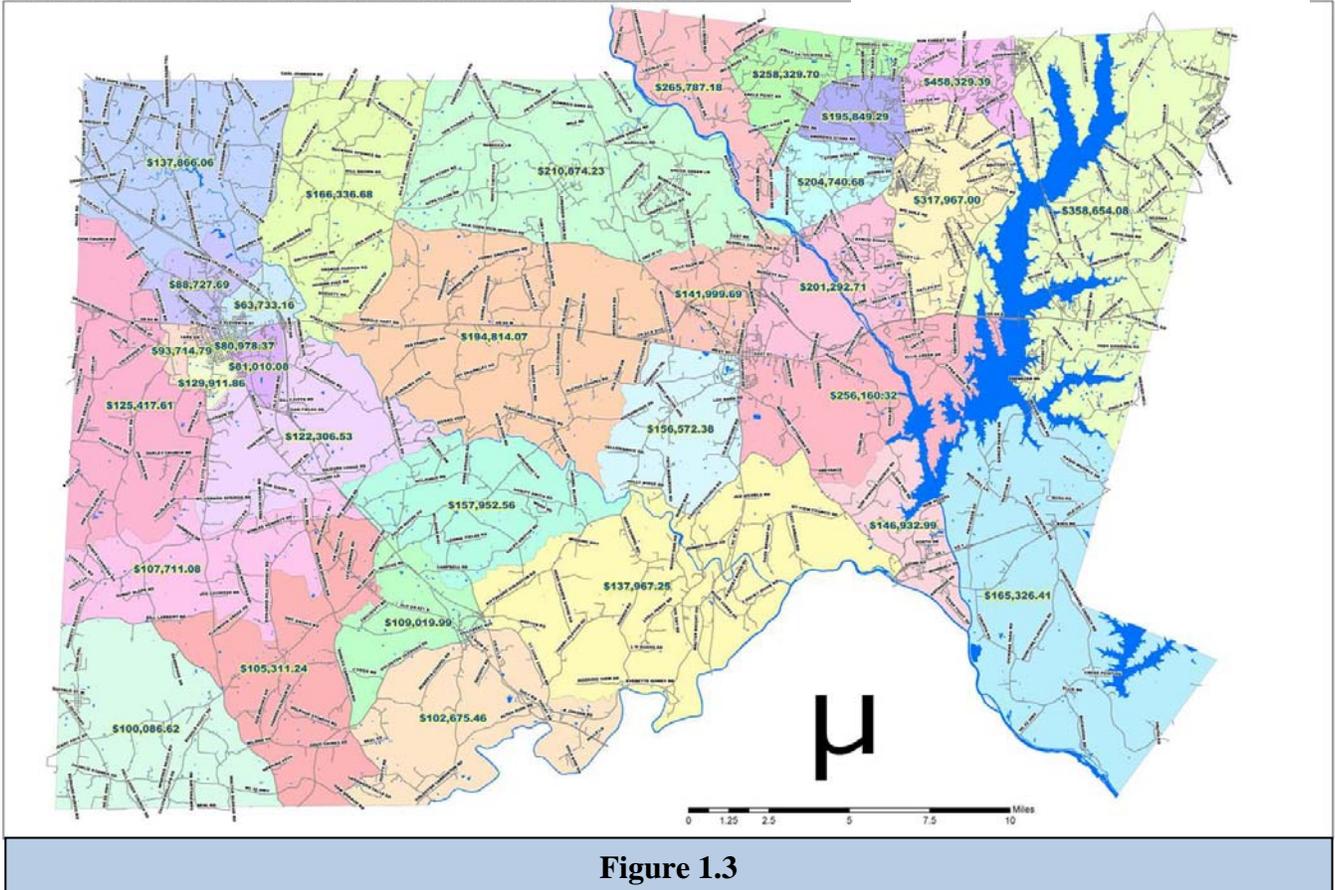


Figure 1.3

See Figure 1.3 above. Residential property values vary between the average of \$63,733 in the Siler City area to \$458,329 in the northern central section of the county for nearly a \$400,000 difference. Property values in the northern and eastern part of the county also average above \$300,000. A majority of the wealth of Chatham County is concentrated in this area while the west remains more rural.

A long-term Chatham community member states, “[Chatham] varies greatly from east to west...As time went on, the east became more of a bedroom community for the Research Triangle. But the western part for the most part today is still more agricultural-centered.”

“[Chatham] varies greatly from east to west...As time went on, the east became more of a bedroom community for the Research Triangle. But the western part for the most part today is still more agricultural-centered.”

Even though Chatham County has many affluent homes and neighborhoods, there are still a number Chatham County residents who go without basic needs.

Of occupied units, .7% of homes lack complete plumbing facilities.²² This same percentage lacks complete kitchen facilities. Both of these numbers are slightly higher than .4% without complete plumbing facilities and .5% without complete kitchen facilities throughout North Carolina.²³

Since 2000, the gap between the median home values of Chatham County and North Carolina has widened by \$16,200.^{24,25} The percentage of homes without complete plumbing facilities in the county has dropped from 1.1% to the current .7%.^{22,24} The statistic has remained the same since 2000 for incomplete kitchen facilities. The increase in homes with plumbing facilities may be due to the efforts of North Carolina Rural Community Assistance Project (NCRCAP) and various partners in the past several years.

As home prices increase, affordable places to live become more difficult to find. A need for affordable housing in Chatham County has been identified. The Affordable Housing Task Force made up of Chatham residents and representatives from local businesses, county and local government, and community agencies conducted a Chatham County housing needs assessment in spring 2008. The report found that:²⁶

- Housing values have increased 62 percent between 2002 and 2007.
- Between 2006 and 2007, 80 percent of homes sold for more than \$200,000.
- Average building permit values in Chatham County increased 32 percent between 2002 and 2007.
- However, 62.6 percent of households in Chatham make at or less than the county median household income of \$60,100 and almost half of these households make less than \$30,000 per year.
- The need for housing for low and moderate income families increased by 27 percent between 2002 and 2007.

These findings led the task force to make nine recommendations to the Board of Commissioners. The recommendations include:

- Creating an Affordable Housing Advisory Board,
- Requiring a minimum of affordable housing as part of new developments,
- Exploring policies and programs so requirements can be fairly applied and housing developed and maintained,
- Local municipalities develop plans for affordable housing, and
- Working in partnership with local and county governments.

For the full list of recommendations, go to <http://www.chathamnc.org/Index.aspx?page=878>.

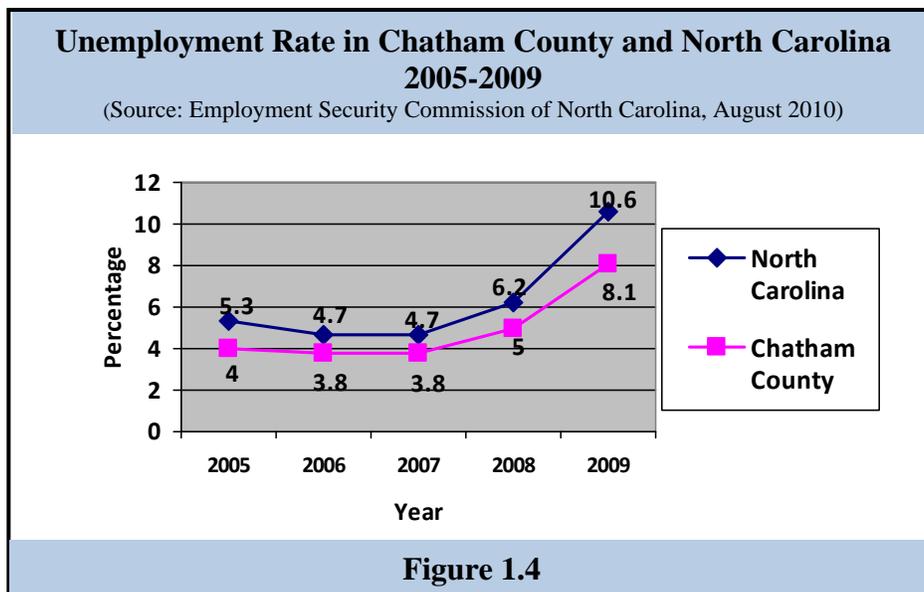
The value of Chatham County homes has risen throughout the 2000s due to development of wealthy neighborhoods such as Briar Chapel, Chapel Ridge, and The Preserves in

northeast Chatham. Housing on both ends of the high-income and low-income spectrum can be found in Chatham County.

Economic Characteristics

The U.S. economy fell into a recession that began in December 2007, the worst since the Great Depression. The National Bureau of Economic Research indicated that the economic downturn ended in June 2009. Although the 18-month slump has passed and the economy is slowly recovering, the effects on Americans are still being felt.²⁷

The state of the economy explains the rise of unemployment throughout 2008 and 2009 in Chatham County. Chatham County had a lower unemployment rate at 8.1% than North Carolina as a whole in 2009 (10.6%). Chatham County's economy still has not recovered. As of September 2010, the unemployment rate remained at 6.2%.²⁸ Pre-recession unemployment rates hovered at 4%. See Figure 1.4.



Industry

Between 2006 and 2008, the top industries in Chatham County were education, health care, and social services, manufacturing, and professional services.²⁹ Slightly more than half (51.2%) of all employees in the county work in these fields. The leading employer is the Chatham County school system with over 1000 employees on its payroll as of the last quarter of 2009.

The following table shows the top ten employers in Chatham County as of December 2009.

Top Chatham County Employers (Source: Employment Security Commission of North Carolina, 2009)		
Table 1.1		
Rank	Name	Industry
1	Chatham County Schools	Education and Health Services
2	Townsend's Inc.	Manufacturing
3	County of Chatham	Public Administration
4	Carolina Meadows Inc.	Education and Health Services
5	Performance Fibers Inc.	Manufacturing
6	Mountaire Farms of NC Inc.	Manufacturing
7	Wal-Mart Associates Inc.	Trade, Transportation, and Utilities
8	Chatham Hospital Inc.	Education and Health Services
9	Uniboard USA Inc.	Manufacturing
10	Galloway Ridge Inc.	Education and Health Services

Between 2000 and 2008, manufacturing fell by more than 7% from 22.3% to 15% as a percentage of total industry in Chatham County.^{29,30} This was a trend at the state level as well. The percentage also fell significantly for the state in the same time period from 19.7% in 2000 to 13.8% by 2008.^{31,32} These data reflect the loss of manufacturing jobs in Chatham County. In 2008, chicken processing plant Pilgrim's Pride closed in Siler City, taking over 800 jobs with it.

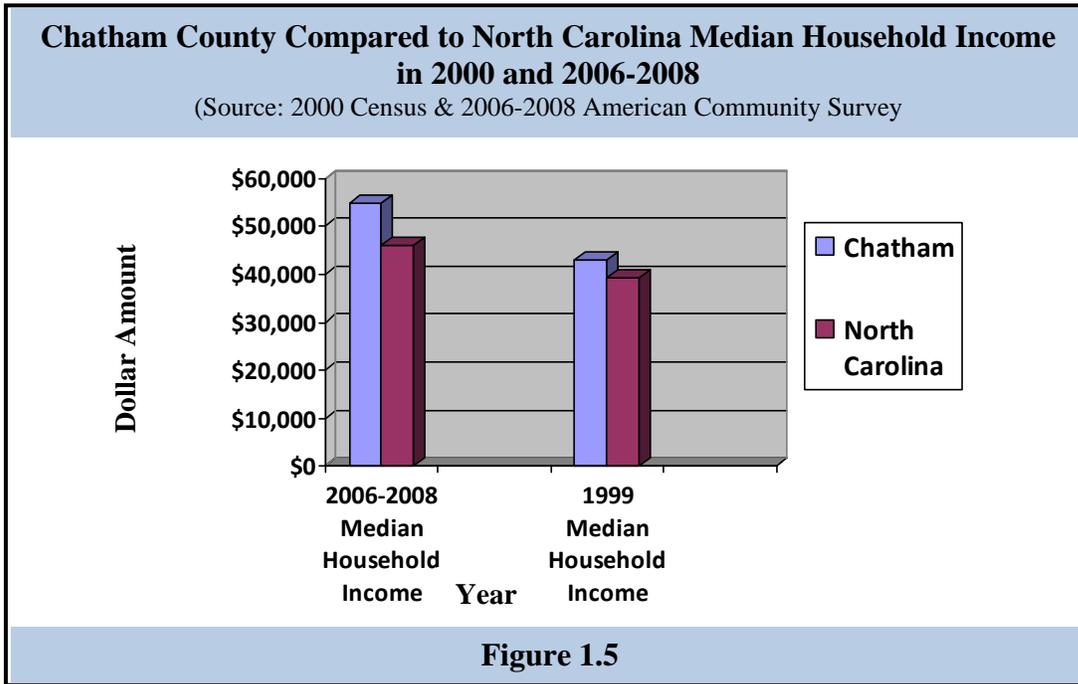
In the past, agriculture was a major industry in the county. During the 2006-2008 period of the American Community Survey, farming, fishing, and forestry occupations made up 1.9% of total jobs in Chatham County.²⁹ This was down from 2.7% in 2000.³⁰ The rural nature of the county continues to decrease due to development.

Outside of the municipalities of Pittsboro, Siler City, Goldston, and a small part of Cary, about 74% of residents are spread throughout the rest of the county. In fact, in the year 2009, the estimated number of persons per capita in Chatham County was 95, which is more than 50% below the state average of 193.³³ This indicates that Chatham is far less populated than the state mean.

Household Income and Poverty

Chatham County is very diverse in terms of population make-up and socioeconomic levels in differing parts of the County. The 2006- 2008 Chatham County median household income of \$54,874 is nearly 20% higher than the North Carolina average of \$46,107.^{29, 32}

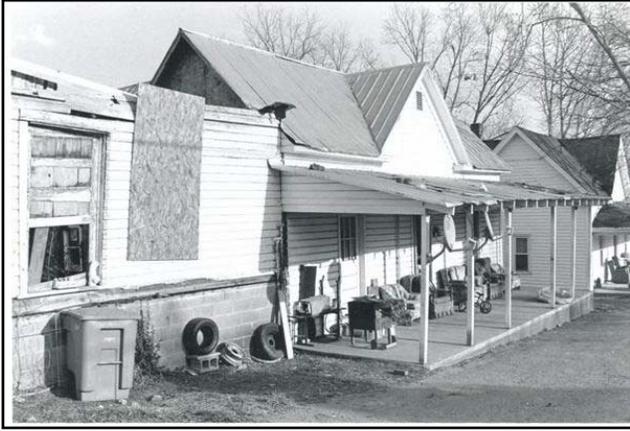
The median household income gap between Chatham County and North Carolina has widened since 1999. In that year, Chatham County topped the North Carolina average by \$3,667 at \$42,851.³⁰



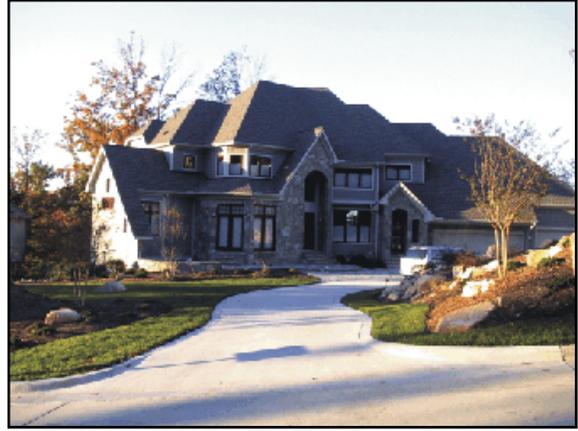
It is an assumption that the residents in the northern and eastern parts of the county near the Orange County line and close to Wake County tend to work outside the county and be more educated and wealthier than Chatham citizens in rural sections of the county. During an interview, one service provider stated that, “...**More affluent type people moving in that don’t work in the county but commute to Chapel Hill and RTP.**”

Chatham County households between 2006 and 2008 have higher estimated incomes than in the 2000 census after adjusting for inflation. In the 2006-2008 time period, there were fewer households making under \$50,000 and a larger percentage of households making \$75,000 or more.²⁹ The households making more than \$75,000 increased by more than 50%, from 22.1% of Chatham County households in 2000 to 34.5% from 2006-2008.^{29,30}

While many Chatham County households are doing well, many are struggling to make ends meet. Families in 2006-2008 American Community Survey living below poverty level made up 10.8% of families statewide and 9.7% in Chatham County.^{29, 32} The numbers of families living in poverty have risen since 1999 for both Chatham County and the state. In that year, 7.1% of Chatham County families lived in poverty compared to 9.0% across the state.^{30, 31}

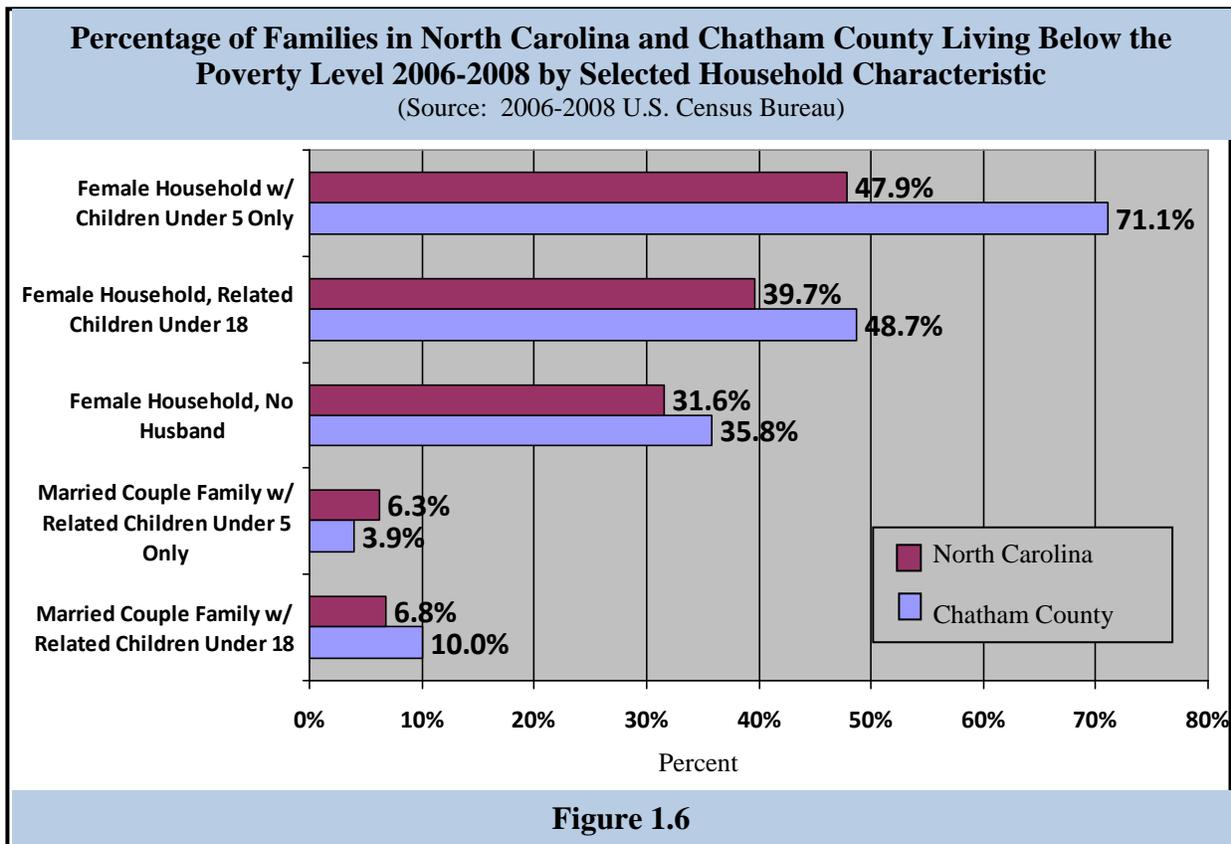


Home in Siler City
Courtesy of Paul Cuadros



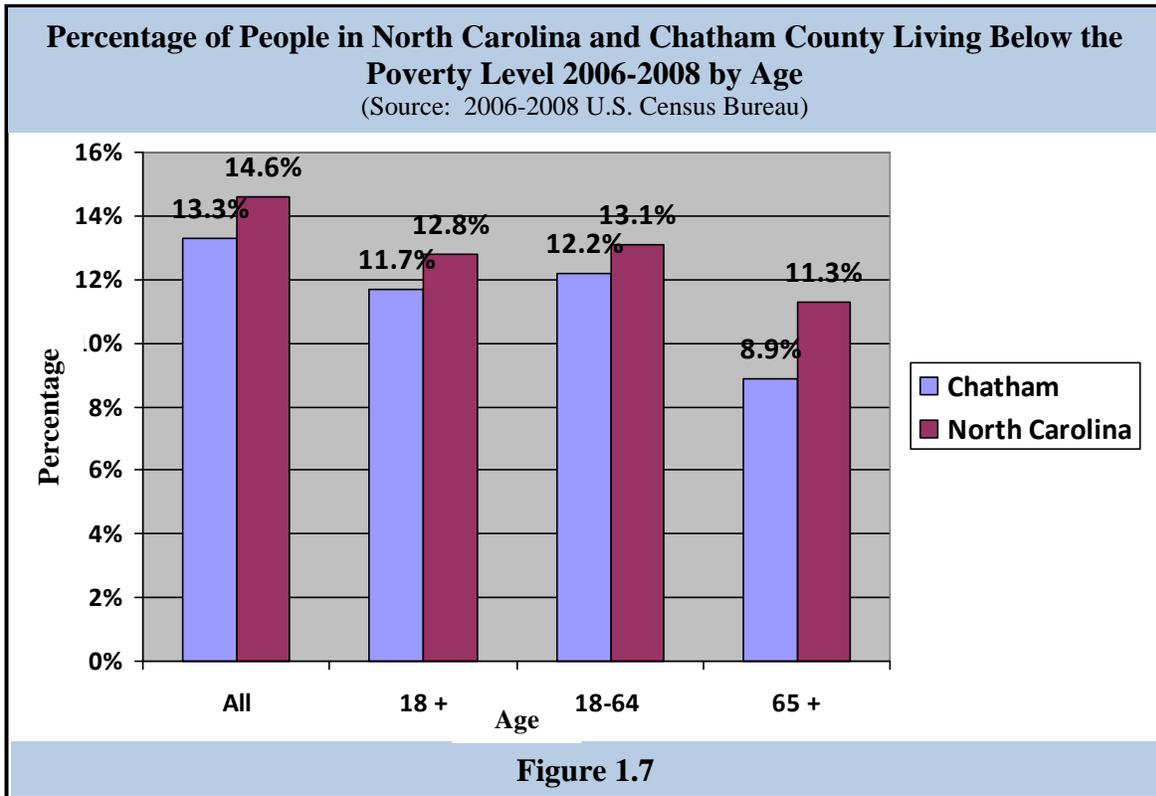
Home in Governor's Club
Courtesy of www.staatsdesignstudio.com

Certain types of families are more at risk for living in poverty than others. See Figure 1.6 below.



Female headed households with no husband live in poverty a greater percentage of the time. Chatham County rates are higher than North Carolina's in all categories shown with the exception of married couple families with related children under 18. The numbers increase with children, especially those under the age of five. This trend was seen in the 2000 Census data as well, although the percentage of female households with children under 5 living in poverty that year was 51.5%. The increase over the eight year period has been almost 20%.^{29, 30}

Individuals 18 and older living in poverty in Chatham County were fewer than North Carolina overall in 2006-2008 at 11.7% compared to 12.8%.^{29, 32} See Figure 1.7 below for Chatham County residents and North Carolinians living in poverty by age groups.



As shown in earlier sections regarding housing, Chatham County has extremes when it comes to household income. Chatham County and North Carolina households overall grew wealthier during the 2000's but the number of people living in poverty increased as well.

For more information on poverty in North Carolina, please go to: www.ncjustice.org or www.law.unc.edu/povertycenter.

Quality of Life

Chatham County is a pleasant place to live according to many residents. During interviews with community members, they described the community in the following terms:

- **“Actually, you don’t want to tell everybody how great it is because more people will move here. But that’s going to be inevitable.”**
- **“Chatham County is in an ideal...situation. We have the advantages of being close to urban areas, educational institutions of higher learning, shopping and commercial activities...And we can still retain some aspects of a more open, rural atmosphere...”**
- **“If someone is in need, everyone seems to get involved.”**
- **“I think the people in Chatham are very caring people... A place where everybody knows everybody else.”**
- **“Chatham County is one of the most diverse places I’ve ever lived.”**

Many individuals interviewed felt that Chatham County is an ideal place to live because of willingness to help one another, strong family connections, diversity, availability of resources, activeness in the community, and the location.

Economy/Jobs

Jobs/Adequate employment was the most frequently mentioned topic during service provider and community member interviews. The same subject was the top concern according to responses from the Community Opinion Survey.

During focus groups and interviews conducted, the following comments were made:

“We need some jobs in Chatham County.”

“The job situation is our biggest thing right now.”

“I would say that there’s less employment here now because of the recession, less opportunities because of the recession.”

“We need some industries around here to help out... All the industries we had went out of business, closed down or something. We’ve got to have some industries to survive.”

“We need some jobs in Chatham County.”

“With the jobs leaving, then a lot of people of people are leaving our county... We’ve got to live and we’ve got to have money in order to live. The job situation is our biggest thing right now.”

In 2007, the economy tumbled into a deep recession that continues to have a lasting impact. The “Great Recession” touched all classes through job loss, pay cuts, reduction in benefits, and shrunken retirement savings. Other effects of the down economy included a decrease in household wealth, bankruptcies of major corporations, financial crises domestically and overseas, and an unemployment rate that rose into double digits. Chatham County has not been spared. In the last two years, over 1000 jobs have been lost across the county, mainly in the manufacturing sector.

Diane Reid, president of the Chatham County Economic Development Corporation, stated at the March 2010 Chatham County Development Briefing, "In all, the county has shed 1,369 jobs" in 2008-09 due to plant closings, layoffs, relocations and idlings." She went on to say that, "To some of us, this is a very ugly picture. There were virtually no commercial projects in the county in 2009 other than a handful of new businesses such as a low-end fast-food restaurant, a dollar store and a funeral home."³⁴

News sources indicate that the economy began rebounding in the last six months of 2009, although at a slower pace than expected.³⁵

One Chatham resident said during another focus group that, **“Most of our large companies have struggled in the last five years. We’ve got a new one but the rest of them have struggled a bit.”**

At its 2010 annual meeting, the Chatham County Economic Development Commission unveiled a 5 year plan to develop business and encourage growth of the economy in Chatham County.

The goals of the 2010-2014 plan are to generate:³⁶

- 3,655 total new jobs,
- \$211 million in capital investment,
- \$116.7 million in total payroll,
- \$90.4 million in consumer expenditures, and
- 15% reduction in retail leakage ratio.

Success of the plan would help Chatham recover from the recession and develop a strong economy for the future.

Recreation

Recreation was repeatedly mentioned by Chatham County residents during interviews and focus groups as an area of concern. Residents felt there are not enough activities to keep community members, especially youth occupied.

“There’s really not much to do in Siler City and Bear Creek unless you want to go look around in Wal-Mart.”

“Teens don’t have anything else to do. They don’t have any program that keeps them busy and keeps them active and so forth.”

“Even kids from this community have to either walk or ride a bicycle way across town to Bray Park just to be able to swim. There’s nothing in this community.”

“There’s really not much to do in Siler City and Bear Creek unless you want to go look around in Wal-Mart. There’s not movie theaters for the kids anymore...There’s really nothing to do unless you just want to go shopping.”

The following details strengths and limitations in recreation resources in the county.

Chatham County is home to the 46,678 acre Jordan Lake State Recreation Area. It is located at the eastern edge of the county near the Wake County line. The park drew over 1.2 million visitors during the 2009 calendar year. It is not known how many of those visitors are residents of Chatham County. This was nearly a 500,000 visitor increase over 2008. In a personal communication with a Jordan Lake staff, the individual believed that there were more visitors in 2009 because of the warmer spring and overall better weather. There has also been an increase in fishing tournaments, which bring more people to the lake. Jordan Lake visitors also enjoy swimming, fishing, and boating on the 14,000 acres of water. Camping and hiking are also popular activities. The Deep, Haw, and Rocky Rivers run through portions of Chatham County offering additional outdoor recreation opportunities.

Besides Jordan Lake, Chatham County has several local and county parks and places to run or walk located throughout the county. Municipalities and county government have made a concerted effort to increase the number of parks and places of recreation across the county in the last few years.

Siler City maintains five parks within its limits. Those parks are Bray Park, Boling Lane Park, Landrus Siler Park, Paul Braxton, and Washington Avenue Park. Bray Park is home to the only public swimming pool in the county. Two gymnasiums and a community center are located in close proximity to the parks.

Curt Askins Park and Jehugh C. Burke Memorial Park are located near downtown Goldston. In 2008, the Chatham County Public Health Department was awarded an \$18,700 grant to partner with the Town of Goldston and install a playground for children ages 0-5 at Curt Askins Park. The Town of Goldston and its residents were pleased to have a play area for its youngest residents.

The Town of Pittsboro has upgraded trails, equipment, fields, and parking areas at Kiwanis and Town Lake Park to make them more user friendly and appealing to residents. In 2010, the town opened Mary Hayes Barber Holmes Park. The park is located north of Pittsboro on US 15-501 and contains a large multipurpose field, walking trails, playground, shelter, and rain garden within its 10 acres. Pittsboro has proposed Southern Park three miles south of town on US 15-501. Public input was sought on the piece of property in October 2010. Pittsboro also has a community center that hosts various classes and is available for public use.

In 2010, the Chatham County Public Health Department partnered with the Town of Pittsboro and various other partners to receive a bronze level Fit Community designation

from the Health and Wellness Trust Fund for the Town of Pittsboro. The health department was also awarded a grant of \$60,000 over two years to construct a greenway in Pittsboro, support programming, promotion, and policy initiatives. The greenway project location is alongside Roberson Creek between US 15-501 South and Martin Luther King Drive, and potentially to Industrial Drive in Pittsboro.

Chatham County Parks and Recreation has been very active in creating regional parks across the county. Southwest Park is next to Chatham Central High School with trails, playground, fields, courts, and a shelter. Northwest Park located off Woody Store Road is home to trails, swimming pool, dining hall, and a lake. Camp was held there in the summer of 2010. It is periodically used for special events such as outdoor movies.

Northeast Park is currently under construction on Big Woods Road. Future plans for this park include ball fields, tennis court, picnic shelter, playground, and more. Construction on these amenities should be finished by March 2011. A 4.6 mile Chatham section of the American Tobacco Trail was dedicated in June 2010. The trail is “a major recreational opportunity for the fastest growing part of the county. It also is an important link with recreational land use plans for Durham County, Wake County, and the Town of Cary.”³⁷

Chatham County Parks and Recreation, Chatham YMCA, municipalities, and private organizations offer ongoing sports leagues for youth and adults in various sports such as soccer, basketball, volleyball, softball, t-ball, dance, and tennis throughout the year.

For a complete listing of county parks and recreation facilities, please go to www.chathamnc.org/activechatham.

Chatham County is well known for its arts community. One community member believes about the arts community, “**The interaction of the different artists is extremely good. Everyone that I have met is open to sharing their ideas and expertise.**” Popular artists such as potter Mark Hewitt, folk artist Clyde Jones, sculptor Scarlinda Scarpa, and woodworker Roy Underhill among many others call Chatham County home. Each artist is renowned for his original work and has achieved national acclaim.

Two different organizations represent the artists of Chatham County. The Chatham Artists Guild hosts the Chatham County Open Studio Tour over two consecutive weekends each December. The event showcases dozens of local artists and gives the public the opportunity to interact with the creators of the artwork in their workspace. The Chatham County Arts Council provides the public with art classes and education, grants, a sponsored art gallery in Pittsboro, and community events and festivals.

First Sunday is a monthly event for local retailers to open the doors during the afternoon to sell goods in Pittsboro. Arts and crafts vendors sell their wares on downtown sidewalks and musicians and bands entertain the crowds. Siler City participates in a monthly arts event as well. On the third Friday of the month, residents and visitors alike can stroll through historic downtown Siler City during Artwalk to visit open art galleries, studios, and speak with artists. People can also enjoy musical acts in the NC Arts Incubator courtyard and at Hadley House Studios at the monthly event.

In addition to the arts, Chatham County also has an active music scene. The General Store, City Tap, Chatham Mills, and Fearington Barn in Pittsboro and the Bynum General Store are local gathering spots to listen to live music. Musical acts range from bluegrass to Latin dance music to jazz. The Shakori Hills Music Festival is a family friendly event that takes place on a farm in Silk Hope during April and October. The fest has dozens of local and national acts across all genres for music lovers in addition to dance, art, and education.

A few of the selected popular events held yearly include the:

- National Night Out, neighborhoods countywide
- Chatham County Fair, Pittsboro
- Siler City Alive, Siler City
- Old Fashioned Day, Goldston
- Pittsboro Street Fair, Pittsboro
- Christmas Parade, Goldston, Pittsboro, Siler City
- Easter Egg Hunt, Pittsboro
- YMCA Healthy Kids Day, Pittsboro

During community interviews, Chatham County residents named other preferred leisure activities:

- Eating at restaurants,
- Attending high school sporting events,
- Visiting county parks,
- Shopping at Wal-Mart,
- Going to a friend or neighbor's house,
- Going fishing or boating at Jordan Lake,
- Playing sports,
- Gardening, and
- Volunteering with churches and other organizations.

Additional venues are providing entertainment to Chatham County residents such as a bowling alley that reopened after years of inactivity, a new state-of-the-art library in Pittsboro, new community center in Silk Hope, and restaurants throughout the county.

Excluding the previous activities, community members often mentioned leaving the area to find additional forms of entertainment. Many Chatham residents felt that it was necessary to travel to an adjoining county for more leisure time activities. Chatham County residents may be looking for malls, movie theaters, and other venues not

“So a lot of times you end up having to go outside of the community to look for fun...”

available within the county. One community member added, **“So a lot of times you end up having to go outside of the community to look for fun, whether it be to go watch a movie- we currently don’t have a theater- or going to go shopping. We don’t have a mall.”**

Transportation

One out of twenty occupied housing units in Chatham County do not have a vehicle available, which falls about a percentage point under North Carolina’s numbers.^{22,23} Not having a vehicle available in Chatham County is a disadvantage because the county is large and mostly rural. Transportation services only reach portions of Chatham.

“Transportation has always been a problem. If you don’t have your personal transportation, it’s hard to get around.”

One interviewee stated, **“Transportation has always been a problem. If you don’t have your personal transportation, it’s hard to get around.”** Another Chatham resident indicated that, **“Transportation has always been a huge issue.”**

There are two public agencies that transport people around the county, Chatham Transit Network and Chapel Hill Transit. Chatham Transit Network is a non-profit service located in Pittsboro. The company offers rides to medical appointments and the general public through cross county routes to Siler City to Pittsboro to Chapel Hill and within Pittsboro or Siler City. Riders can call the office between 8:00 am and 5:00 pm each weekday to make reservations for same day pick up or set up a future time. Fees for public riders are \$1.00 each way within Siler City or Pittsboro, \$2.00 between Siler City and Pittsboro, and \$3.00 from either of these towns to Chapel Hill.

On November 15th, 2010, Chatham Transit Network began running a fixed bus route in Siler City with several stops. The cost is \$1.00 each way.

Chatham Transit has worked on a 5-year Community Service Transportation Plan. The plan includes:³⁸

- Development and promotion of transit options,
- Integrates the community transportation system's program,
- Improvements in efficiency and effectiveness of transportation programs,
- Coordination of public transportation services across geographies and jurisdictions,
- Dependable mobility transportation options,
- A focused plan for growth over the next 5 years, and
- Defensible, results-based budget requests.

Chapel Hill Transit began running an express bus route between the Town of Pittsboro and Chapel Hill in early 2009. The bus provides service on weekdays along US 15-501. Fares are \$3.00 each way and park and ride resources are available.

There are several private transportation companies located within and outside Chatham County used by county residents.

In 2009, Chatham County government created a new department of Sustainable Communities Development with the division of transportation falling under it. The Transportation Division's goals are to: provide transportation planning and mobility management for the County, work closely with Chatham Transit Network, the Durham-Chapel Hill-Carrboro Metropolitan Planning Organization, the Triangle Area Rural Planning Organization, and the North Carolina Department of Transportation, and provide support for the County's Transportation Advisory Board.³⁹

In February 2010, County Commissioners approved a Transportation Advisory Board. Members were appointed in April 2010. The purpose of the board is to study transportation related issues and examine sustainable transportation systems that allow for multiple ways to move about the county.

Many Chatham County residents would like a fully operational public transportation system that offers services in the evening and on weekends, but currently there are no options. The Transportation Division and Transportation Advisory Board will work with local agencies and organizations to develop a transportation system that benefit a larger number of Chatham County residents.

Crime

Chatham County has a low crime rate when compared to North Carolina overall. Statistics from the North Carolina Department of Justice show that the index crime rate dropped nearly 15% in Chatham from 2008 to 2009. The index crime rate includes total violent crimes such as murder, rape, aggravated assault and property crimes such as burglary, larceny, and motor vehicle theft. When separating the violent crime rate from other types of crime, the crime rate in Chatham County fell approximately 30% between 2008 and 2009. The decrease in property crime for that time period was not as dramatic, but still fell almost 13%.

Table 1.2 and 1.3 shows the comparison in the state crime index and the Chatham County crime index for 2008 and 2009.

2009 Crime Index Rate Per 100,000 Persons (Source: North Carolina Department of Justice/State Bureau of Investigation, July 2010) Table 1.2			
	Total Index	Violent	Property
Chatham County 2009 Rate	2297.4	182.5	2114.9
North Carolina 2009 Rate	4178.4	417.2	3761.2

2008 Crime Index Rate Per 100,000 Persons (Source: North Carolina Department of Justice/State Bureau of Investigation, July 2010) Table 1.3			
	Total Index	Violent	Property
Chatham County 2008 Rate	2694.7	267.4	2427.2
North Carolina 2008 Rate	4581.0	477.0	4103.9

The following chart contains the number of offenses per crime for 2008 and 2009. The number of offenses dropped in most categories in 2009.

Chatham County Reported Crime Totals by Offenses for 2008 & 2009 (Source: State Bureau of Investigation, July 2010) Table 1.4		
Crime	2008	2009
Murder	None reported	1
Rape	14	11
Robbery	25	26
Aggravated Assault	119	72
Burglary	506	436
Larceny	816	773
Motor Vehicle Theft	112	63

Social Networks

Service providers and community members repeatedly identified the churches, volunteer organizations and residents caring about one another as major strengths of living in Chatham County.

- **“If something happens, definitely people are there to help out.”**
- **“I’ve enjoyed the county, this area. It’s been a good place to live. A lot of kind people, a lot of good people.”**

- **“The community here I would describe as being a very caring community. I think the people in Chatham are very caring people.”**
- **“I think we have really kind, compassionate citizens who are willing to help each other out and care about each other and that’s a huge strength.”**

Social networks are what tie Chatham County residents together. In interviews, when asked what organizations they were involved with, residents answered with a variety of agencies and organizations such as Affordable Housing Task Force, Boy Scouts, Chamber of Commerce, Chatham’s Citizens for Effective Communities, Chatham County Development Corporation, Habitat for Humanity, Head Start, Kiwanis Club, NAACP, North Carolina Rural Development, Scholars’ Latino Initiative, State Employees Credit Union, UNC Hospice, local schools, and church. Besides the names listed, there are many more formal and informal organizations in Chatham County that help individuals and families in need.

In interviews with community members, the church was named as a gathering place in the county and also as a source of social activities. One Chatham County resident believes that, **“In our community, church has always been a staple.”** Places of worship are numerous in Chatham County, numbering over 150.

“In our community, church has always been a staple.”

One person interviewed felt that church plays a large part in the lives of Chatham residents because it is, **“a source of fellowship, meeting new people and as a means of providing services to other groups of people.”** With few communal places for people to gather in the county, another interviewee believes of places of worship, **“I think they play a big part, you know, as far as trying to get people to come together.”** Churches are also sources of information for the public. It was a common theme throughout interviews that churches were a good vehicle to get information to Chatham residents. Churches were also listed as one of the best methods to distribute news in case of an emergency. Agencies such as the health department share information about programs, services, and upcoming events with churches to communicate with the congregation. Besides tying people together in social and spiritual ways, churches also provide a way to help others. Church activities and involvement make up a large part of the recreation and social system in Chatham County.

There are also informal networks in Chatham County to help others. A strength cited by Chatham residents and service providers during interviews was willingness to help those in need. This was seen in an anecdote shared by a community member. A gentleman in his 30s was diagnosed with cancer. Several of those who knew him well and worked with him provided assistance throughout his care by forming carpools to get him to the hospital for treatment and working with the hospital to get the patient benefits. Stories like this exist all over Chatham County.

Resources

Agencies in Chatham County provide resources in areas of basic needs such as child care, employment, employment, family support, family violence, finances, food, housing, mental health, substance abuse, and additional areas. Council on Aging, Partnership for Children, and United Way have printed guides listing the availability of these resource. The Chatham County Public Health Department maintains a similar list. A selected sample of this list is below. See Table 1.5.

Selected List of Chatham County Resources Table 1.5		
Child Care	Resources, Referrals, and Subsidy	Child Care Networks, Inc. Smart Start Chatham Child Development Center
	Preschool Programs	Head Start More at Four
	After School Programs	4-H Club
		Screech Owl Farm School
		Chatham County Schools
		NC Childcare Resource & Referral
Employment	Resources/Job Listing	JOCCA Job Link Center
		Employment Security Commission
		Chatham Trades Inc.
		Carolina Job Network Chatham County Dept. of Social Services
Training/Assessment	Vocational Rehabilitation	
Employment Assistance	Work First Program	
Financial	Debt Counseling	NC Cooperative Extension Service
		Hispanic Liaison
	Assistance	Harvey Reid
		DSS American Red Cross Chatham County Council on Aging JOCCA
		Salvation Army
	Child Support	Child Support Office Child Care Networks
Food	Emergency food supply	CORA
		Western Chatham Food Pantry
		Family Resource Center
		Salvation Army
		Haw River Church
		Mt. Gilead Baptist Church
		Alston Chapel Church
		Pentecostal Holiness Church
		Evergreen Church
	Rev. Joy MacVane	
Ongoing food assistance	DSS Food Stamps	

Chatham County Public Health Department 2010 Community Health Assessment

		WIC
Housing	Transitional Housing Resources and Referrals	Project HomeStart
		Chatham Co. Housing Authority
		Habitat for Humanity EmPOWERment Silk Hope Catholic Worker
Mental Health	Assessment and treatment	Carolina Outreach
		Orange, Person, Chatham Mental Health Center Club Insight
		Chatham Counseling Center
		El Futuro
	Services for children 0-6 with emotional or behavioral issues	Preschool Outreach Program
	Screening, triage, access, and referral	Star Call Center
	Services for families with children 0-8 exposed to violence	Safe Start/Chatham Partnership

Please see Appendix A or go to <http://www.chathamnc.org/Modules/ShowDocument.aspx?documentid=4029> for the full list.

Chatham County offers many services to its residents. According to feedback from service providers and interviewed, there are barriers to offering additional or more comprehensive services. They are:

- **Funding-** Budgets have been cut due to the economic downturn and loss of funds from the county and state. Agencies have to do more with less money.
- **Diversity of county-** Dealing with extreme differences in education, income, language, and culture in the Chatham County population can make it harder to provide services.
- **Communication-** Media is fragmented making it difficult to get the word out about programs and services. Communication between agencies needs to improve.
- **Language-** Many that need services do not speak English and some agencies do not have the capacity to provide Spanish language resources.
- **Salaries-** Many agencies and organizations can't compete with salaries offered by employers in nearby towns and counties. It can make it hard to retain experienced staff.
- **Misperceptions-** Once the public has an incorrect impression about an agency and its services; it can be hard to change it.
- **Transportation-** People do not have access to consistent transportation. It can be difficult to get places in the county without private transportation.

- **Time-** There is not enough time in the day to serve everyone in need.
- **Accessing services-** Large portions of the public do not understand how to access services provided by different agencies.
- **Volunteers-** Recruiting and maintaining volunteers is a problem.

Despite the barriers to providing services to Chatham County residents, several agencies reported successes they've had:

- Growth of youth sports and programming,
- Engaged and active volunteer base,
- Increase in the number of clients served, and
- Becoming a training leader in green technologies.

Chatham County agencies try to provide services to meet the needs of as many Chatham County residents as possible.

Immigration Issues

Chatham County currently has one of the largest Latino populations in the state. Most of this change began during the 1990s. Between 1990 and 2000, Chatham County's Hispanic population grew by 741%.¹¹ Immigrants migrated from Mexico and Central America in search of jobs, mainly in poultry plants, construction, agriculture, and service industries.

Immigrants from Spanish speaking countries continue to move to Chatham County, although at a slower rate. The majority of the Hispanic population is concentrated around Siler City. The changing culture in Chatham County has caused some friction.

Interviewees named issues such as:

- An inadequate number and quality of soccer facilities which results in spillover onto ball fields or courts,
- White flight in Chatham County Schools,
- Lack of educational opportunities for immigrants after high school due to restrictions on higher education,
- Fear from immigrants and Chathamites that causes racial tension,
- Feeling that immigrants are taking jobs from Chatham residents here legally, and
- Feeling that immigrants are overutilizing limited resources such as the health department and social services.

Early in 2009, the Board of Commissioners passed a non-binding resolution against participating in the U.S. Immigration and Customs Enforcement (ICE) 287(g) program. Their reasons for passing the decree against 287(g) included cost, ineffectiveness, and

pulling resources from areas where it's needed such as gang prevention. The purpose of the program is to help local law enforcement identify illegal immigrants and begin the deportation process.⁴⁰

The Board of Commissioners allowed the public to provide input at the February 2009 board meeting. Over 30 residents signed up to speak during the public session so the normally 30 minute time limit was increased to 90 minutes. Twenty-nine residents were in favor of the resolution while four opposed.

After the meeting, Commissioner George Lucier said of the resolution, "It's important to embrace that diversity and not be afraid of it. One reason why we passed this resolution was to reflect this reality."⁴⁰

Chatham County residents sit on both sides of the illegal immigration issue. During interviews, some Chatham County residents shared optimistic views about the relations between different racial and ethnic groups. **"I think people are coming more to accept the different groups that's moving into Siler. I think it's becoming more acceptable so it's getting somewhat better."** Another resident expressed relief that the Chatham County Human Relations Commission is dealing with these types of issues.

Chatham County Health Trends

Mortality

Birth Rates

Tracking trends in birth rates can help governments and agencies plan sufficient resources to meet the demands of the population. For example, a period of high birth rates may lead to a large number of young dependants while a period of sustained low birth weights can lead to a higher proportion of an older population to a young work force.

In 2007, the National Center for Health Statistics reported the national birthrate was 14.3 per 1,000 of the population. Across the United States, birth rates for Hispanics are higher than any other ethnic or racial group.

⁴³

Infant mortality is the death of a baby before the age of one. The infant mortality rate (IMR) is generally thought of as a measure of the health of a population. Overall, the United States' IMR is higher than a number of other developed nations due to disparities among racial and ethnic groups. In 2004, (the last year which data is available), the United States ranked 29th in the world. The IMR has declined in North Carolina over the past decade but is still above the national average.⁴¹

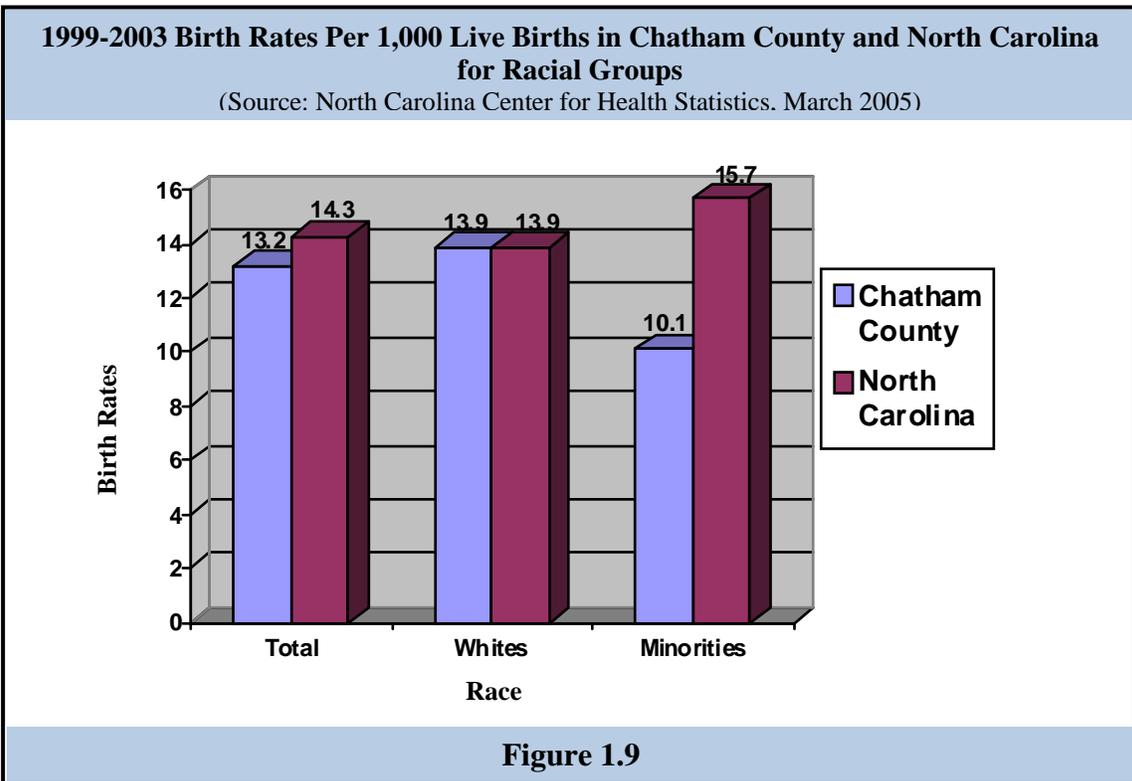
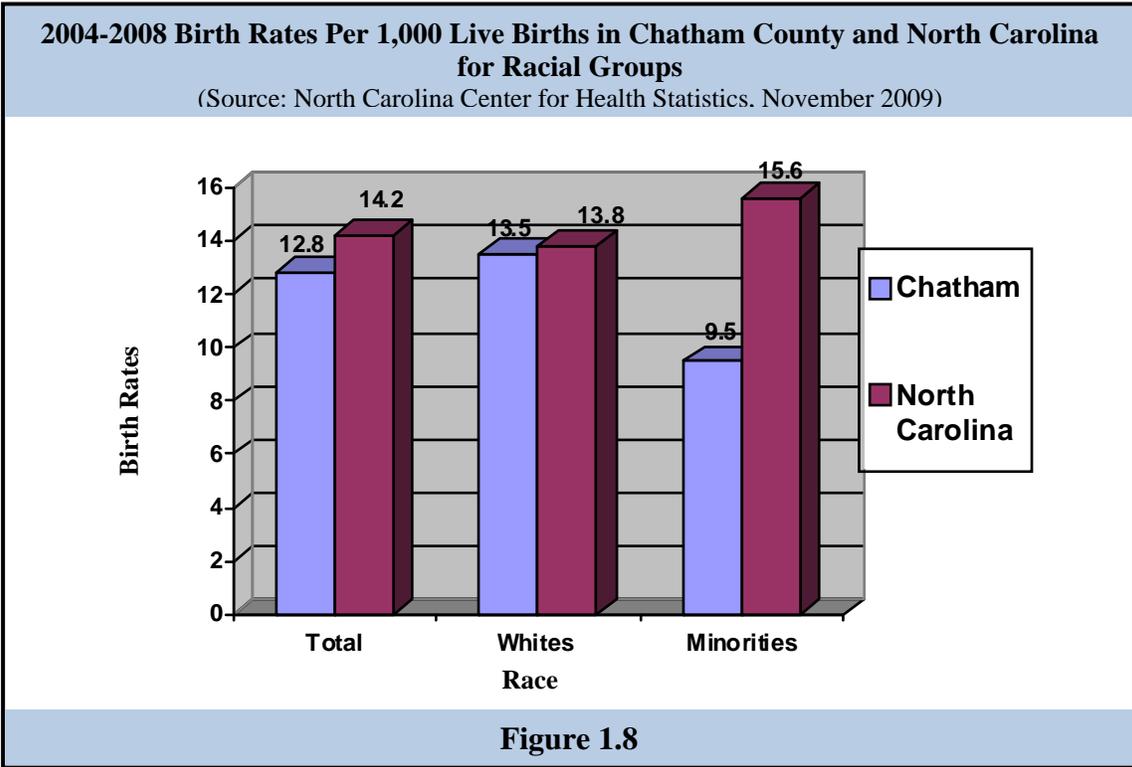
Low birthweight is defined as 2,500 grams (5 pounds, 8 ounces) or less. Low birthweight babies are at higher risk for health problems, disabilities, and death.⁴² In 2007, 8.2% of babies born in the U.S. were low birthweight. The percentage of low birthweight babies rose steadily the United States between the mid-1980s and slight decline in 2007.⁴³

According to Advocates for Youth, a non-profit organization that helps youth make responsible decisions regarding their sexual and reproductive health, "Adolescent pregnancy and birth rates in the United States had been slowly but steadily declining. But 2006 data showed a three percent rise in birth rates among 15- to 19-year-old women."⁴⁴ Approximately 85% of teen pregnancies are unintended.⁴⁵ Additionally, young people of color are more likely to be affected by teen pregnancy.⁴⁵

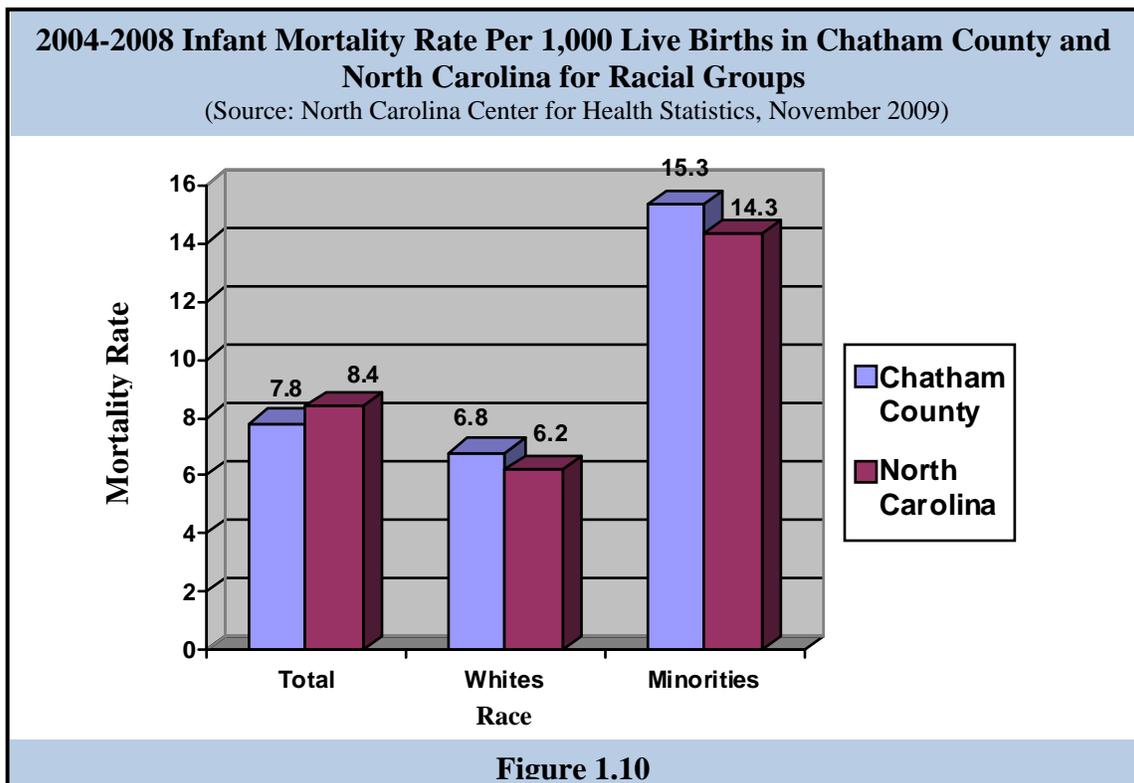
Teens between the ages of 15 and 19 who have children more often face the following consequences of being less likely to obtain early and regular prenatal care, less likely to graduate from high school, more likely to live in poverty and rely on welfare, and have babies that are at higher risk for premature birth, low birthweight, other serious health problems and death.⁴⁶

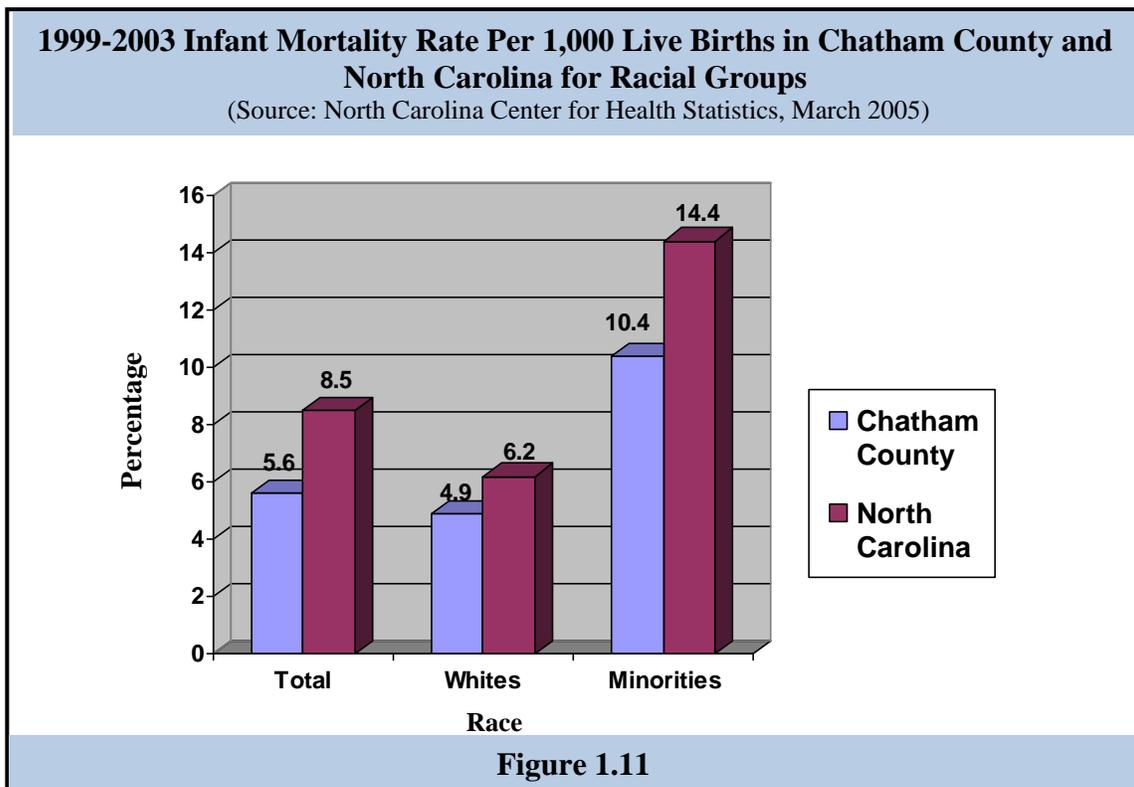
For the 2004-2008 time period, the overall Chatham County birth rate of 12.8 per 1,000 of the population was lower than the state rate of 14.2. Over 3,700 babies were born to Chatham residents during this time. The rate for Chatham County minorities is over 40% below the North Carolina minority rate. The trends are similar to the 1999-2003 period,

although the gap between Chatham’s minority birth rate and the state’s has increased. See Figure 1.8 and 1.9.



The total infant mortality rate in North Carolina during the 2004-2008 time period was 8.4 per 1,000 live births compared to 7.8 per 1,000 live births in Chatham County. In 1999-2003, Chatham County infant mortality rates in all categories fell below the rates at the state level. This was not the case between 2004 and 2008. The total Chatham County rate has increased since the five year span between 1999 and 2003. The minority IMR is still far higher than the White IMR rate. The data shows that the gap has gotten smaller between the state's minority infant mortality rate and Chatham County's since 1999-2003 due to the rise in Chatham County's rate. Infant mortality numbers are traditionally low in Chatham County. There were 29 cases between 2004 and 2008 and 19 cases in the 1999-2003 time period. Caution should be used when interpreting data at the county level due to low incidences of infant mortality. See the Figure 1.10 and 1.11.





The percentage of low birth weight births increased at both the state level and in Chatham County from 1999-2003 to 2004-2008. Despite the increase, Chatham’s total low birthweight is below North Carolina’s for the 2004-2008 time period. Slightly over 300 low birthweight babies were born to Chatham mothers. The rise in rates has been slight across North Carolina but larger in Chatham. The percentage of minority babies born of low birthweight in Chatham County exceeded that of whites by over 50% between 2004 and 2008. From 1999-2003, the Chatham minority rate was lower than the North Carolina’s. See Figure 1.12 and 1.13.

2004-2008 Percentage of Low Birthweight Births in Chatham County and North Carolina for Racial Groups

(Source: North Carolina Center for Health Statistics, November 2009)

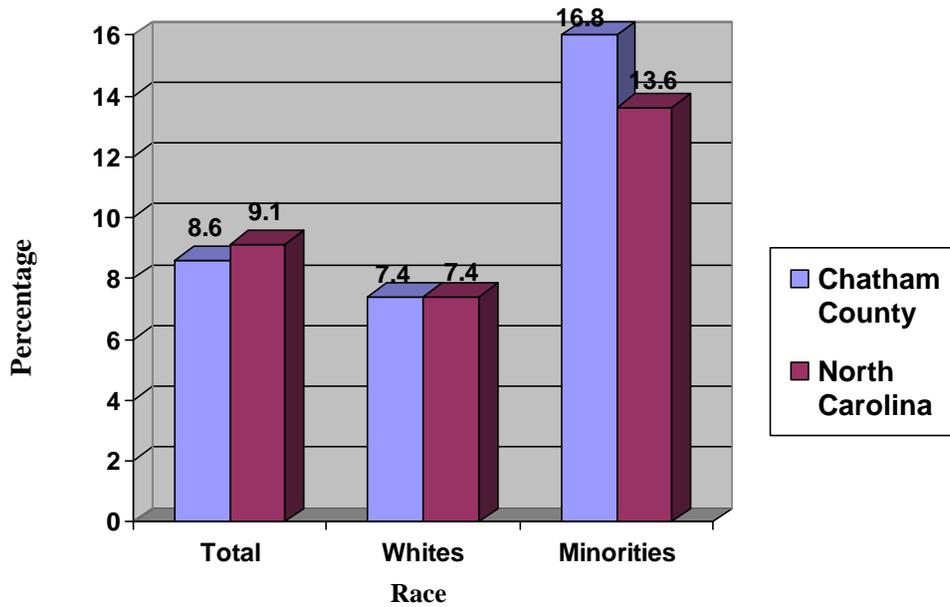


Figure 1.12

1999-2003 Percentage of Low Birthweight Births in Chatham County and North Carolina for Racial Groups

(Source: North Carolina Center for Health Statistics, March 2005)

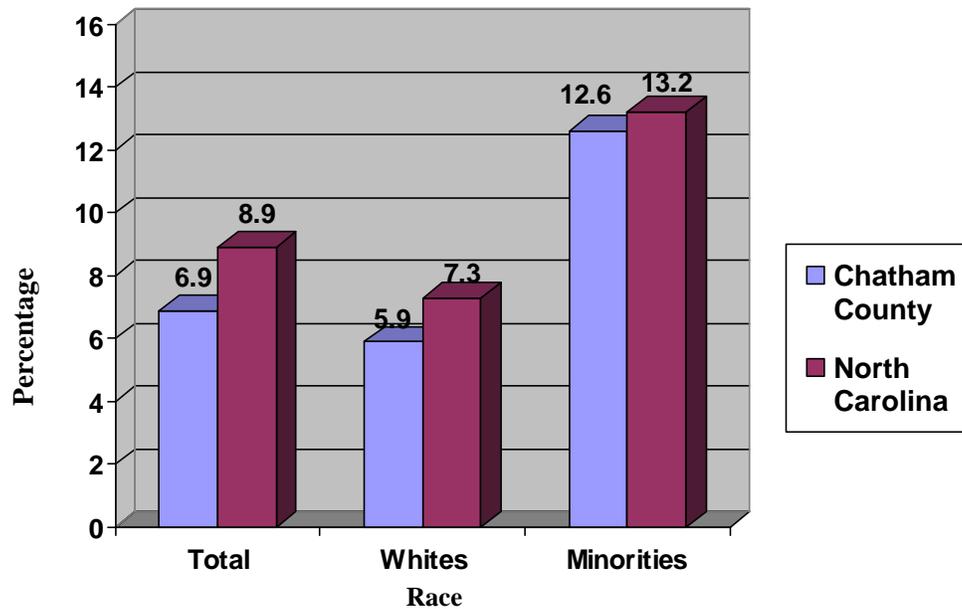
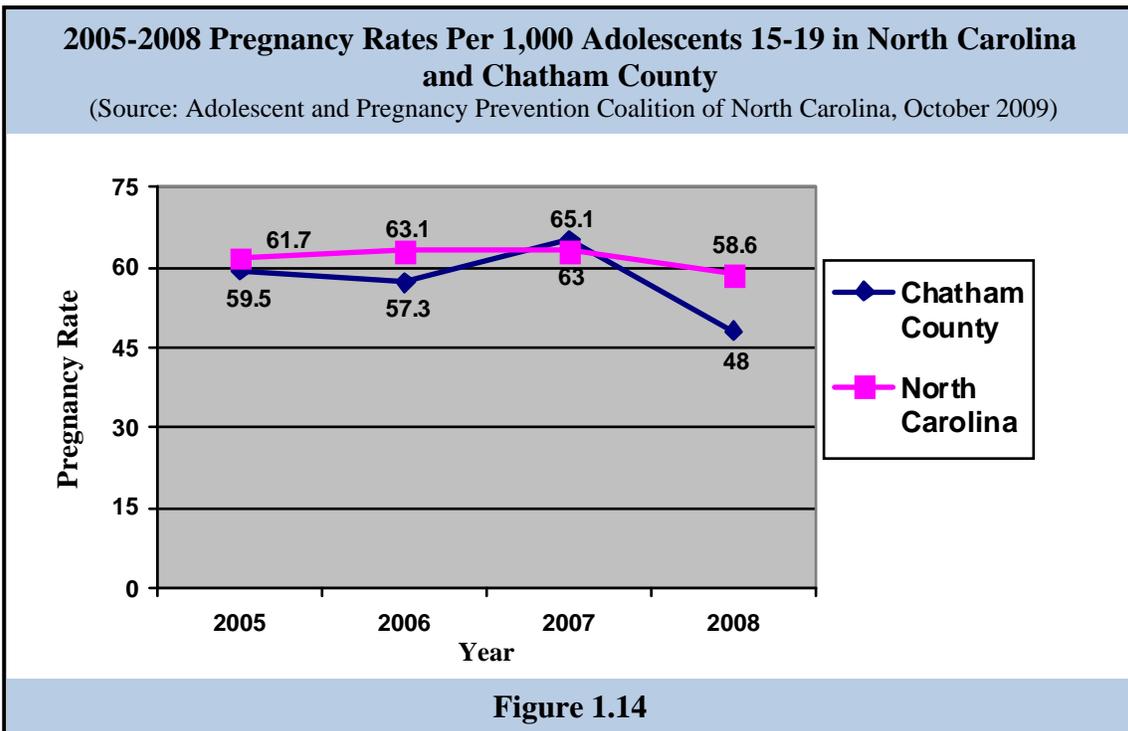
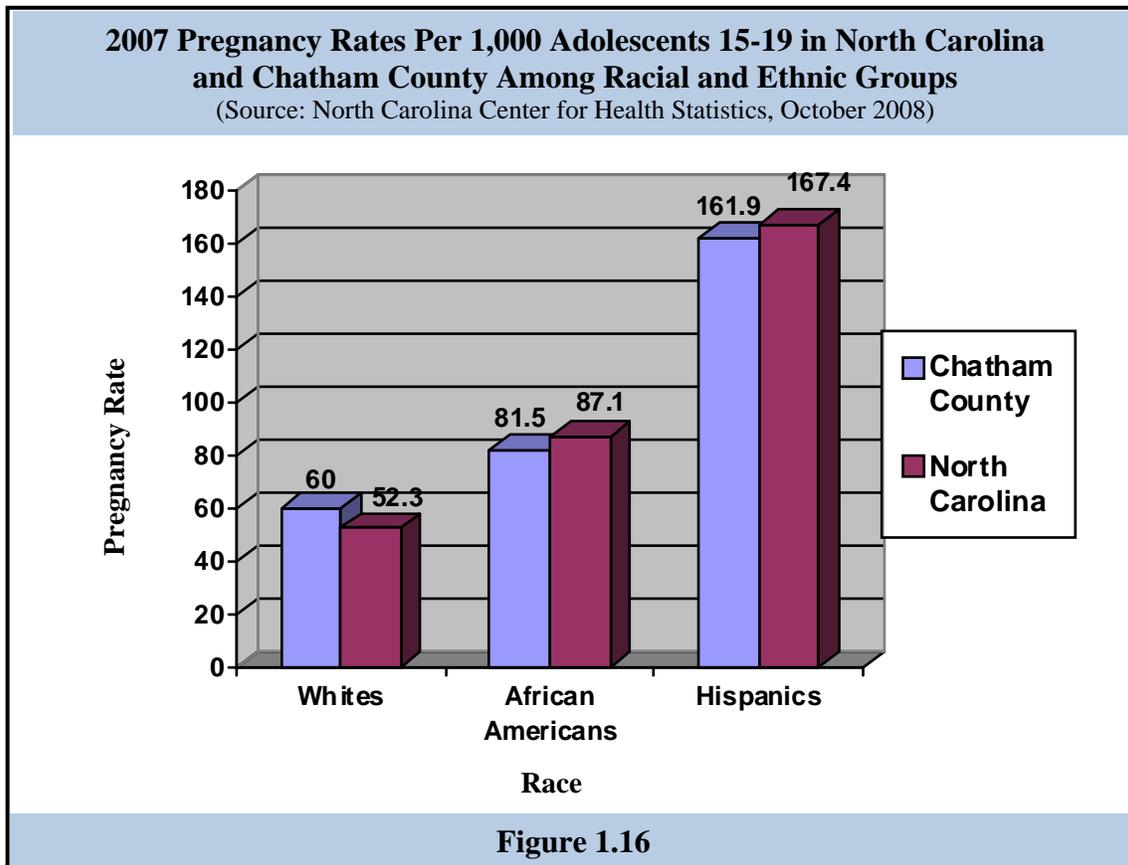
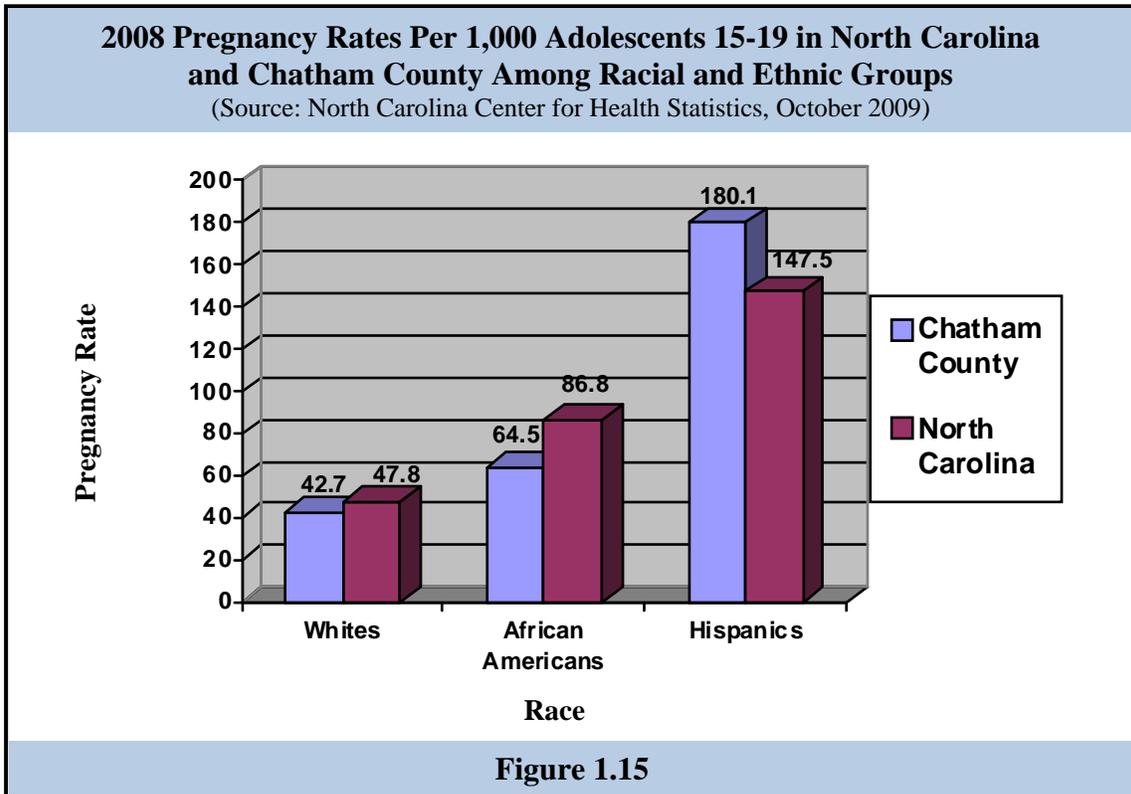


Figure 1.13

Overall, the Chatham County teen pregnancy rate has been declining for the past several years with a brief spike in rates in 2007. The total adolescent pregnancy rate (48.0) in Chatham County for 2008 was lower than the North Carolina rate of 58.6. This was a reverse of the 2007 data when Chatham's teen pregnancy rate exceeded the state. But 2007 appears to be an anomaly, as 2005 and 2006 Chatham figures are below the state level. See Figure 1.14.

Although the overall rate declined in 2008 after an increase in 2007, certain racial and ethnic groups have much higher rates of teen pregnancies than do Whites. See Figures 1.15 and 1.16 The charts show the differences among racial and ethnic groups in 2007 and 2008, the only years for which this data is available.





Best practices have been identified to combat the problems of infant mortality, low birthweight, and teen pregnancy.

The best way to improve the outcome of the baby is to improve the health of the mother. The North Carolina Healthy Start Foundation indicates that “Research shows that the more informed a woman is, the healthier she is before getting pregnant, and the better her access to prenatal care, the better her pregnancy outcome is likely to be.”⁴⁷

Major barriers to healthy pregnancies include: lack of health insurance, access to health care, high rates of poverty, stress and lack of education.⁴⁷ Infant mortality and other poor birth outcomes such as low birthweights will decrease once these factors are addressed.

North Carolina public health agencies partner with community organizations, local communities, nonprofit agencies, public and private health care providers on collaborative programs and initiatives to improve birth outcomes. North Carolina is also working to reduce the number of unintended pregnancies, address risk factors for prematurity, and promote infant sleep safety.

The CDC is partnering with the Office of Public Health Science to reduce teen pregnancy rates and address disparities in adolescent pregnancy and birth rates. The CDC will achieve this by focusing on the following areas:⁴⁸

- **Evidence-based and evidence-informed prevention program implementation** Providing teens with evidence-based and evidence-informed, medically accurate and age-appropriate teen pregnancy prevention programs. Improving health care services
- **Linking teens to quality health services** Improving preconception care and health for specific groups of women
- **Stakeholder Education:** Educating stakeholders (community leaders, parents and other constituents) about relevant evidence-based and evidence-informed strategies to reduce teen pregnancy and data on needs and resources in target communities; and
- **Sustainability:** Supporting the sustainability of the communitywide teen pregnancy prevention effort.

North Carolina is continuing its efforts to make pregnancies healthier for both mother and child.

Death Rates

According to the National Center for Health Statistics, in 2007, life expectancy for the total United States population reached an all time high at 77.9 years.⁴⁹ Females exceed males in life expectancy by five years while white females have the highest longevity and black males have the lowest.

The US Department of Health and Human Services, National Center for Health Statistics, and the CDC’s 2009 report, *Health, United States*, details the leading causes of death in the country and the increase or decrease in the death rate over specified time periods. See Table 1.6.

Top 6 Leading Causes of Death in U.S, 2008 Source: http://www.cdc.gov/nchs/data/hus/hus09.pdf Table 1.6		
Leading Causes of Death	Percentage Increase/Decrease in Death Rate	Time Period
1. Heart Disease	- 66%	1950-2006
2. Cancer	- 16%	1990-2006
3. Stroke	-76%	1950-2006
4. Chronic Lower Respiratory Diseases	+43%	1980-2006
5. Unintentional Injury	-49%	1950-2006
6. Diabetes	+48%	1986-2002
	-8%	2003-2006

Reasons for the decreases in stroke and heart disease mortality rates can be attributed to better control of risk factors such as high blood pressure and cholesterol, increased screening and early detection, and advancements in treatment and care.⁵⁰ Cancer death rates decreased 16% throughout the 1990s and the first half decade of the new millennium. Cancer death rates follow the trends of lung cancer death rates, which is the highest death rate of all sites of cancer.⁵⁰

As for the other leading causes of death, long term effects from smoking and exposures to environmental pollutants could explain why deaths from chronic obstructive respiratory diseases such as emphysema have gone up by over 40% from 1980-2006. Preventive actions such as seatbelt laws, helmet laws, and lower speed limits have probably helped people live longer. The increase in diabetes death rates between 1986 and 2002 is likely linked to the obesity epidemic in the United States. There are efforts to improve reporting methods on death certificates.

The overall death rate between 2004 and 2008 was 861.4 per 100,000 population in North Carolina and 752.9 per 100,000 population in Chatham County. Chatham County was below the state deaths rate in every category. Death rates fell for both the state and Chatham County from the 1999-2003 time span. Minorities and males had the highest death rate of any group from 1999-2008.

2004-2008 Death Rates Per 100,000 Residents in Chatham County and North Carolina for Specific Race and Gender Groups

(Source: North Carolina Center for Health Statistics, November 2009)

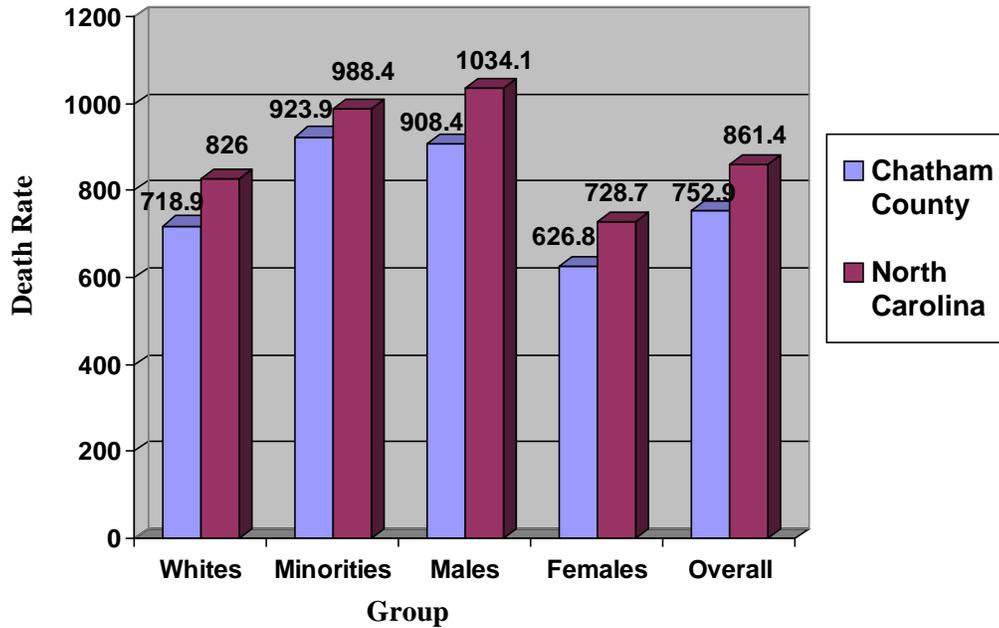


Figure 1.17

1999-2003 Death Rates Per 100,000 Residents in Chatham County and North Carolina for Specific Race and Gender Groups

(Source: North Carolina Center for Health Statistics, March 2005)

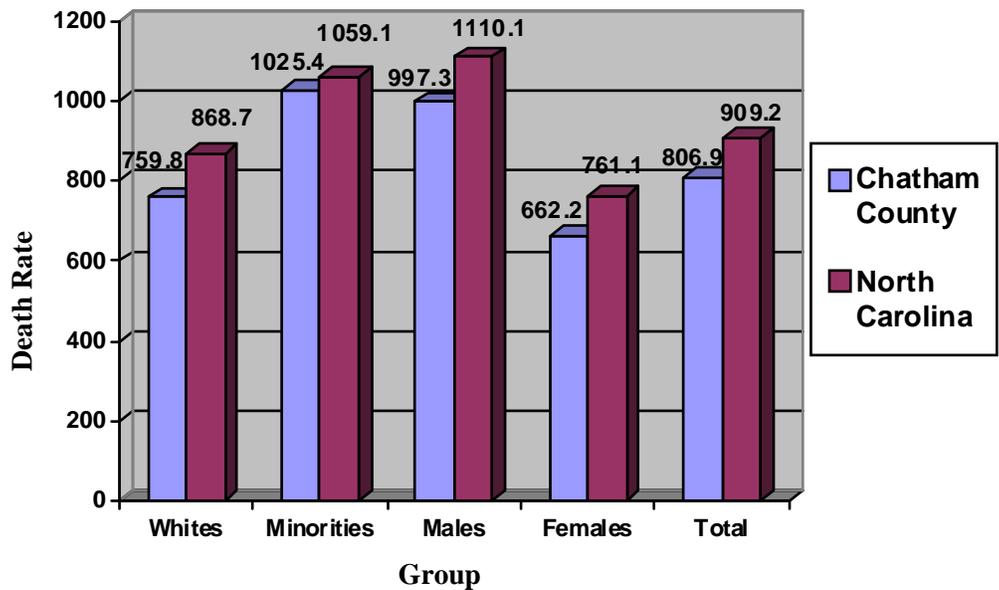


Figure 1.18

The leading causes of death in Chatham County and across North Carolina include chronic diseases, acute illnesses, and injuries.

**Top 10 Leading Causes of Death in Chatham County and North Carolina
2004-2008**
(Source: State Center for Health Statistics)

North Carolina Leading Causes of Death	Chatham County Leading Causes of Death
1. Heart Disease	1. Heart Disease
2. Cancer	2. Cancer
3. Cerebrovascular Disease (Stroke)	3. Cerebrovascular Disease (Stroke)
4. Chronic Lower Respiratory Diseases	4. Chronic Lower Respiratory Diseases
5. Alzheimer’s Disease	5. Unintentional Motor Vehicle Injuries
6. All Other Unintentional Injuries	6. Diabetes Mellitus
7. Diabetes Mellitus	7. All Other Unintentional Injuries
8. Pneumonia and Influenza	8. Alzheimer’s Disease
9. Nephritis, Nephrotic Syndrome, and Nephrosis	9. Pneumonia and Influenza
10. Unintentional Motor Vehicle Injuries	10. Suicide

Chronic Diseases

Chronic diseases such as heart disease, stroke, diabetes, and cancer are a few of the most prevalent and costly diseases to treat. According to the CDC, in 2005, seven of ten Americans deaths were the result of a chronic disease. Heart disease, cancer, and stroke total more than 50% of deaths each year.⁵¹

These diseases are among the most preventable by making healthy lifestyle choices such as exercising regularly, eating a balanced diet, and not smoking. In Chatham County and across North Carolina, a majority of the top ten leading causes of death are due to chronic diseases.

Heart Disease

Cardiovascular disease is the number one killer in North Carolina and Chatham County. According to the American Heart Association, an estimated 81,100,000 American adults have one or more types of cardiovascular disease. Nearly 2,300 Americans die of CVD each day. Cardiovascular disease claims more lives each year as cancer, chronic lower respiratory diseases and accidents combined.⁵²

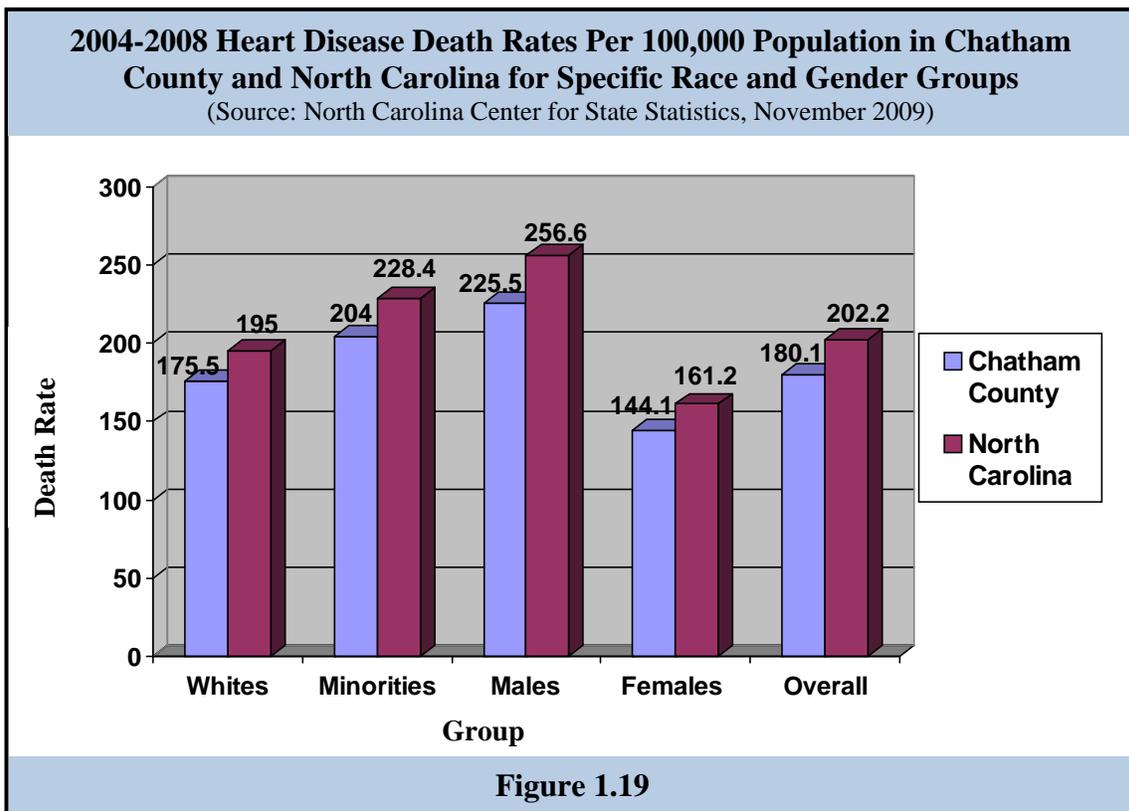
Heart disease is a general term used to describe a variety of diseases that affect the heart and sometimes the blood vessels. “The term "heart disease" is often used interchangeably with "cardiovascular disease" — a term that generally refers to conditions that involve

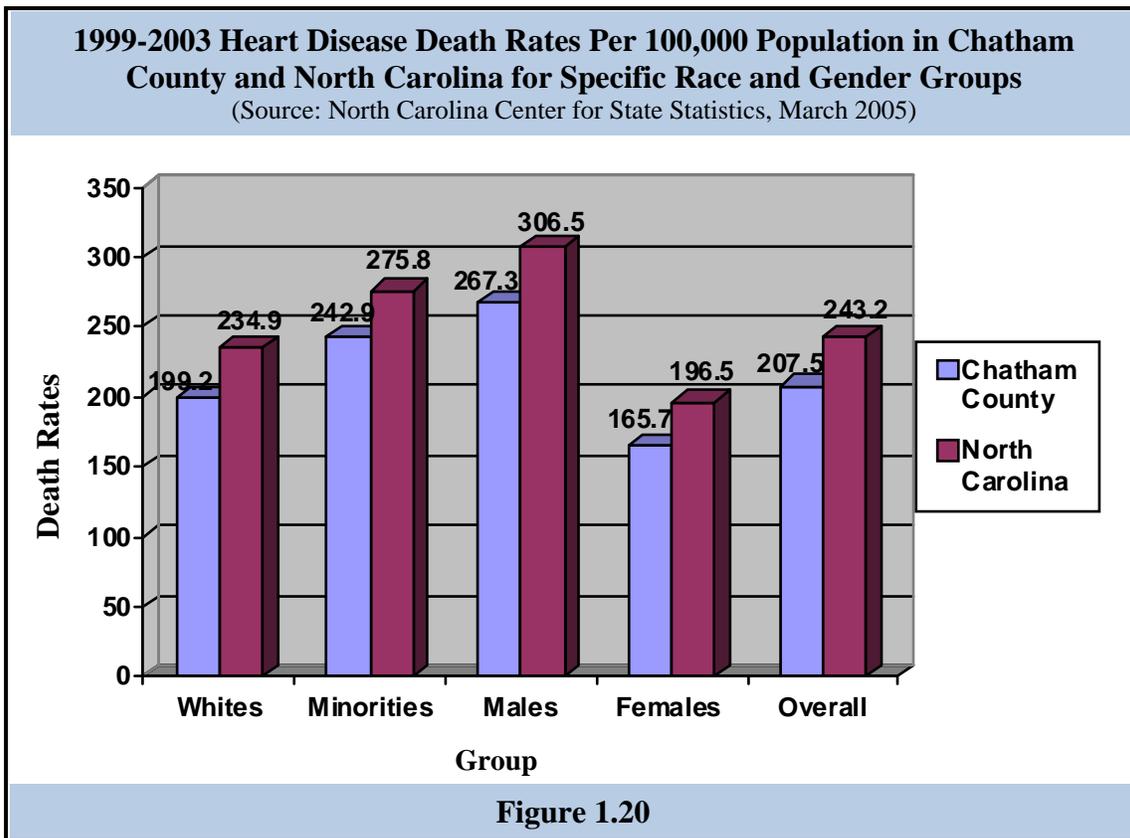
narrowed or blocked blood vessels that can lead to a heart attack, chest pain (angina) or stroke.”⁵³

Lifestyle risk factors for developing heart disease are: smoking, high blood pressure, high cholesterol, physical inactivity, being overweight or obese, stress, poor hygiene, and diabetes. The best way to prevent heart disease is by living a healthy lifestyle through eating a balanced diet high in fiber and low in sodium and saturated fat, getting regular physical activity, maintaining a healthy weight, not smoking, drinking alcohol in moderation, managing stress effectively, having good hygiene and dental habits, and controlling diabetes.

The death rates from heart disease in Chatham County are lower than the state’s in every category for the 2004-2008 time period. This was also the case for the 1999-2003 data.

For the years between 2004 and 2008, the overall rate for Chatham County residents dying from heart disease was 180.1, about 10% lower than the state’s overall rate of 202.2. Whites have the lowest risk of death from heart disease out of any ethnic groups. Females naturally have a lower risk than men due to biological factors. Minorities fared the worst of any group from death due to heart disease. Men and minorities have the highest risk of death from heart related diseases. See Figures 1.19 and 1.20.





Cancer

Cancer is the second leading cause of death in the Chatham County and North Carolina. According to the American Cancer Society, “Cancer is the general name for a group of more than 100 diseases in which cells in a part of the body begin to grow out of control.”⁵⁴ There are many types of cancer, often named for the place they start in the body. All cancers begin because abnormal cells grow uncontrollably. Untreated cancers can cause serious illness and even death. Half of all men and one-third of all women in the US will develop cancer during their lifetimes.⁵⁴

Risk factors for cancer include: growing older, tobacco use, sun exposure, radiation and certain chemical exposures, some viruses and bacteria, certain hormones, family history, excessive alcohol use, poor nutrition, lack of physical activity, and being overweight. Regular cancer screenings are also an important piece of cancer prevention and early detection.

Cancer death rates for Chatham and North Carolina dropped during the 2004-2008 time period from the years between 1999 and 2003. The rate for North Carolina fell just below 4%. In Chatham County, the overall rate decreased by 13.0%. Chatham’s death rates for cancer are below the state’s at all levels.

Cancer causes the death of men and minorities at a higher rate than other segments of the population in North Carolina and affects men at a higher rate in Chatham County. Lung cancer is the largest killer. According to the CDC, about 90% of lung cancer deaths in

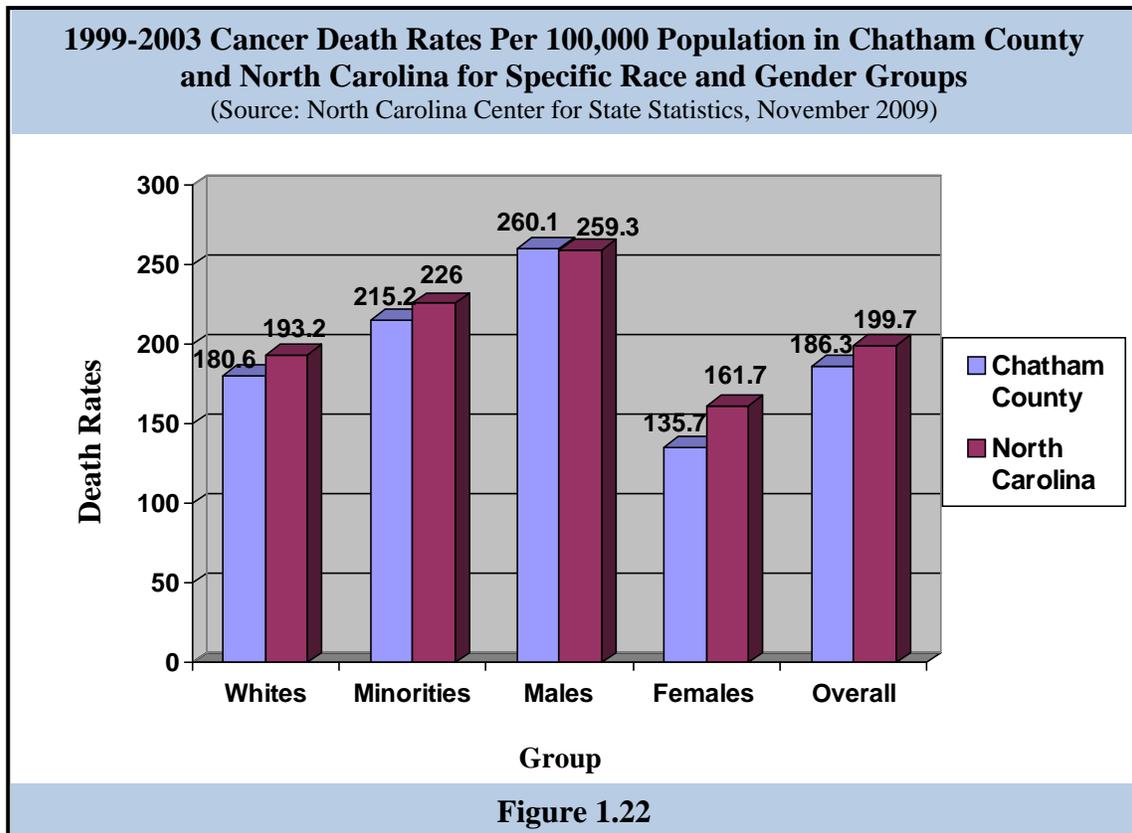
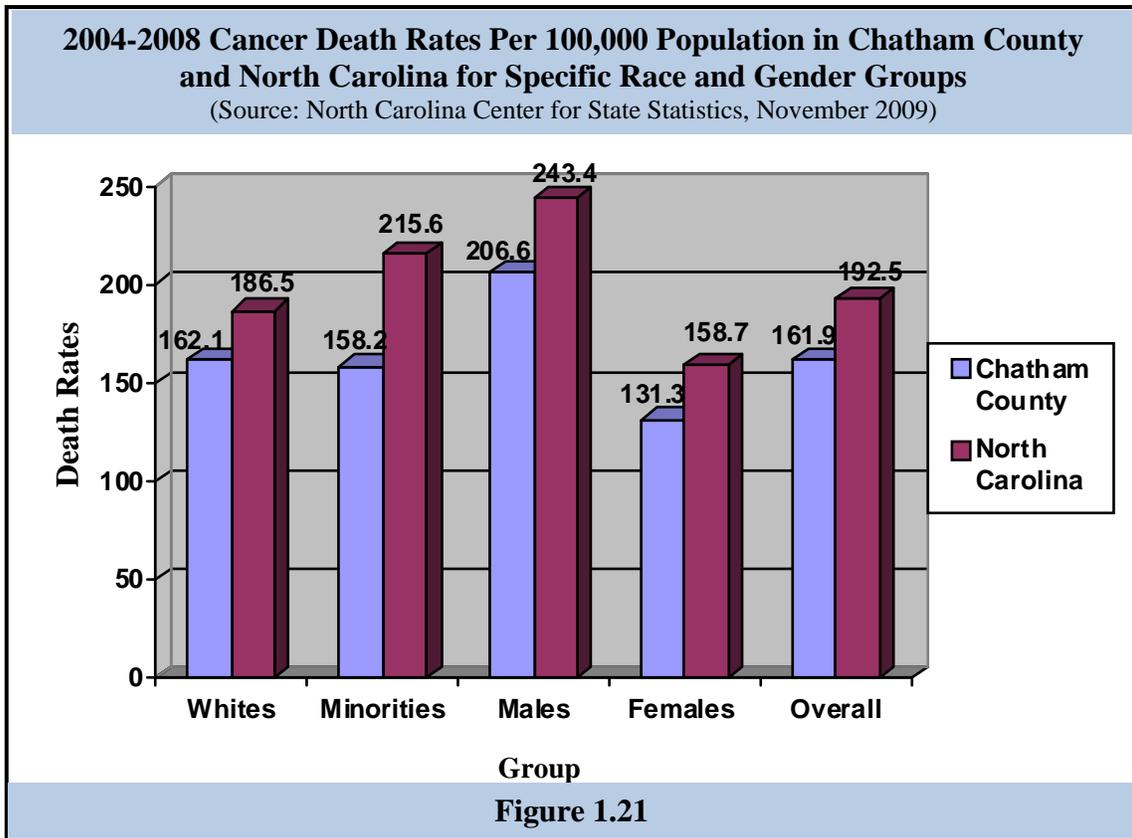
Chatham County Public Health Department 2010 Community Health Assessment

men and almost 80% of lung cancer deaths in women are due to smoking in the U.S.⁵⁵ Minorities in Chatham County have a prostate cancer mortality rate almost two and a half times of whites. The statistics are similar in the case of breast cancer. Minority women die at a higher rate than whites. Caution should be used in examining the female breast cancer mortality rate due to low number of cases.

The differences can be seen on the following chart.

2004-2008 Most Common Cancers Death Rates Per 100,000 Population in Chatham County					
Table 1.7					
(Source: North Carolina Center for State Statistics, November 2009)					
	White Rate	Minority Rate	Male Rate	Female Rate	Overall Rate
All Cancers	162.1	158.2	206.6	131.3	161.9
Colon, Rectal, Anus	13.6	12.6*	13.7	12.8	13.4
Pancreas	7.5	14.5*	9.2*	8.0*	8.6
Trachea, Bronchus, Lung	50.0	36.8	71.7	30.3	48.1
Female Breast	17.2	35.9*	.6	19.9	20.5
Prostate	26.0	62.7*	30.7	N/A	30.7

(*Number of deaths below 20. Caution should be used when interpreting these data.)



Cerebrovascular Disease

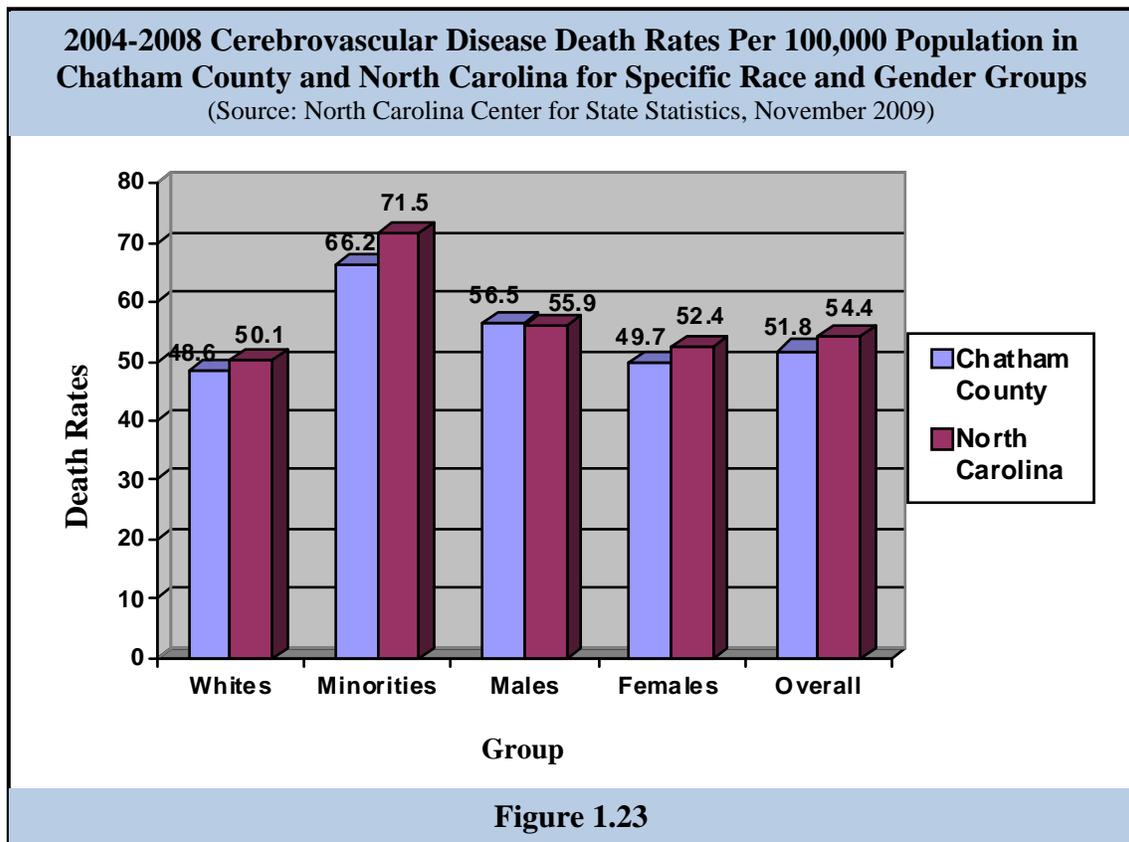
Cerebrovascular disease is the clinical term for stroke. It is the third leading cause of death in Chatham County and across North Carolina.

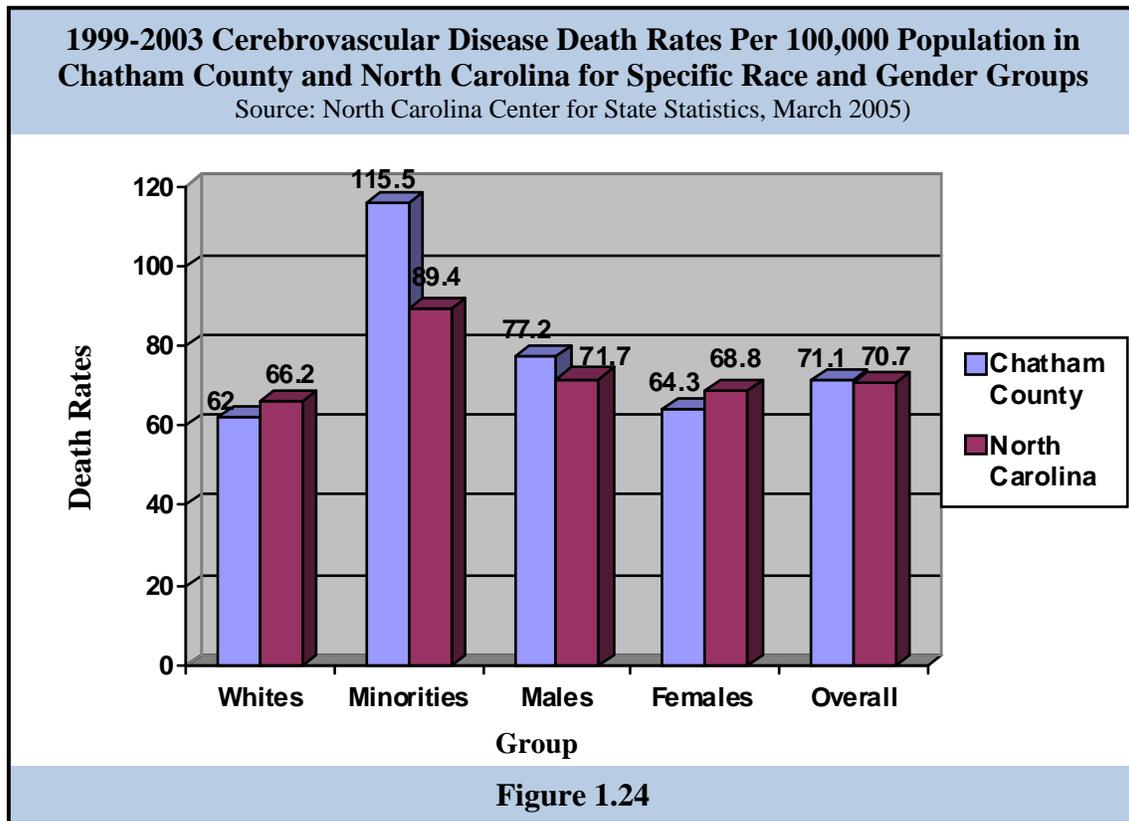
Strokes occur when a blood vessel to the brain is either blocked by a clot or bursts. When there is a clot or a burst blood vessel, part of the brain cannot get the blood (and oxygen) it needs, so it starts to die.⁵⁶

Permanent damage can result if medical attention is not received within a short time from the onset of symptoms. Without treatment in a timely manner, a stroke can result in paralysis, vision problems, speech problems, and memory loss.

Risk factors for strokes include: age, heredity, gender, prior stroke or heart attack, high blood pressure, smoking, diabetes, heart disease, high cholesterol, sickle cell disease, poor diet, and physical inactivity. The best method of prevention for cerebrovascular disease is similar to the methods for other chronic diseases, making healthy lifestyle choices. A way to limit the damage from stroke is to be aware of the warning signs.

Death rates from stroke fell in all categories for North Carolina and Chatham County by 2008. For the five year period between 2004 and 2008, Chatham County had a rate of 51.8 compared the state's 54.4. Between 1999 and 2003, the overall death rate for cerebrovascular disease in Chatham County and North Carolina were very similar. From 2004-2008, minorities in Chatham County exceeded the white cerebrovascular death rate. See the Figures 1.23 and 1.24.





Diabetes

Diabetes is the sixth leading cause of death in Chatham County and seventh in North Carolina. According to the American Diabetes Association, in 2007, 23.6 million Americans have diabetes, but 5.7 million of that total is undiagnosed.⁵⁷

Diabetes is a group of diseases that result in high blood sugar as a result of the body's inability to produce insulin or use it correctly.⁵⁸ Complications from uncontrolled diabetes include heart disease, eye, kidney, and nerve damage, neuropathy (nerve damage), and stroke.

The main risk factors for diabetes are: family history, being overweight, physical inactivity, age, high blood pressure, having had gestational diabetes, and being African-American, Hispanic-American, or Native American. The best method to prevent diabetes is by living a healthy lifestyle in the ways described in previous sections.

Between 2004 and 2008, the diabetes death rates rose slightly by 10% for Chatham County. Rates decreased in this time period for North Carolina. During the years between 1999 and 2003, Chatham County had a lower rate of death from diabetes than the state. In Chatham County for the most recent five year span, minorities in Chatham County died at a rate more than three times higher than whites. A similar trend was seen across North Carolina, although the difference was not as large. See Figure 1.25 and 1.26.

2004-2008 Diabetes Mellitus Death Rates Per 100,000 Population in Chatham County and North Carolina for Specific Race and Gender Groups

(Source: North Carolina Center for State Statistics, November 2009)

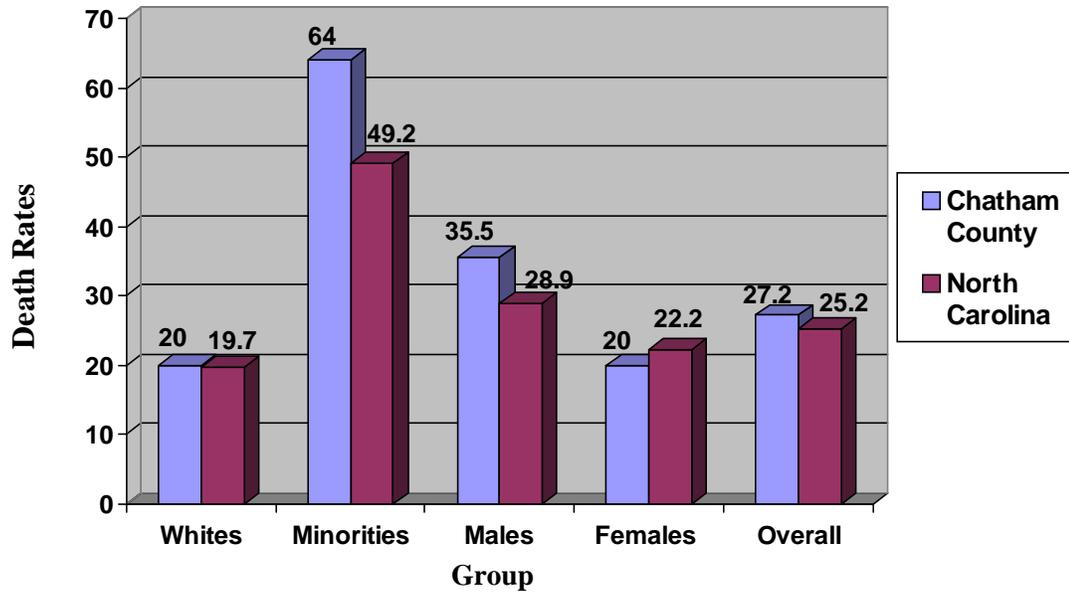


Figure 1.25

1999-2003 Diabetes Mellitus Death Rates Per 100,000 Population in Chatham County and North Carolina for Specific Race and Gender Groups

(Source: North Carolina Center for State Statistics, March 2005)

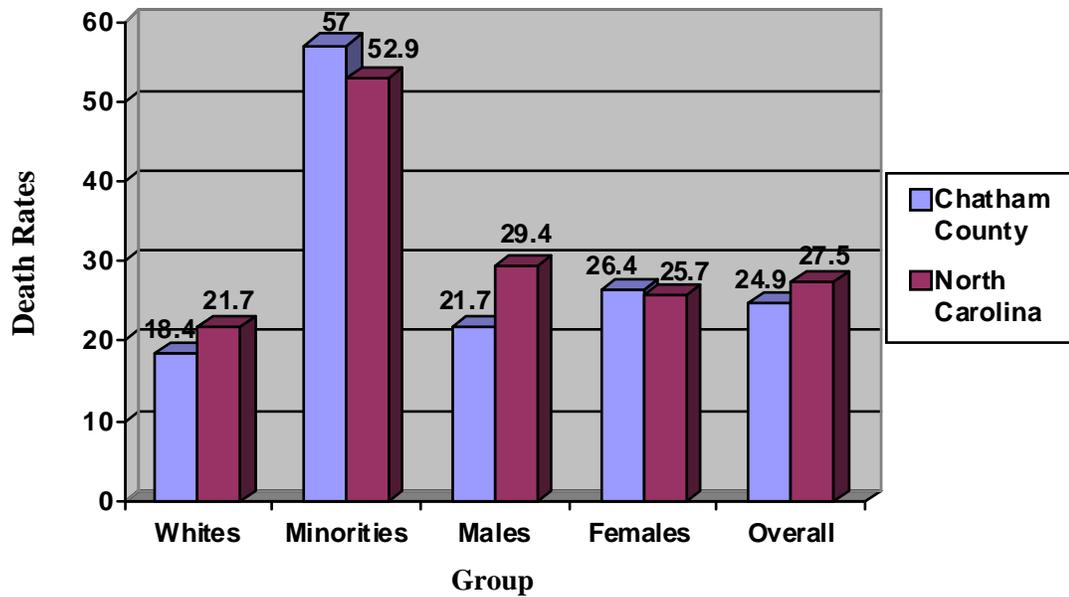


Figure 1.26

Chronic Lower Respiratory Diseases

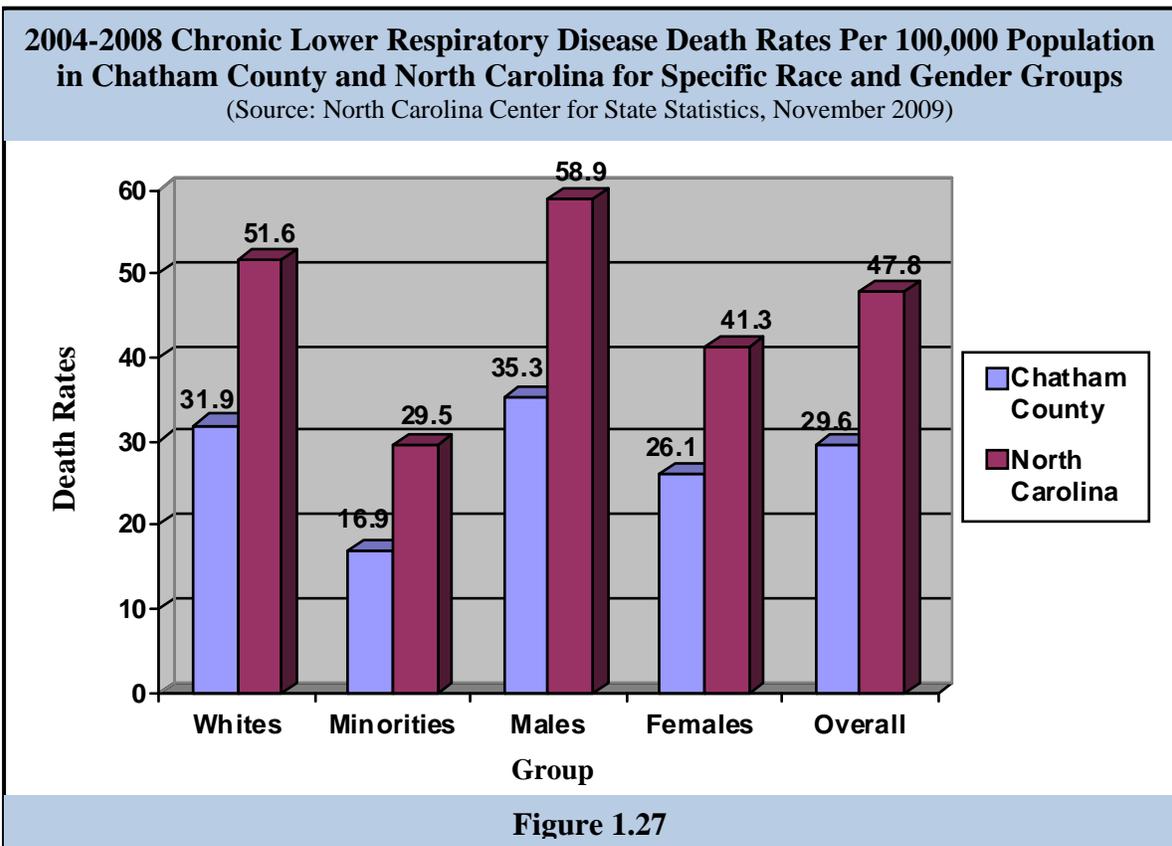
Chronic lower respiratory diseases are a group of diseases that affect the airways and lungs. Chronic Obstructive Pulmonary Disease (COPD) is the biggest chronic lower respiratory disease killer. COPD includes emphysema and chronic bronchitis.⁵⁹ Chronic lower respiratory disease is the fourth biggest killer in Chatham County and North Carolina.

The biggest risk factor in contracting a lower respiratory disease is smoking. According to the National Women’s Health Information Center, males who smoked are 12 times more likely to die from COPD than a man who has never smoked.⁵⁹

The best way to avoid chronic lower respiratory diseases is to not smoke, avoid secondhand smoke, and reduce exposure to workplace chemicals.⁵⁹

Between 2000 and 2004, the rate of death from chronic lower respiratory diseases was 29.6 in Chatham County, nearly 60% lower than North Carolina’s rate of 47.8. Rates have mainly stayed constant since the 1999-2003 time period.

Males and whites in Chatham County had the highest rate of death from chronic lower respiratory diseases in the most recent five year span. See Figure 1.27.



1999-2003 Chronic Lower Respiratory Disease Death Rates Per 100,000 Population in Chatham County and North Carolina for Specific Race and Gender Groups

(Source: North Carolina Center for State Statistics, March 2005)

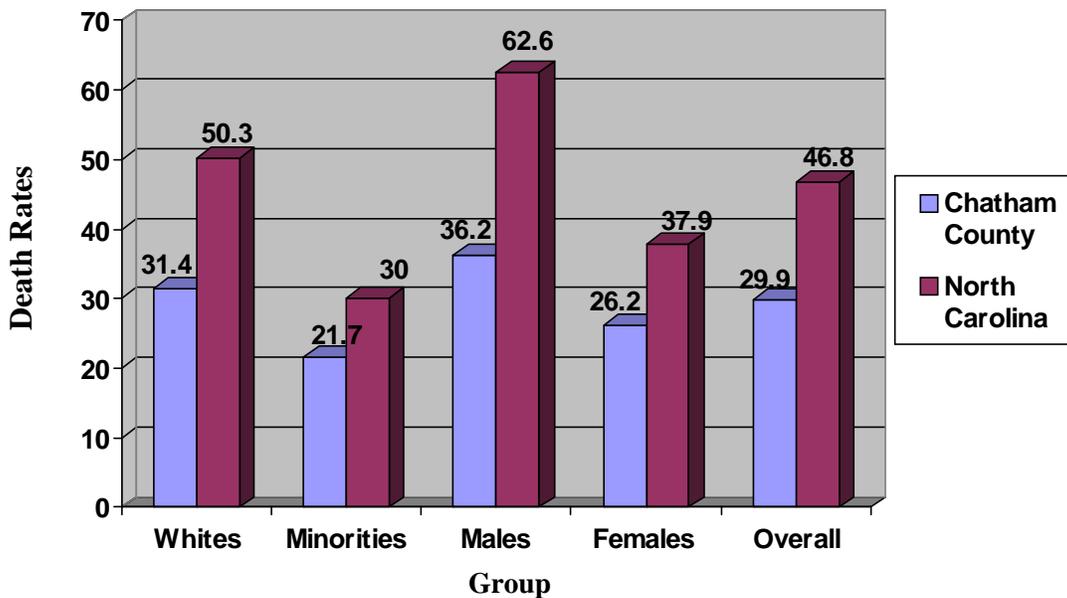


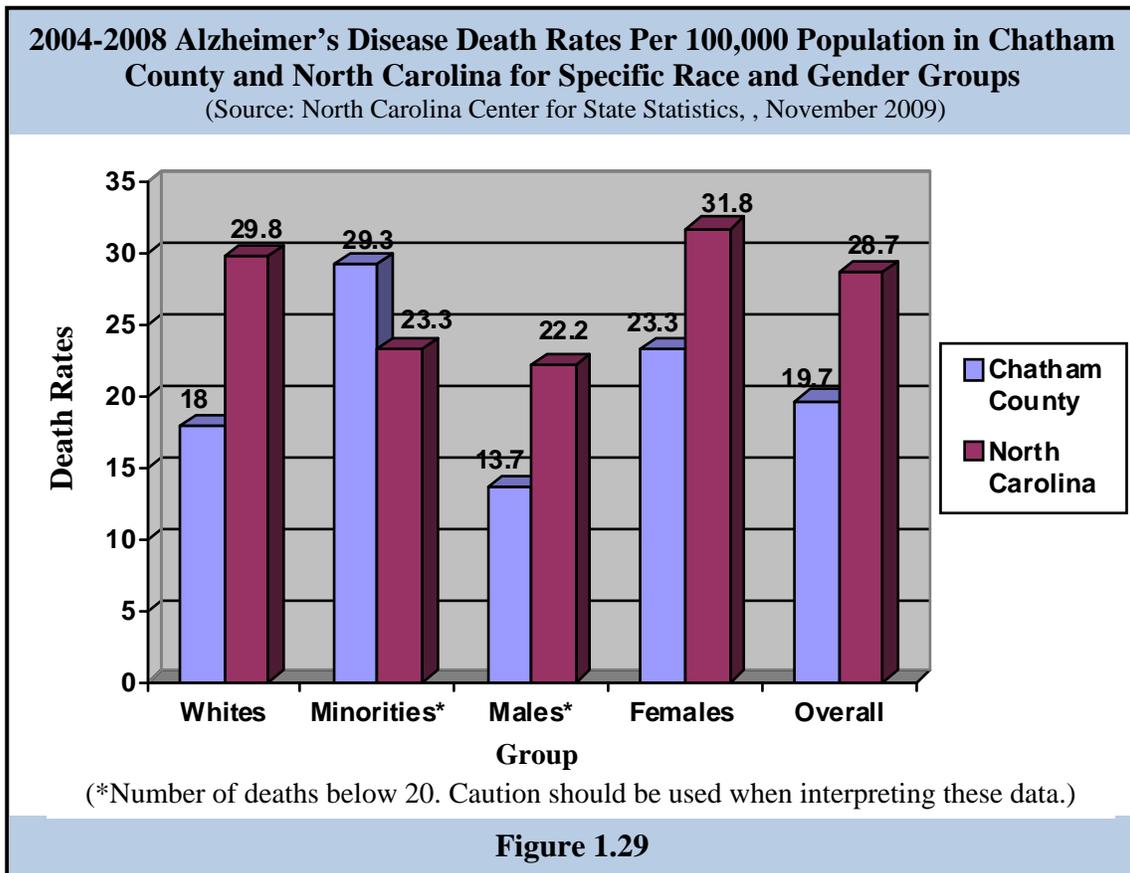
Figure 1.28

Alzheimer’s Disease

Alzheimer’s disease is a progressive brain disorder. Alzheimer’s gradually destroys a person’s ability to learn, reason, remember, and perform activities of daily living. It is a terminal disease. Alzheimer’s disease is responsible for 50%-80% of all cases of dementia.⁶⁰ Alzheimer’s disease is the fifth leading cause of death in North Carolina and eighth cause of death in Chatham County.

The main risk factors are age, family history, and genetics. There is no way to prevent Alzheimer’s disease. Symptoms can be managed with medical drugs, but there is no cure.

For the 2004-2008 time period, North Carolina’s Alzheimer’s disease death rate was nearly 50% higher than Chatham County’s. The minority rate and female death rate for this disease were highest of any other groups in Chatham County. This trend was not the case at the state level. Chatham County minority and male rates should be interpreted with caution since they are below 20 cases in each instance. Alzheimer’s disease rates were only available for the state between 1999 and 2003. In that year, the overall death rate for North Carolinians was 24.2.



Chronic Disease Summary

The National Center for Chronic Disease Prevention and Health Promotion has identified several best practices that are proven to work in preventing chronic diseases. According to the *Power of Prevention* report, “Chronic disease prevention, to be most effective, must occur in multiple sectors and across individuals’ entire life spans.”⁶¹ The list includes the following:⁶¹

- **School-based strategies** that foster environments and instruction that promote healthy eating, daily physical activity, sun protection, and the avoidance of tobacco, alcohol, and illicit drugs.
- **Smoking cessation strategies**, such as improved access to quitlines, improved insurance coverage of smoking cessation services, and greater involvement of health providers and health care systems in the routine delivery of cessation advice and services to patients who want to quit smoking.
- **Outreach strategies and coordination** to ensure that older adults have access to programs with documented, science-based measures to prevent disease and functional decline.
- More **population-based case management systems** to which doctors can refer patients once a condition has been detected (e.g., community-based lifestyle programs to prevent type 2 diabetes, cancer survivorship programs, hypertension management programs, tobacco quitlines).

- **Urban design and land-use strategies** that lead to increased physical activity, as well as changes to transportation and travel policy and infrastructure that reduce dependence on motorized transport and increase physical activity.
- **Low-fat and high-fruit-and-vegetable menu selections** in restaurants, schools, and employee cafeterias.
- Requirements for **daily physical education classes** in schools. 100% smoke-free policies in workplaces, restaurants, schools, and other public places.
- Increase **health promotion efforts targeting social determinants of health**, such as increased access to affordable healthy food options in underserved communities through the development of community gardens, as well as taxing and zoning policies that encourage the development of full-service grocery stores in neighborhoods where they are lacking.
- Implement **programs that foster healthy living across life stages among disadvantaged groups**. Examples include early childhood education, work-study programs that improve graduation rates and access to secure employment with livable wages, and employer-sponsored health promotion programs for blue-collar and low-wage workers.

Additional prevention methods have been listed under each chronic disease in this section. It is important for individuals to take responsibility for their health by making healthy lifestyle decisions in order to age healthily. Public health agencies are tasked with addressing health issues at multiple levels in order to affect a greater portion of the population. Interventions that focus on changes at the individual, interpersonal, organizational, community, and policy levels are most likely to be effective and produce long-term results.

Acute Illnesses

An acute illness has a rapid onset and usually lasts a few days or weeks. Symptoms can be mild or severe. Common examples of acute illnesses are colds, appendicitis, and ear infections. Acute illnesses that are the largest causes of death in Chatham County and North Carolina are pneumonia and influenza.

Pneumonia and Influenza

Pneumonia and influenza are grouped together for the purposes of reporting leading causes of death. Pneumonia and influenza is the eighth leading cause of death in North Carolina and ninth in Chatham County.

Influenza, or more commonly known as the flu, is a contagious respiratory illness caused by the influenza virus. The virus can cause mild to severe illness, sometimes leading to death.⁶² Symptoms of the flu include fever, headache, fatigue, dry cough, sore throat, runny nose, muscle aches, and vomiting or diarrhea.⁶³

According to the Medline Plus, a service of the National Library of Medicine and the National Institutes of Health, between 5% and 20% of the population gets the seasonal flu each year.⁶⁴ Certain members of the population such as older adults, young children, and

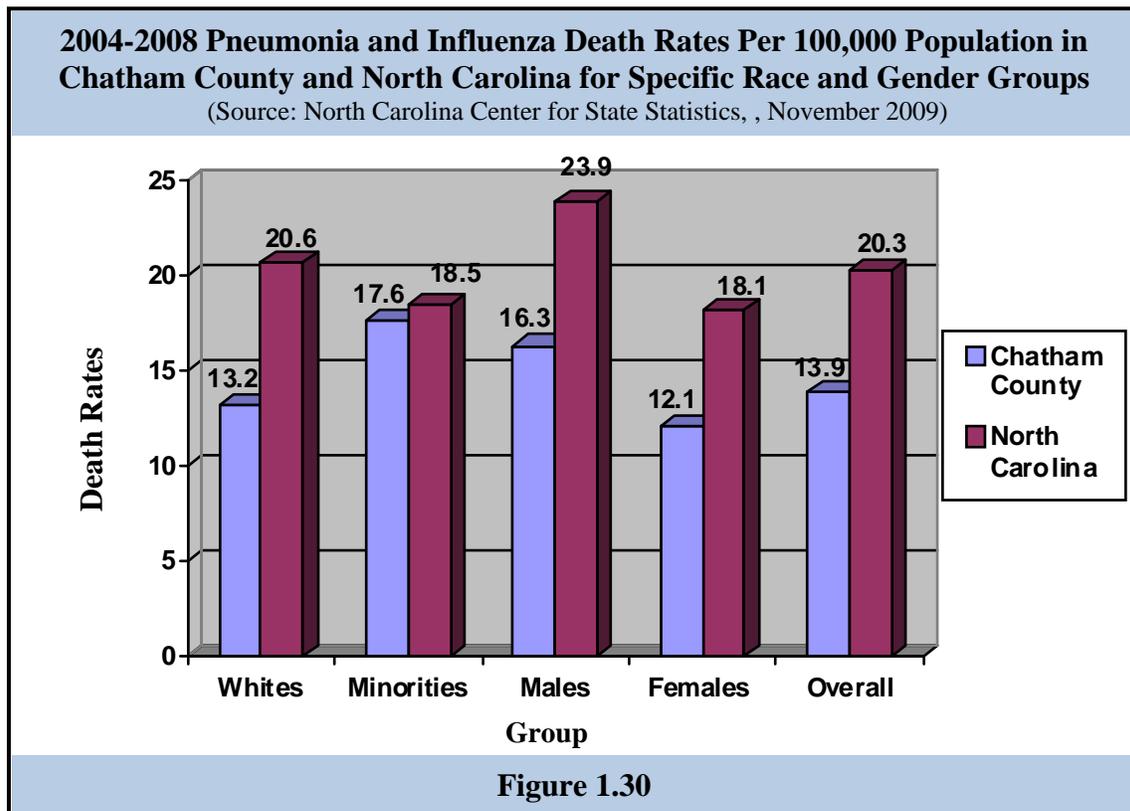
those with suppressed immune systems are at high risk for serious complications from the flu and pneumonia.

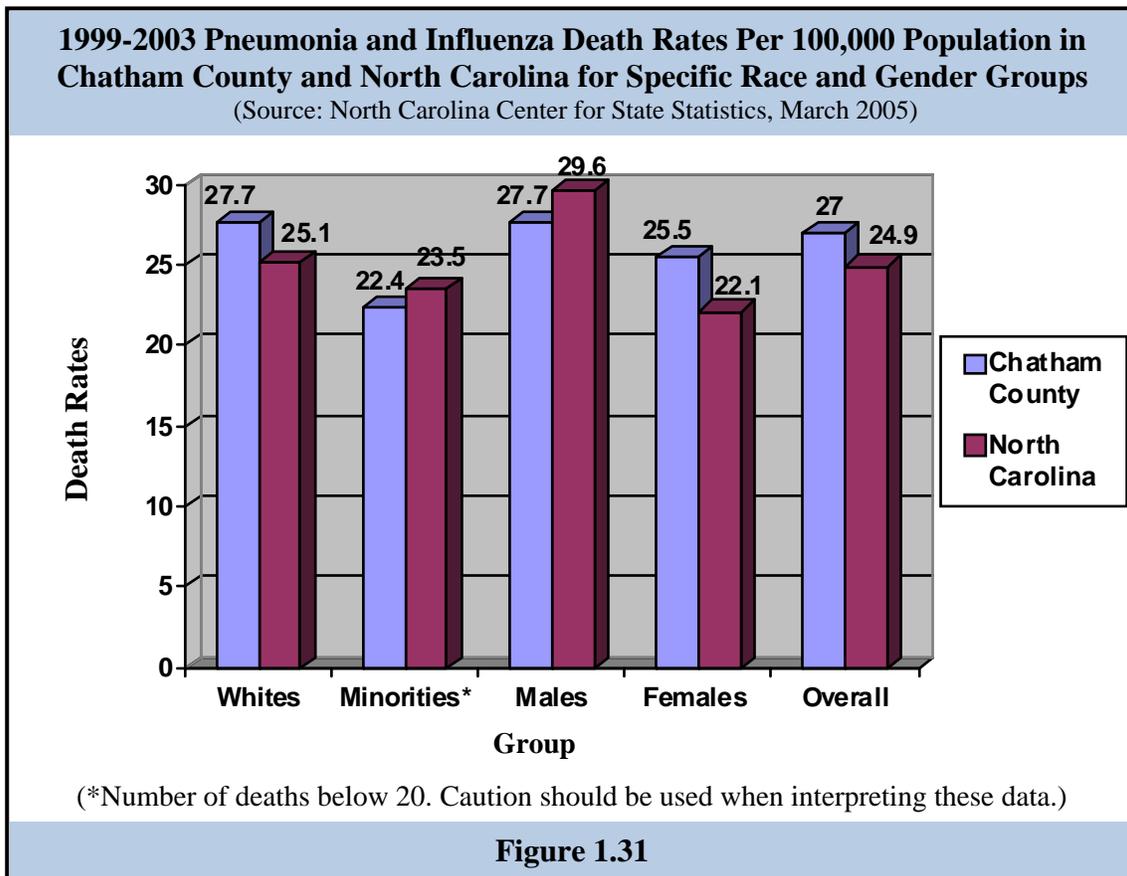
Pneumonia is an inflammation of the lungs caused by infection, bacteria, viruses, or other organisms. Symptoms of pneumonia include coughing, fever, fatigue, nausea, vomiting, rapid breathing or shortness of breath, chills, or chest pain.⁶⁵

The best methods for preventing the flu and pneumonia are getting vaccinated. Flu vaccination is available through the flu shot or with a nasal spray vaccine. The flu vaccine may also prevent pneumonia because it can be a complication of the flu. There is also a separate pneumonia vaccine.

Other ways for people to keep healthy during the November through March influenza and pneumonia season is to wash hands regularly, cover mouths and nose when coughing or sneezing, and avoid touching the eyes, nose or mouth, cleaning hard surfaces that are touched regularly such as doorknobs, and to keep the immune system strong through adequate sleep, proper diet, and regular exercise.⁶⁵

Between 2004 and 2008, Chatham County had a lower rate of death from pneumonia and influenza than the state. The rate for Chatham County was 13.9 compared to 20.3 for North Carolina. Across the state, males had the highest influenza and pneumonia death rate. In Chatham County the highest rate belonged to minorities, although there were fewer than 20 cases. Fewer than 20 Chatham County minority deaths also occurred between 1999 and 2003. This rate should be interpreted with caution. Between 1999 and 2003, the Chatham County overall death rate was nearly twice as high as during 2004-2008. Between the late 90s and early 2000s, Chatham had a higher rate of pneumonia and influenza deaths than across the state. See Figure 1.30 and 1.31.





Injuries

Unintentional Injuries

“Injuries—including unintentional injuries, homicide, and suicide, are the leading cause of death for people ages 1 to 44.”⁶⁶ In North Carolina, statistics for unintentional injuries are divided into the categories of “Unintentional Motor Vehicle Injuries” and “All Other Unintentional Injuries.”

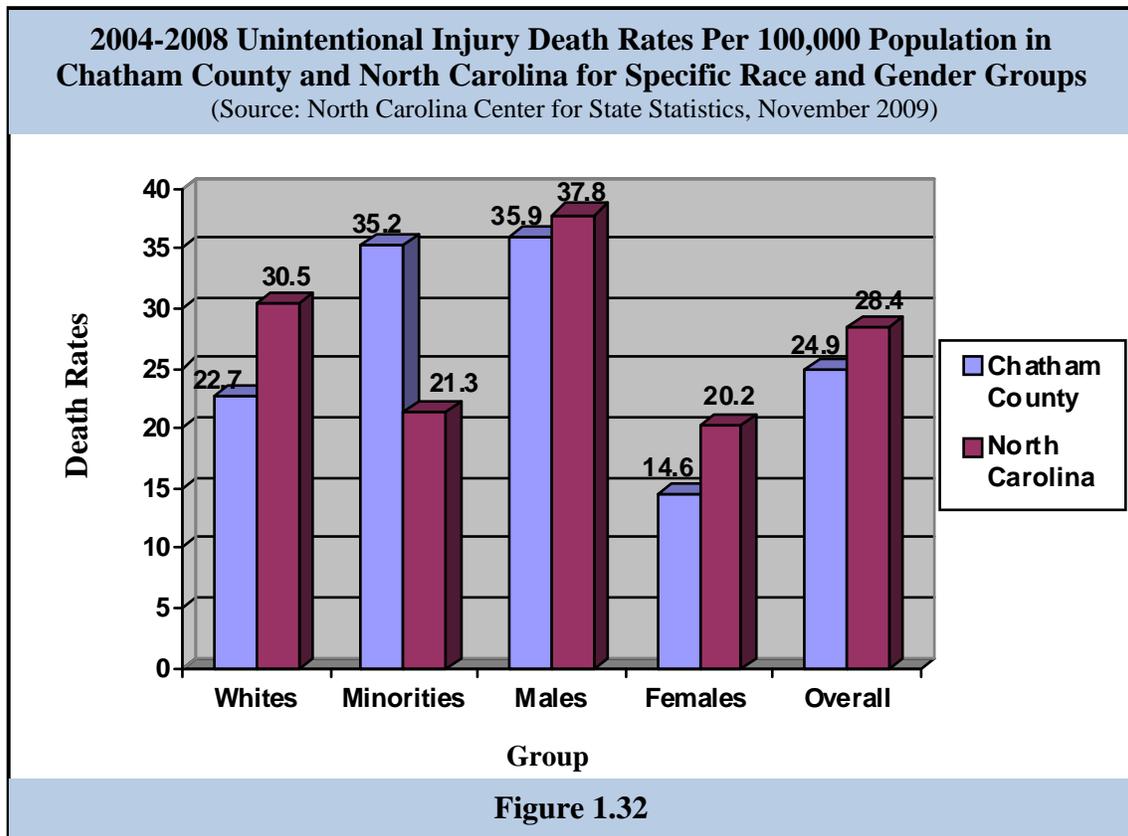
Unintentional injuries are unplanned or not intended to happen. Unintentional injuries include accidents such as falls and poisonings. These events are predictable and preventable.⁶⁷ Unintentional injuries are the sixth leading cause of death in North Carolina and seventh in Chatham County.

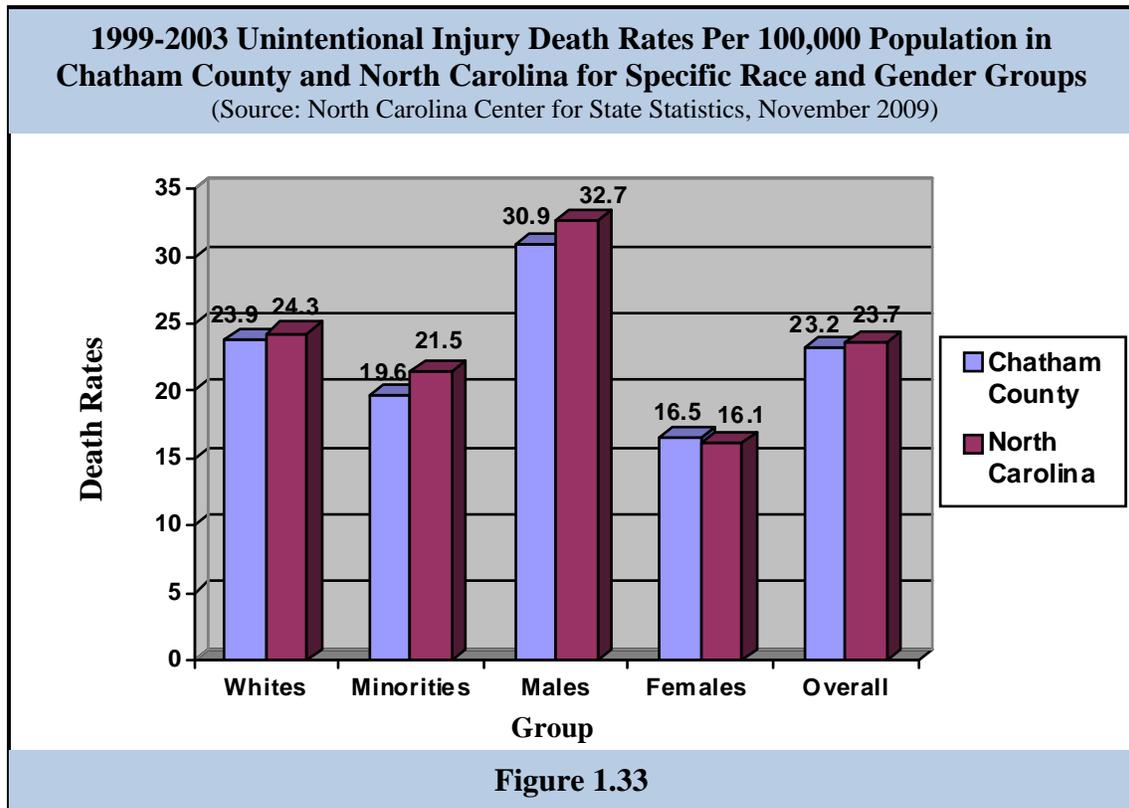
The best method to prevent accidents is to take safety precautions. Examples of these are: install fire alarms and make sure they work properly, supervise children’s activities, do not smoke when sleepy, read and understand labels on food and medicines, store medications and hazardous materials away from children, and keep a list of emergency numbers at home.

All Other Unintentional Injuries

In the 2004-2008 time period, unintentional injuries not caused by motor vehicle crashes such as drowning and burns claimed lives at a rate of 24.9 people per 100,000 in Chatham County and 28.4 in North Carolina. Between 1999 and 2003, the death rate for injuries was 23.7 in North Carolina and identical in Chatham County at 23.2. Unintentional injury death rates rose throughout the 2000s in Chatham and across the state.

Men die at a rate two and a half times higher than women from unintentional injuries in Chatham County. Men dying at a higher rate than women as the result of unintentional injuries holds true for the North Carolina statistics as well. The Chatham County minority rate should be interpreted with caution since there were fewer than 20 cases in each time period. See Figure 1.32 and 1.33.





Unintentional Motor Vehicle Injuries

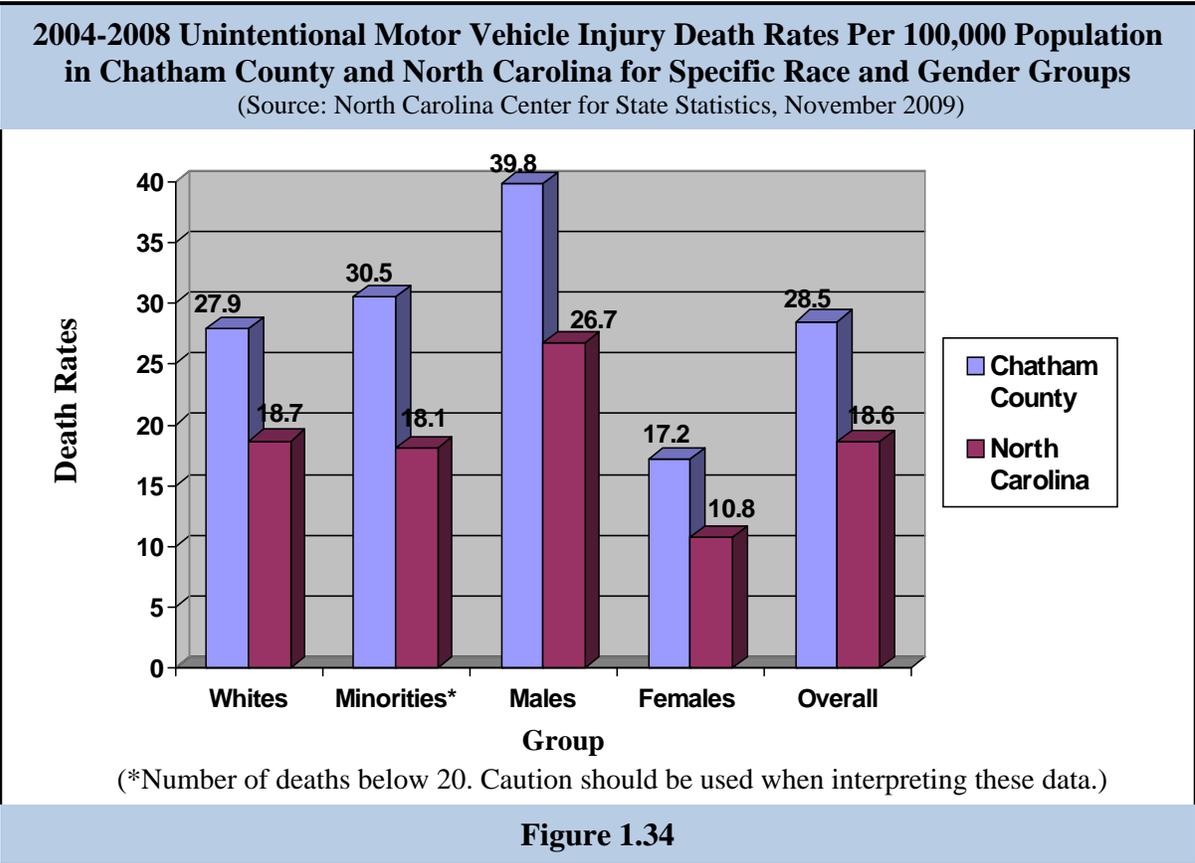
Unintentional Motor Vehicle Injuries are the fifth leading cause of death in Chatham County and tenth in North Carolina. Motor vehicle accident deaths are usually the result of driving while impaired, driving while distracted, failure to wear a seat belt, or use a child safety or booster seat, inexperienced teen drivers, and older adult drivers with decreased motor skills. “Motor vehicle crashes are the leading cause of death for U.S. teens, accounting for more than one in three deaths in this age group.”⁶⁸ According to the State Center for Health Statistics, between 2004 and 2008 unintentional motor vehicle injuries caused the most deaths for residents in the 0-19 and 20-34 year-old age groups in Chatham County.

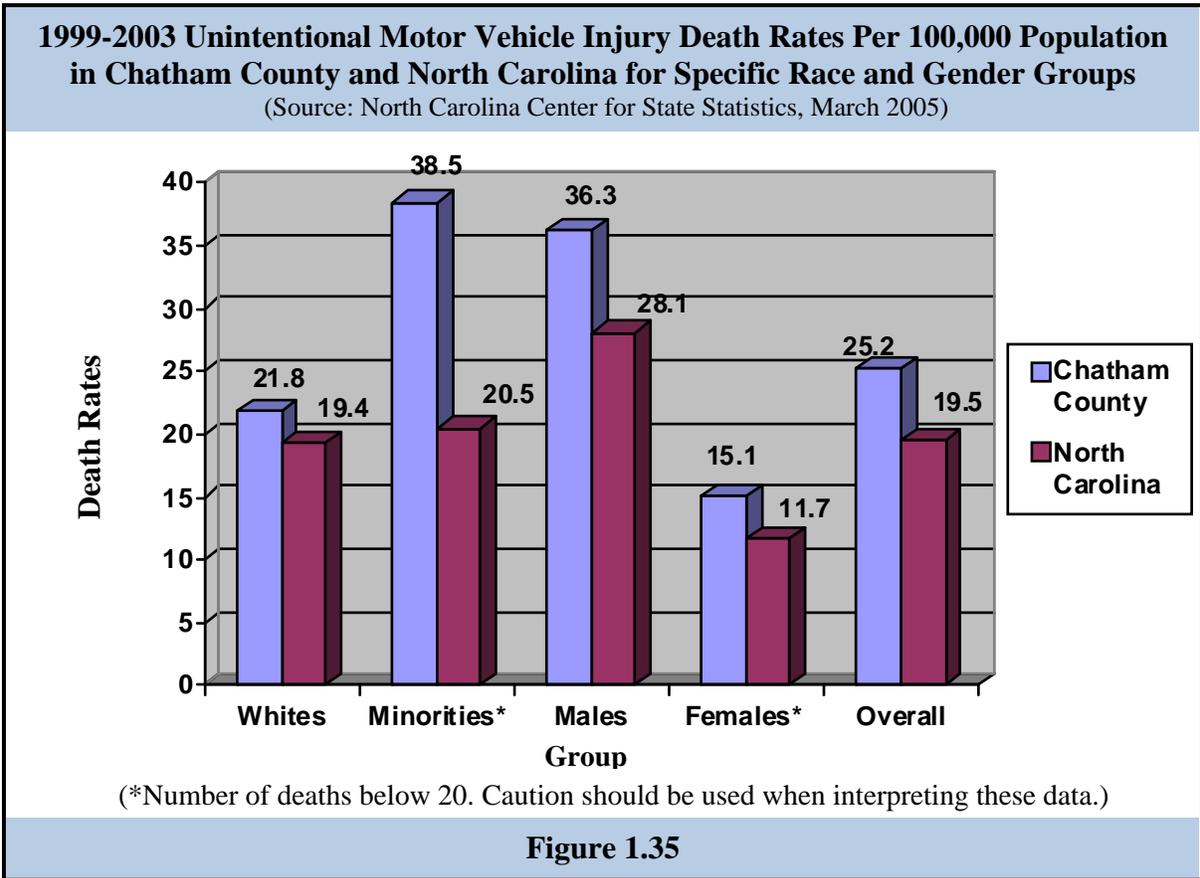
The CDC recommends the following best practices to prevent motor vehicle injuries and deaths:

- Use child safety seats and booster seats appropriate for a child’s age and weight,⁶⁹
- Wear a seat belt,
- Implement graduated driver’s license programs for young drivers,⁶⁸
- Enforce .08 blood alcohol concentration laws, minimum legal drinking age laws, and zero tolerance laws,⁷⁰
- Set up sobriety checkpoints,⁷⁰
- Pass laws against texting behind the wheel, and⁷¹
- Continue to educate the public through campaigns about motor vehicle safety.⁷⁰

For the 2004-2008 time period, Chatham County was slightly over one and a half times higher above the overall state death rate for motor vehicle injuries with 28.5 compared to 18.6 for North Carolina. Chatham County currently exceeds North Carolina in each category for deaths from unintentional motor vehicle injuries. This was the same trend seen from 1999 to 2003. During that time period, Chatham County's rate was 25.2 compared to North Carolina's 19.5.

There is a disparity in deaths from motor vehicle injuries for men and minorities in Chatham County. Both groups have the highest death rates from motor vehicle injuries. The Chatham County minority rate should be interpreted with caution since there were fewer than 20 cases between both 2004 and 2008 and 1999 to 2003. The same holds for women in the 1999-2003 five-year span. Compared to women, males have a rate more than twice as high as women in the county. See Figure 1.34 and 1.35.





Intentional Injuries

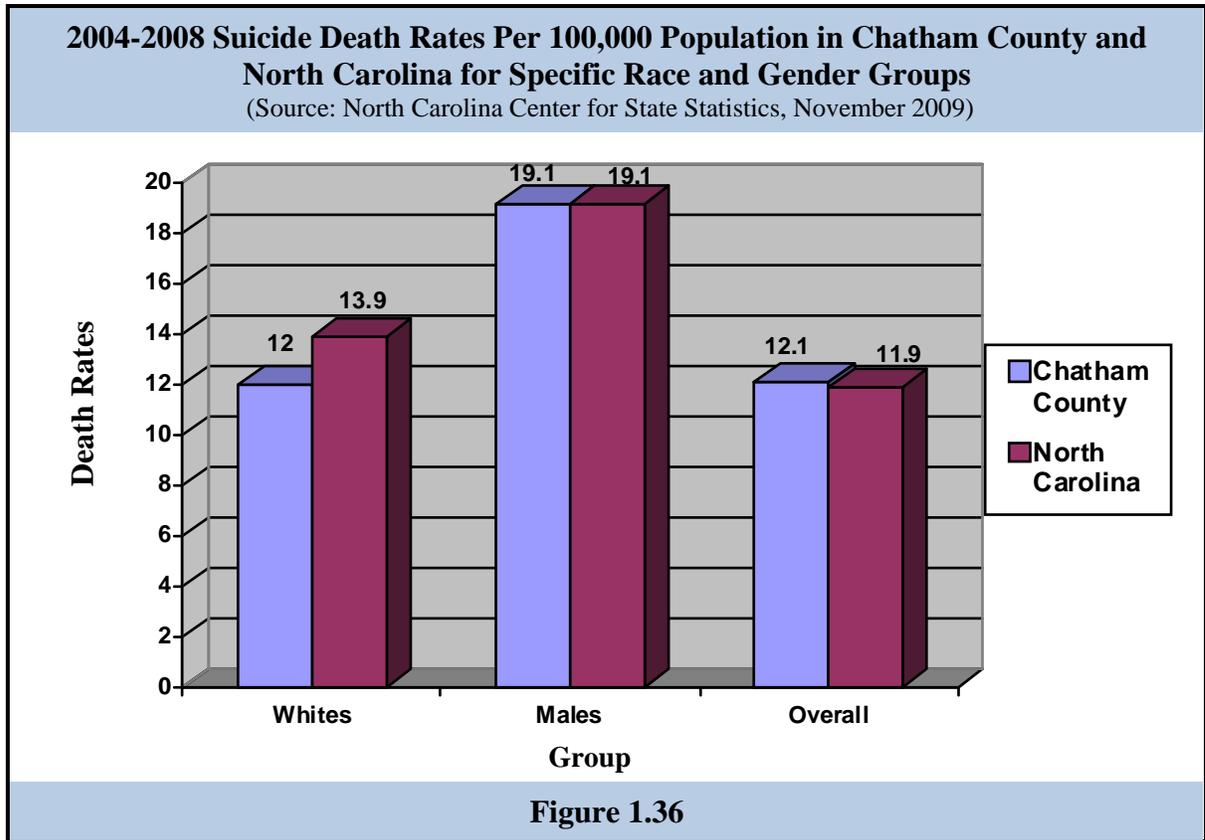
Suicide

Suicide is the act of taking one’s own life. It is the tenth leading cause of death in Chatham County and twelfth in the state. Suicide affects the victim’s friends, family and community. Men are four times more likely than women to die from suicide, but women are three times more likely than men to attempt to take their lives.⁷² Suicides are high among middle aged and older adults.⁷²

Risk factors for suicide include previous suicide attempts, history of depression or mental illness, alcohol or drug abuse, family history of suicide or violence, physical illness, and feeling alone.⁷²

The most effective methods for preventing suicides from the CDC include individuals learning the warning signs in order to know how to respond to someone who shows signs of wanting to end their life and becoming involved in community efforts.⁷²

Death from suicides for Chatham County minorities and females between 2004 and 2008 are so low (under 10) that the rates cannot be reliably compared to the state. Rates for minorities and females are not included in Figure 1.36. The same is true for all categories during the 1999-2003 time period in Chatham County. There is no graph for those years.



Prevention methods for unintentional and intentional injuries have been named in this section. Injuries can be avoided with precautions such as practicing proper safety measures, maintaining safe driving habits, and knowing the warning signs of someone in need of help.

Six of the top ten leading causes of death in Chatham County are the result of chronic diseases, three are related to injuries, and one is due to acute illness. The likelihood of death from nearly all of these causes can be reduced if a person takes the proper safety precautions and makes healthy lifestyle choices.

Health Resources in Action states, “Since poor health is often the result of factors that are beyond the community's control, other challenges require policy and regulatory solutions that are best implemented at the governmental or organizational levels.”⁷³ Public health needs to be a leader in creating environments conducive to individuals and communities living healthy lifestyles.

Morbidity

Morbidity is the incidence or prevalence of a disease in the population at a given time. North Carolina tracks the morbidity of many diseases such as: sexually transmitted diseases, communicable diseases, and cancer.

Sexually Transmitted Diseases

Sexually Transmitted Diseases (STDs) affect people of different classes, races, ages, and backgrounds. According to the American Social Health Association (ASHA), “each year in the U.S. there are approximately 19 million new cases each year, about half of which occur among youth ages 15-24 years.”⁷⁴

STDs are spread through oral, anal, or genital sex, and by skin-to-skin contact. The three causes of sexually transmitted diseases are parasites, bacteria, and viruses. Parasitic infections such as crabs can be cured with over the counter drugs or medication. Bacterial infections such as gonorrhea and syphilis can be treated with antibiotics. STDs caused by viruses such as herpes and HIV cannot be cured, but some can be controlled with medication.⁷⁵

Having unprotected sex, having multiple partners, and sharing intravenous (IV) needles are risk factors for contacting a sexually transmitted disease. The best methods for preventing STDs are to remain abstinent, always use a condom correctly when having intercourse, only enter into monogamous sexual relationships, avoid sharing IV needles, and get tested regularly for STDs.

Gonorrhea, syphilis, and AIDS cases are reported infectious diseases to the state. Rates for gonorrhea and syphilis are kept both for the overall population and minorities. Numbers for primary and secondary syphilis and AIDS cases are so low (under 10) for Chatham County during the five-year periods that reliable comparisons cannot be made to the state rate. There are no charts for these two diseases.

Gonorrhea

Gonorrhea is caused by a type of bacteria. The most common symptoms are discharge from the penis or vagina or a burning sensation during urination. Women often show no signs. If left untreated in women, gonorrhea can cause infertility, pelvic inflammatory disease, and ectopic pregnancies. Gonorrhea can be cured with antibiotics.⁷⁶

During the years between 2004 and 2008, the prevalence of gonorrhea in Chatham County was far below the North Carolina rate. The rate in Chatham County was 65.8 compared to the state’s 178.4. The rates for minorities in Chatham County and North Carolina are substantially higher. In Chatham County, the minority rate was almost four times that of the rest of the population. The same trend held across North Carolina. The gonorrhea rates of minorities for the years between 1999 and 2003 was more than three times that of the rest of the population in Chatham County and across the state, although overall and minority rates have dropped. See Figures 1.37 and 1.38.

2004-2008 Gonorrhea Rates Per 100,000 Population in Chatham County and North Carolina

(Source: North Carolina Center for State Statistics, November 2009)

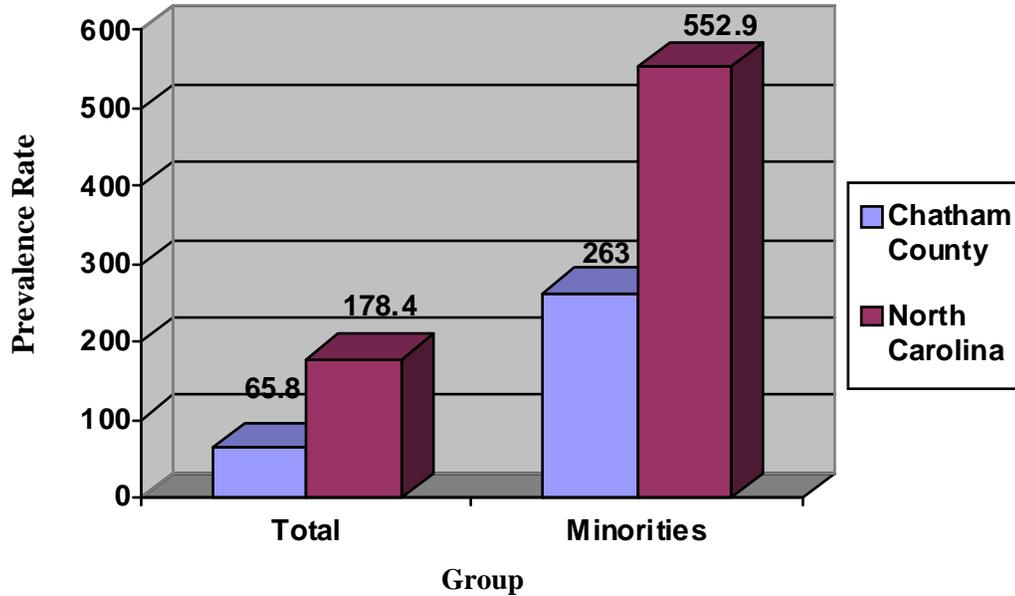


Figure 1.37

1999-2003 Gonorrhea Rates Per 100,000 Population in Chatham County and North Carolina

(Source: North Carolina Center for State Statistics, November 2009)

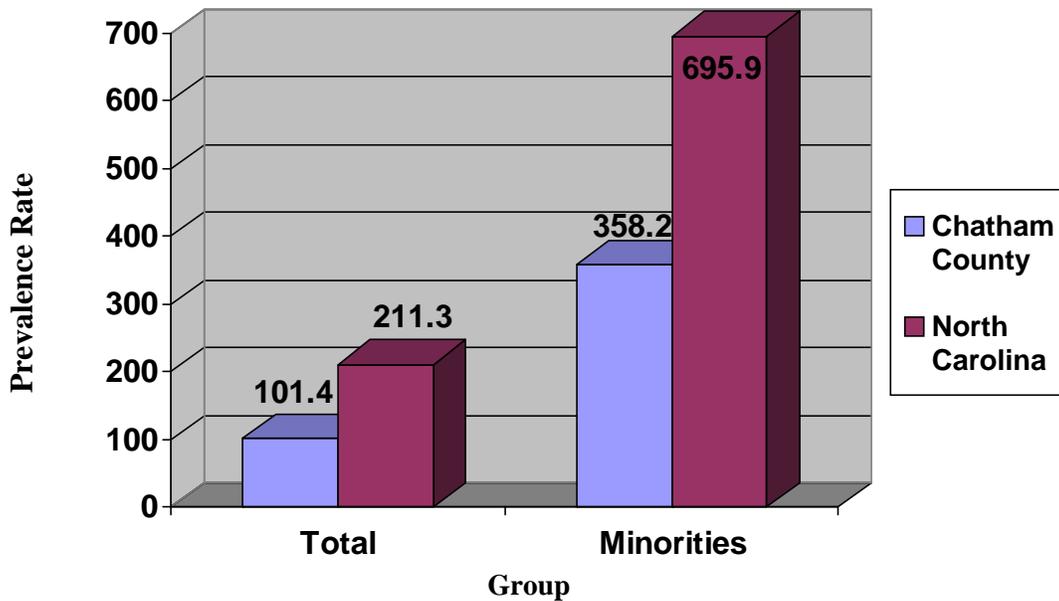


Figure 1.38

Individuals need to take steps in protecting their sexual health. Public health agencies also have a responsibility to reduce the incidence of sexually transmitted disease cases. The North Carolina Department of Public Health aims to reduce the number of STD cases through the Syphilis Elimination Project, non-traditional testing, counseling, and referral program, expanded HIV and syphilis jail screening program, and by providing technical assistance to local health departments.⁷⁷

Communicable Diseases

Communicable or infectious diseases are caused by infective agents such as bacteria, viruses, parasites, or fungi. Some communicable diseases can be spread between people either directly or indirectly. Direct contact occurs when a person comes into contact with an infected animal or individual in ways such as coughing, kissing, or getting bitten or scratched. Indirectly, germs can be spread through touching an object that has been used by an infected person and then touching your eyes, nose, or mouth without washing your hands.⁷⁸

Other infectious diseases are transmitted by ingesting contaminated food, water or other contaminants in environment.⁷⁹

The Mayo Clinic recommends the following steps to prevent the spread of communicable disease:⁸⁰

- Wash your hands,
- Get vaccinated,
- Stay home when sick,
- Prepare food safely,
- Don't share personal items, and
- Travel wisely by not flying when ill and getting necessary vaccinations.

Communicable diseases increased slightly each year between 2006 and 2008 before dropping by more than 10% in 2009. Rocky Mountain Spotted Fever is the most common infectious disease (outside of STDs) in Chatham County. See Table 1.8 below for a list of selected communicable disease infections in Chatham County from 2006 to 2009.

**Cases of Selected Communicable Diseases in Chatham County
2006-2009**

(Source: Communicable Disease Control Branch, Division of Epidemiology, North Carolina Department of Public Health, October 2010)

Table 1.8

	2006	2007	2008	2009	Total
Campylobacter	4	1	10	8	23
E. Coli	3	4	3	3	13
Foodborne, Other	4	0	0	0	4
Hepatitis A	0	1	1	0	2
Hepatitis B- Acute	0	1	1	0	2
Hepatitis B- Chronic	3	1	1	3	8
Lyme Disease	0	2	1	1	4
Mumps	3	0	0	0	3
Pertussis	0	1	3	2	6
Rocky Mountain Spotted Fever	32	36	22	20	110
Salmonellosis	14	19	22	17	72
Shigellosis	0	0	2	5	7
Streptococcus A	2	0	2	0	4
Total	65	66	68	59	258

Cancer Incidence

Cancer is a devastating disease, but more and more Americans are surviving it with improvements in treatments and detection. Many who are diagnosed can go through long periods of remission or are permanently cured. Risk factors, treatment, and prevention of cancer have been discussed extensively earlier in the report.

For the 2002-2006 time period, incidence of cancers in Chatham County was below the state rate in all areas despite Chatham's overall increase. The Chatham County all cases cancer incidence rate of 382.5 was below the North Carolina rate of 477.0. The female breast cancer rate for Chatham and the state was very similar between 1997 and 2001, but that gap has widened in the years for which most recent data is available. Chatham's rate is now significantly below North Carolina's. From 1997-2001, Chatham County's cancer incidence rate fell below the state's in all selected sites. See Table 1.9 and 1.10.

2002-2006 Cancer Incidence Rates for Chatham County and North Carolina for Selected Sites Per 100,000 Population					
(Source: North Carolina State Center for Health Statistics, December 2008)					
Table 1.9					
	Colon/Rectum	Lung/Bronchus	Female Breast	Prostate	All Cancers
Chatham County	33.1	51.1	117.2	144.9	382.5
North Carolina	48.4	75.0	147.2	153.2	477.0

1997-2001 Cancer Incidence Rates for Chatham County and North Carolina for Selected Sites Per 100,000 Population					
(Source: North Carolina State Center for Health Statistics, April 2004)					
Table 1.10					
	Colon/Rectum	Lung/Bronchus	Female Breast	Prostate	All Cancers
Chatham County	40.1	44.2	147.1	111.3	352.7
North Carolina	48.4	69.7	148.2	152.5	445.3

Mental Health and Substance Abuse

Alcohol and other drug use was top priority in 2006, but did not make the list in 2010. Mental health services are a continuous need in Chatham County. Drug abuse and mental health are often intertwined due to problems with addiction and self-medication with alcohol and illegal substances to deal with mental health issues.

During 2008 in Chatham County, 16 residents sought care for substance abuse at North Carolina alcohol and drug treatment centers. This does not reflect the total number who needed care, only those that sought it from state facilities. Approximately 1,295 Chatham individuals were served in area mental health programs for a rate of 21.4 persons per 1,000 of the population.⁸¹

Substance abuse is a public health challenge as it leads to other social problems such as impaired driving and family violence. Drug abuse can also lead to homelessness, crime, and problems keeping a job.⁸² Drug abuse is often caused by addiction. Drug addiction is a disease that affects the brain and can be difficult to overcome.

Mental illnesses are medical conditions such as depression and schizophrenia that can affect an individual’s “thinking, feeling, mood, ability to relate to others and daily functioning.”⁸³ Mental illnesses are serious and can limit a person’s ability to live a normal life.

Substance abuse and mental illness can affect people of any race, age, or income. Although they are chronic conditions, there are ways to treat and prevent substance abuse and manage mental illness.

Drug abuse treatment includes finding a program that works for the individual. Therapies usually include “behavioral therapy (such as individual or group counseling, cognitive therapy, or contingency management), medications, or their combination.”⁸⁴ Since substance abuse is a lifelong problem, those inflicted need to find programs that fit their needs and remain effective.

Drug addicts often deal with other conditions such as mental illness. These too must be treated, often through plans that include cognitive, individual, and group therapy, medication, and community services.⁸³ Therapies for both conditions can be on an outpatient or inpatient basis.

Mental illness cannot be prevented but the onset of drug abuse can. Whether in the home, school, or community, effective substance abuse programs should include the following principles such as reducing risk factors, addressing the type of drug abuse problem, tailoring programs to meet needs of specific populations, involving parents and families, and reaching youth in multiple settings.⁸⁵

In Chatham County, mental health services such as the OPC Area Program, Therapeutic Alternatives, and Freedom House Recovery Center provide mental health and substance abuse therapies. For additional resources for mental illness and substance abuse, please see the Resources section.

Obesity

The Chatham County Public Health Department conducted a series of obesity prevention retreats between July and December 2009. Stakeholders representing agencies and organizations, local government, and the community met to discuss existing obesity prevention interventions in Chatham County, how to best coordinate resources, and identify recommendations on how to address the obesity epidemic. The result of the meetings was the March 2010 report, *Chatham County 2009 Obesity Prevention Retreat Final Report and Recommendations*. The following information is contained in that report.

Americans have been growing fatter for each of the last three decades. According to the Centers for Disease Control and Prevention (CDC), “Since 1980, obesity rates for adults have doubled and rates for children have tripled.”

Obesity is a nationwide health issue but affects North Carolinians as well. North Carolina is the 10th most overweight/obese state in the nation. Approximately two-thirds (65.7%) of North Carolina adults are overweight or obese. This is 2.5% higher than the national average.

Data shows that in Chatham County, 59.4% of adults in the Chatham/Lee/Moore region were overweight or obese.⁸⁶ According to the 2008 North Carolina Nutrition and Physical Activity Surveillance System (NC-PASS), 19.9% of Chatham County children seen in North Carolina Public Health sponsored WIC, child health clinics, and school based health centers were obese. An additional 16.5% were overweight.⁸⁷

Overweight for adults is defined as having a body mass index (BMI) of 25 or higher. Obesity is having a BMI of 30 or higher.⁸⁸ For example, a person who is 5'6", weighs 155 and has a BMI of 25 is overweight. A person of the same height with a weight of 186, would have a BMI of 30 and be considered obese. "In children, overweight is defined as a BMI at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex."⁸⁹

Being overweight or obese raises the risk for developing health conditions such as:

- Heart disease
- Type 2 diabetes
- Cancers (endometrial, breast, and colon)
- Hypertension
- Stroke
- Liver and Gallbladder disease
- Sleep apnea, and
- Gynecological problems

Being overweight or obese can also make existing health problems worse.

Obesity is a complex problem that requires a complex solution. Multiple interventions are needed in multiple settings in order to provide lasting change. The obesity epidemic must be targeted at different levels.

The Socioecological Model addresses health issues at the individual, interpersonal, organizational, community, and public policy levels. The multi-level approach creates healthy environments that encourage physical activity and nutrition in the following ways:

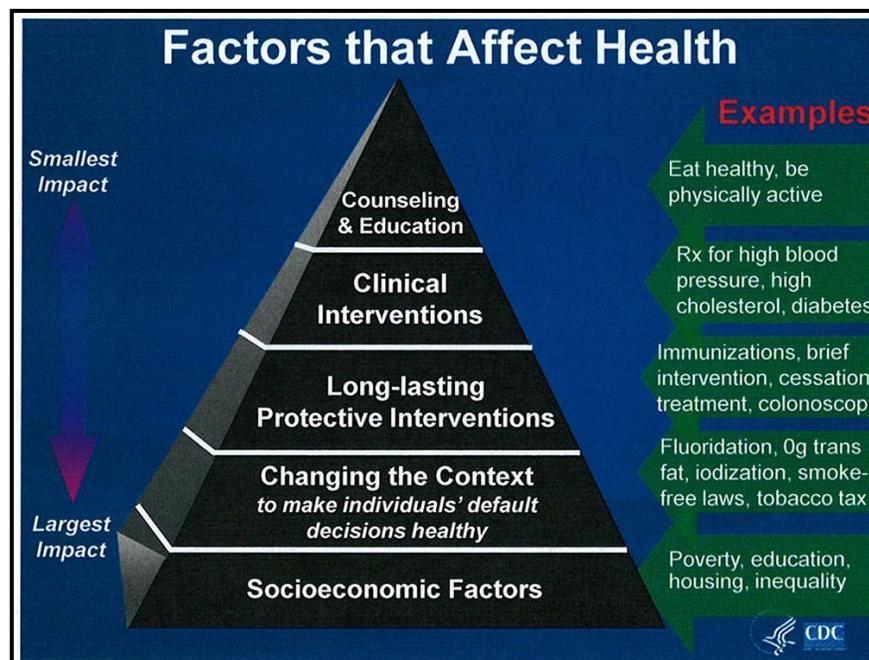
1. **Individual-** Motivating change in individual behavior by increasing knowledge, or influencing attitudes or challenging beliefs. *Example:* individual nutrition counseling.



2. **Interpersonal** – Recognizing that groups provide social identity and support, interpersonal interventions target groups, such as family members or peers. *Example:* a church health ministry.
3. **Organizational**– Changing the policies, practices, and physical environment of an organization (e.g., a workplace, health care setting, a school/child care, a faith organization, or another type of community organization) to support behavior change. *Example:* a worksite health program that holds exercise classes for employees during work hours, encourages healthy eating, and posts signage for a tobacco free workplace.
4. **Community**– Coordinating the efforts of all members of a community (organizations, community leaders, and citizens) to bring about change. *Example:* A community-wide campaign with multiple partners to increase physical activity or healthy eating among residents.
5. **Public Policy** - Developing and enforcing state and local policies that can increase beneficial health behaviors. Developing media campaigns that promote public awareness of the health need and advocacy for change. *Example:* Mandating that all new developments include land for parks or recreation spaces.

It is important for all levels to work together in order to be effective. Doing so gives the public the opportunity to be healthy throughout their lives whether at home, work, school, or at other locations such as church.

The Chatham County Public Health Department uses the Socioecological Model to guide health program planning and implementing policy and environmental changes. The CDC has developed a model of factors that affect health. The model shows interventions that cause the smallest to largest impact.



State of Health Care

Chatham Hospital

Chatham Hospital is a non-profit medical center located in Siler City. The facility serves all of Chatham County due to its status as Chatham's lone hospital. The original hospital was completed in 1950 and renovated twice to adjust to changing needs. In recent years, Chatham Hospital partnered with University of North Carolina (UNC) Health Care to improve and expand services.



Courtesy of <http://www.chathamnc.org>

Chatham Hospital offers 24-hour emergency care and has a critical care unit, medical-surgical floor, day-surgery department, cardiac rehabilitation, physical therapy, and diabetes education.⁹⁰

In July 2008, Chatham Hospital moved into its new location at the Central Carolina business campus near the US 421 and 64 intersection in Siler City. The new building contains digital radiology equipment, larger patient rooms and operating rooms, more cardiac trauma and intensive care rooms, and modern upgrades such as flat screen televisions in patient rooms. The 25-bed, 66,000 square foot facility includes room for future expansion.

Chatham Hospital expects to open a new 31,000 square foot structure in early 2011. The building will be home to business and information technology offices. There will be office space available. Physical therapy, cardiac rehabilitation, and diabetes education services that are currently located off-site will move to be in close proximity to the hospital. A community resource and conference center for the public will also be a part of the new facility.⁹¹

The new hospital has many benefits for Chatham County residents and medical providers alike.

Juvenile Justice Center

One of four replacement North Carolina youth development centers opened in Chatham County during April 2008. Community members, government officials, politicians, and representatives from schools and the juvenile justice attended the dedication.

The 32-bed residential facility is located in the Central Carolina Business Campus near Chatham Hospital. The center will serve females over the age of 10 who have been committed to the state of North Carolina. Commitment to a state facility is “reserved for serious and/or violent offenders” and chronic offenders.⁹²

With the new facilities, the Department of Juvenile Justice and Delinquency and Prevention Program (DJJDP) plans to begin using a “more therapeutic approach to providing services to our youth and their families, with the intent of a community-oriented juvenile justice system.”⁹³

This approach aims to get members of the community to volunteer with the young women in order to build healthy adult-youth relationships. This method will benefit DJJDP by allowing them to better help youth with the skills necessary to become productive members of society.

The DJJDP hopes that community support and the education-treatment model of care will increase the chance of success for the young ladies upon release.

Health Care Provider Resources

Chatham County has numerous health care options for its residents. Besides Chatham Hospital and numerous medical care providers, there are services available in areas such as acupuncture, case management, chiropractic medicine, dialysis, home health, and mental health.

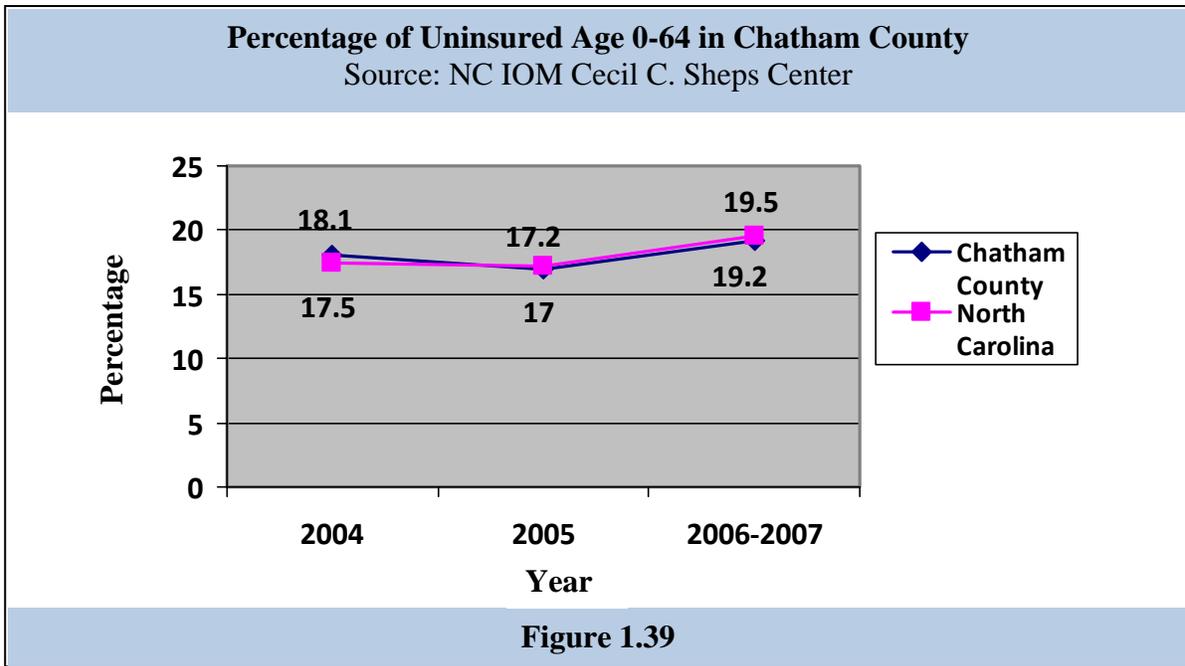
Low cost medical options in Chatham County include the Chatham County Public Health Department clinics located in Pittsboro and Siler City, federally qualified health center Piedmont Health Services in Siler City and Moncure, and Chatham CARES Pharmacy.

For a full listing of Chatham health resources, please see the Healthy Chatham Affordable Health Care Resource Guide at www.chathamnc.org/healthyathatham.

Uninsured

The nation’s health care system is mainly based on employer-based health insurance. Since the downturn in the economy, millions have lost their jobs and many have subsequently lost health coverage. There is a strong association between job loss and an increase in the rate of the uninsured. The North Carolina Institute of Medicine and the University of North Carolina’s Cecil G. Sheps Center for Health Services Research estimate that the “number of uninsured in North Carolina increased by 22.5 percent from 2007 to 2009.”⁹⁴

The same two organizations approximate that 19.2% of Chatham County residents between the ages of 0 and 64 did not have health insurance during 2006 and 2007, the last years for which data are available. Chatham’s rate was below the state in 2005 and 2006-2007.



The increase cost of health insurance premiums in the last few years has also affected the ability of people to afford coverage.

Research has shown that individuals without health insurance:⁹⁵

- Have poorer health outcomes,
- Much less likely to receive clinical preventive services,
- Chronically ill adults delay or forgo visits with physicians and clinically effective therapies, including prescription medications,
- More likely to be diagnosed with later-stage cancers that are detectable by screening or by contact with a clinician who can assess worrisome symptoms,
- More likely to die from trauma or other serious acute conditions, such as heart attacks or strokes, and
- Evidence also demonstrates that when adults acquire health insurance, many of the negative health effects of uninsurance are mitigated.

With the passage of the health care bill in 2010, the U.S. is moving towards health insurance coverage for all Americans. This should reduce the number of uninsured and the resulting health effects of not having coverage.

Hospital Usage

Increases in health care expenditures have been driven by advances in health care technology, development of new medications and the consumer demand for both, chronic disease treatment, an aging population, and administrative costs.⁹⁶

High health care costs figure into the price of in-patient hospital stays. Even if an individual has private health insurance, there are out-of-pocket expenses such as deductibles and co-pays. These expenses can quickly become costly.

In the year 2008, Chatham County residents had 4,997 cases that required the use of inpatient hospital care which added up to \$108,827,964. These totals exclude newborns and care needed in out-of-state hospitals.

The average charge per day for all conditions was \$4,827. The mean charge per case was nearly \$22,000 for 4.5 days. The most expensive condition to treat was AIDS at an average charge per case of \$103,555. The 18-day average length of stay for AIDS cases contributed to the six-figure total. Pregnancy and childbirth was the least expensive to treat at just over \$8000 per case.

The largest number of cases for inpatient stays was due to cardiovascular and circulatory diseases such as heart disease and stroke. The top five medical reasons requiring hospital stays in 2008 were the following:⁹⁷

1. Cardiovascular and circulatory diseases
2. Pregnancy and childbirth
3. Respiratory diseases
4. Digestive system diseases
5. Injuries and poisoning

For the past two years, Chatham Hospital has averaged over 1000 visits to its emergency room (ER) each month. In personal communication with Chatham Hospital staff in November 2010, there were 12,376 total emergency room visits in 2008. ER visits increased by over 10% the next year. Chatham Hospital had 13,671 total ER visits in 2009.

The high cost of health care is one barrier for people to seek care. The 2010 Health Care Bill is attempting to remedy this problem.

2010 Health Care Bill

A health care reform bill was signed into law by President Barack Obama on March 23, 2010. The Patient Protection and Affordable Care Act enacts changes in health insurance company practices beginning in 2010 and the final parts of the act taking effect in 2014.

In 2010, health insurance companies will no longer be able to:⁹⁸

- Deny coverage to kids with pre-existing conditions,
- Put lifetime limits on benefits,
- Cancel your policy without proving fraud, or
- Deny claims without a chance for appeal.

Consumers will also have new rights. They will be able to:⁹⁸

- Receive cost-free preventive services,
- Keep young adults on a parent's plan until age 26,
- Choose a primary care doctor, ob/gyn and pediatrician, and
- Use the nearest emergency room without penalty.

Many of these changes went into effect six months after the passage of the bill on September 23, 2010 for new plans or those that changed substantially. Other benefits including prescription drug discounts, reducing paperwork and administrative costs, establishing health insurance exchanges, and eliminating lifetime limits will take place in the years leading up to 2014.⁹⁹

A complete timeline on changes can be seen at <http://www.healthcare.gov/law/timeline/index.html>.

The Affordable Care Act should eliminate some of the health insurance barriers related to receiving health care.

Barriers to Health Care

There are many reasons why Americans do not receive adequate health care. Those reasons are related to the health care system itself or cultural, social, and economic factors.

Issues unrelated to health insurance which is addressed by the Affordable Care Act include:¹⁰⁰

- **Shortage of health care professionals-** Fewer medical providers can mean longer waits for needed services and therapies. This is a problem especially in rural areas.
- **Being able to afford care-** Those who have a difficult time affording health care don't see a doctor as regularly. Lower income patients receive less preventive counseling and have a weaker doctor-patient relationship.
- **Language-** When doctor and patient do not speak the same language, there can be misunderstandings on both parts.
- **Education-** Lower education may lead to a lack of understanding for medical terms or information that can delay or impair access to services.
- **Geographic isolation-** People living in rural areas may not have immediate access to emergency services and have to travel a long distance for basic services and even farther for specialty care.
- **Value systems-** Some patient cultures promote traditional or spiritual remedies over medical ones.

The United States health care system still has work to do in order to address the other barriers to individuals receiving medical care.

Physical Environment

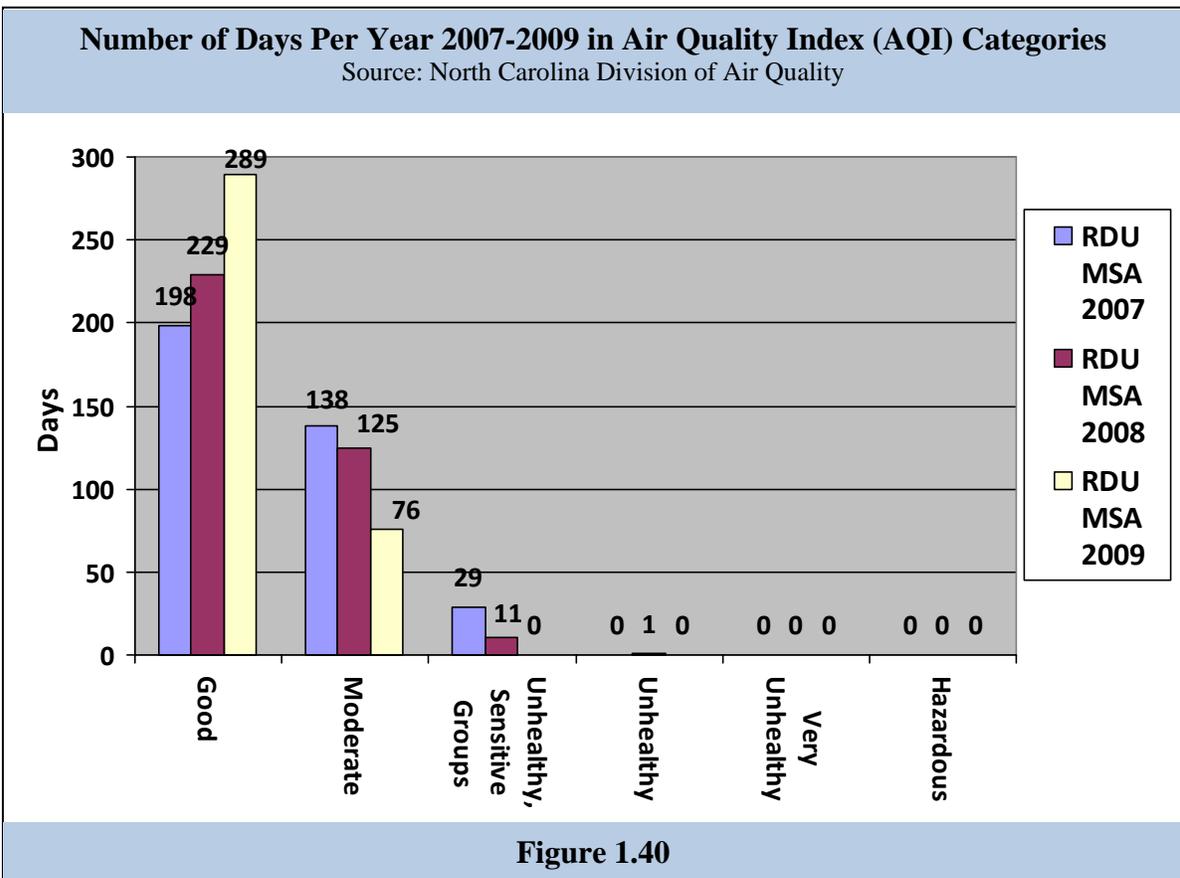
Environmental pollution can affect land, air, and water and is usually caused by man-made waste. Air pollution occurs when chemicals and particles are released into the atmosphere. Water pollution is the result of surface runoff, spills, littering, wastewater discharge, and leakage into groundwater. If contaminants are spilled on or below ground, soil can become polluted. Common toxins include herbicides, pesticides, and toxic waste. Ocean and noise are other types of pollution.

Environmental pollutants can have a deadly impact on humans and surroundings. For example, excessive noise can cause hearing damage or loss. Oil spills can have a negative impact marine life. Second hand smoke can damage the lungs of individuals.¹⁰¹

Air Quality

Clean air is necessary to public health and the environment. Clean air outdoors is important so people can breathe without health problems and to sustain forests, waterways, and agriculture. “Humans can live for days without water and weeks without food, but only a few minutes without air.”¹⁰²

Air Quality Index (AQI) reports daily outdoor air quality. In 2009, the AQI results for the Raleigh-Durham- Chapel Hill Metropolitan Statistical Area (MSA) were good 289 days and moderate the other 76 days of the year. No days fell into the unhealthy for sensitive groups, unhealthy, very unhealthy, or hazardous categories.¹⁰³ See Figure 1.39 for data on years 2008 and 2007.



Indoor air pollutants have grown over the past several decades.¹⁰⁴ “The four basic factors affecting indoor air quality (IAQ) are indoor air pollutant sources; the heating, ventilation, and air-conditioning (HVAC) system; pollutant pathways; and occupants.” Typical pollutants include asbestos, radon, mold, and second-hand tobacco smoke.¹⁰³

Beginning on January 2, 2010, North Carolina’s Smoke-Free Restaurants and Bars Law went into effect, eliminating smoking in enclosed spaces in nearly all bars and restaurants in the state. Smoking is also illegal in hotels, motels, and inns, if food and drink are prepared. Smoking is still allowed in open areas such as outdoor patios in restaurants. Reduction of secondhand smoke in public establishments will lower the risk of negative health effects on patrons.

Lead Testing

Lead poisoning is often symptomless but can cause health problems, especially to children. The most common ways for people to be exposed to lead are in their homes through paint from before 1978, lead contaminated dust, and through lead used in household plumbing.

Children under the age of six are especially at risk due to their rapid growth and tendency to put objects they touch into their mouths. Kids of low-income families are at greatest risk because they tend to live in older housing. Minority children are also at a higher risk. Exposures at 10 micrograms per deciliter can cause irreversible damage to brain development in small children.

See Figure 1.40 for information on the numbers of one and two-year old Chatham County children tested for lead in 2007 and 2008.

Chatham County One and Two-Year Old Children Tested for Lead Poisoning (Source: North Carolina Division of Environmental Health)			
Table 1.11			
Year	Number Tested	Lead \geq 10	Percent \geq 10
2007	600	7	1.2
2008	594	8	1.3

During 2008 in Chatham County, 678 children between the ages of 6 months and 6 years were tested for lead poisoning. Three were confirmed for testing at levels between 10 and 19 micrograms per deciliter ($\mu\text{g}/\text{dl}$). For the same age group in 2007, of 712 children tested, four had confirmed blood lead levels between 10 and 19 $\mu\text{g}/\text{dl}$.^{105, 106}

Fortunately, there are ways to prevent lead poisoning. The best for people to protect themselves and their families is by:¹⁰⁷

- **Have a professional check your home for lead.** Home lead tests may not be reliable.

- **Talk to your landlord about** take certain actions to reduce your lead exposure.
Everyday tasks
- **Clean your floors** with a wet mop and wipe furniture, windowsills and other dusty surfaces with a damp cloth.
- **Run cold water for at least a minute before using**, if you have older plumbing containing lead pipes or fittings. Do not use hot tap water to make baby formula or for cooking.

Testing children for lead poisoning is another method to decrease cases of childhood lead poisoning.

The Chatham County Public Health Department is trying to do just that. In July 2010, the health department started a Childhood Lead Poisoning Prevention Program. The purpose of the program is to increase lead testing of children under six and eliminate lead risks. This will be achieved by dedicating staff to perform outreach to high risk homes, undergoing training to perform lead inspections, and conducting more lead screenings.

The North Carolina Rural Community Assistance Program (NCRCAP) supported the new health department program and also called for lowering standards at what levels should action be taken when a child tests positive for lead.

The Chatham Board of Health passed changes to rules that determine at which testing levels action is taken at the October 2010 meeting. The current state level is 20 µg/dl. The Board of Health has recommended lowering the level to 7 µg/dl. If the rule is passed, children who test at 7 µg/dl and above will have a lead investigation in their homes and abatement of any lead that is found beginning in 2011.

Below is language from the approved Board of Health lead rule:

1. When the Health Director learns of a *confirmed lead poisoning* (Blood lead concentration of 20 micrograms per deciliter or greater determined by the lower of two consecutive blood tests within a six month period.), the requirements of N.C.G.S. 130A- Article 5 Section 4. Lead Poisoning and 15A NCAC18A. 3100 Childhood Lead Poisoning Prevention Program shall apply.
2. When the Health Director learns of a *confirmed elevated blood lead level* (Two consecutive blood lead tests, capillary, venous or a combination of both that have been documented by laboratory analysis within a twelve month period, the lowest of which is not less than 8 or greater than 19 micrograms/deciliter.), the Health Director shall conduct an investigation to identify the lead hazards to children. The Health Director shall investigate the residential housing unit where the child with the confirmed elevated blood lead level resides. The Health Director shall also investigate any supplemental addresses of the child who has a confirmed elevated blood lead level, if deemed necessary.
3. When the Health Director learns of a *confirmed blood lead level of concern* (Two consecutive blood lead tests, capillary, venous or a combination of both that have

been documented by laboratory analysis within a twelve month period, the lowest of which is not less than 4 or greater than 7 micrograms/deciliter.), the Health Director, shall, upon informed consent from the owner or tenant, investigate the residential housing unit where the child with the confirmed blood lead level of concern resides. If consent to investigate is denied by a tenant, the child with the confirmed blood lead level of concern cannot be located, or the child's parent or guardian fails to respond, the Health Director shall contact the property owner or responsible party to offer an environmental investigation.

The new Childhood Lead Poisoning Program in combination with work already being done in the field by organizations such as NCRCAP and the rule change should positively impact the health of young children in Chatham County.

Water Quality

Water quality for both drinking water and in local waterways such as the Haw and Rocky Rivers has been a concern of Chatham County residents for a number of years. Several non-profit organizations in Chatham County are dedicated to improving the cleanliness and quality of watersheds.

The Haw River Assembly monitors and protects the Haw River watershed including Jordan Lake through projects such as assessing water quality, training volunteers to act as watchdogs, educating the public, preserving land tracts near watershed urban areas, eliminating pollution, and coordinating river clean-ups.¹⁰⁸

Friends of the Rocky River is dedicated to protecting economic, natural, and environmental resources for the stream through education and lobbying policymakers. Measures the organization supports are efforts by government agencies to improve water monitoring, land use ordinances, more effective sedimentation control, additional funding, and enforcement of existing state and local regulations. The group tries to achieve change by building citizen support to improve protection.¹⁰⁹

Members of Friends of the Rocky River are also a part of the Rocky River Heritage Foundation (RRHF). RRHF is a non-profit that focuses on research and education in order to protect economic, natural, environmental, and historical resources of the Rocky River. It has similar goals to the Friends of the Rocky River.¹¹⁰

Thousands of pounds of trash end up in Jordan Lake each year polluting shorelines and aquatic life. The non-profit agency, Clean Jordan Lake is dedicated to removing litter from the lake, preventing litter from getting into the lake, and educating the public. Clean Jordan Lake estimates there are 5000 tires, 250 basketballs, tens of thousands of recyclable bottles, and one foot deep of trash covering 40 acres floating in the lake.¹¹¹ Regular clean-ups are scheduled throughout the year with the most recent occurring in October 2010.¹¹¹

North Carolina House Bill 239, signed by Governor Bev Purdue in June 2009, restores water quality in Jordan Reservoir. The law provides for improvements in management of

the Jordan watershed to improve water quality and change pollution reduction requirements for the lake.

In addition to work being done to protect waterways, Chatham County and townships are also working towards improving the quality of drinking water for residents.

Chatham County provides the best quality drinking water possible. The county does not have total control over water quality because it purchases water from other sources. There are three water systems in Chatham County. Northeast Chatham system is supplied by Jordan Lake. Sanford serves residents in the Southeast Chatham system. The Southwest system gets its water from the Town of Siler City and the Goldston-Gulf district.¹¹² In 2009, there were five violations between the three systems for compounds such as Haloacetic Acids and Total Trihalomethanes, which are by-products of water chlorination.

The detection of compounds during testing does not necessarily pose a health risk, but that the compounds were detected. Drinking water would have to exceed Maximum Contamination Levels (MCL) over many years to cause health problems. There was one violation each in the Southeast and Southwest system that went over the MCL. Chatham County reports taking measures to improve the quality of its drinking water to Chatham residents.

Siler City had two total violations over MCL levels for Total Haloacetic Acids and Total Trihalomethan during 2008. The Town of Siler City is “investigating changes in our treatment process to include; changes in chemicals used to remove or reduce compounds that form haloacetic acids. We also are working to clean water holding tanks to reduce the possibility of the formation of these compounds.”¹¹³

In water quality samples taken throughout 2009, Pittsboro had three violations of Total Trihalomethan that exceeded the allowable MCL. This problem was corrected in the last quarter of 2009.¹¹⁴

Chatham County also protects the public’s water source through its Sedimentation and Erosion Control Program. The county regulates land-disturbing activity such as residential and commercial construction and building of roads in order to control erosion and sedimentation. This prevents the pollution and damage to water, waterways, and public and private property by sedimentation. The Sedimentation and Control Program also aims to “protect the public health, safety and general welfare” and establishes “procedures through which these purposes can be fulfilled.”¹¹⁵

The Chatham County Public Health Department administers several programs to maintain water quality for Chatham residents. The Environmental Health division approves and inspects septic, private well and water systems to assure water quality and prevent disease. The staff performs water quality sampling on newly constructed wells and upon request from a client.

In 2008, the Chatham County Board of Health amended rules for the construction, repair, and abandonment of wells to protect the groundwater resources and public health

in Chatham County. Anyone who wants to construct a private well in Chatham County has to first obtain a permit from Environmental Health.¹¹⁶

All of these efforts and partnerships are helping to improve the quality of Chatham County water.

Food Establishment Regulations

Food establishments need to be permitted anytime food is served to the public for pay. Minimum standards must be in place to protect the health of the public from not only mishandled food and contamination, but also to ensure the water supply, waste water disposal, good health and hygiene of food handlers, and properly sanitized utensils and equipment. Without permit requirements and oversight, there would be greater foodborne illness outbreaks and death.

During the 2009 fiscal year, the Chatham County Public Health Department performed 674 inspections of 251 Chatham County food service establishments. While the majority of businesses had few problems, eight food establishments were given an intent to suspend. This is a legal remedy that the health department can use if critical violations are cited during an inspection.

Critical violations are cited when any of the five risk factors that contribute directly to food borne illness are observed. An example of a critical violation is food not being kept at proper temperatures. The establishment is then responsible for correcting the violation within a time period determined by the Environmental Health Specialist but by law, cannot exceed 10 days. If the problem is not fixed, the result could include a 30 day permit suspension or if severe enough, a revocation of the permit and the establishment would have to close the doors.

For more information on Chatham County restaurant inspections and grades, please go to the Health Department's Food and Lodging webpage at <http://www.chathamnc.org/Index.aspx?page=612>.

Preparedness

2009 H1N1 Outbreak

In 2009, the H1N1 influenza pandemic was a health issue that demanded a major public health response by the Chatham County Public Health Department. H1N1 first struck in the U.S. in April 2009. Early cases appeared in just a few states, but the novel flu strain quickly spread throughout the entire country by summer time. The strain has a combination of genes from flu viruses that normally circulate in pigs in Europe and Asia, bird genes and human genes. Officials felt that this would lead to a more severe 2009-2010 flu season.

Between April and September 26th, 2009, Chatham County recorded one H1N1 death and 20 confirmed cases. The state had a total of 13 deaths and 267 hospitalizations attributed to laboratory confirmed H1N1 during that time. On September 27th, 2009, North Carolina discontinued reporting flu statistics exclusively for H1N1 and county level H1N1 data.

The Chatham County Public Health Department implemented several strategies to best serve the public during the 2009-2010 flu season.

- **Vaccines:** The Health Department partnered with private health care providers to vaccinate residents. H1N1 vaccinations were given by appointment only to individuals in priority groups based on availability of the vaccine. Priority groups included pregnant women, household contacts and caregivers for children younger than 6 months of age, healthcare and emergency medical services personnel with direct patient contact, all people from 6 months through 24 years of age, and persons aged 25 through 64 years with underlying health conditions.
- **Outreach:** The health department provided education to the public about proper hygiene and how to prevent getting the H1N1 flu through: press releases to local media, health department website postings at www.chathamnc.org/publichealth, presentations to local school classes, civic organizations and agencies, informational brochures distributed at various outreach events, and information specifically targeting high priority groups were given to operators of childcare centers, businesses, medical providers, institutions, community and civic organizations, and Spanish speaking populations.
- **Updates:** The health department updated the public about the availability of its vaccine supply multiple times a week through its website, H1N1 hotline, press releases sent to local media, and notices sent to local medical providers.
- **Funds:** The health department received approximately \$138,000 in federal funds to aid in the planning and delivery of vaccinations. Additional staff was hired to assist clinic and public health response.

Though there was a large increase in demand for the H1N1 vaccine, the Chatham County

Public Health Department is met the public's needs during the 2009-2010 flu season.

Vulnerable Populations

Vulnerable populations are “people who feel they cannot comfortably or safely access and use the standard resources offered in disaster preparedness, relief and recovery.”¹¹⁷

When asked during key informant interviews, Chatham County residents and service providers answered that the following groups would be at risk for health problems during a public health emergency:

- African-Americans,
- Hispanics,
- Minorities,
- Infants,
- Children,
- Elderly,
- Young families,
- Low income,
- Ill,
- Non-English speakers,
- People with low education levels,
- People with disabilities,
- People who live in rural areas, and those
- “Not digitally wired”.

It is important that public health develop plans to assure that all segments of the population have access to services during an emergency to reduce the affect on overall health.

Emerging Issues

Chatham County is facing issues that it will have to deal with over the next several years. Issues identified by community member during interviews and surveys include economic development, income gap, and technology.

Economic Development- Inadequate jobs and the economy was the number one concern of Chatham County residents interviewed and surveyed. As the county transitions from recovering from the recession to improving economic development, several concerns will need to be addressed. Chatham County Government, municipalities, Chatham County Economic Development Corporation, and many other partners will need to work together to:

- Attract more jobs to Chatham County,
- Bring high-quality jobs,
- Lure desirable companies to Chatham,
- Train the workforce with needed skills,
- Bring needed services and business that the community wants,
- Sustain growth and the economy over the long term, and
- Increase spending in Chatham instead of outside the county.

Recovering from the economic downturn will be difficult, but Chatham's economy has the opportunity to become stronger.

Technology- Large parts of Chatham County are rural. It is difficult and in some cases impossible for these areas to get reliable cell phone reception, high speed internet, or cable television. As mentioned in interviews, portions of Chatham County do not have access to these services. Debra Henzey, Chatham County Director of Community Relations said of this issue:

“Cable internet is only available in Pittsboro, Siler City, some parts of northeastern Chatham along 15/501 and a small area near Sanford. DSL broadband service has been expanding, primarily through Century Link (formerly Embarq) and Randolph Telephone, to cover more areas of the county... In more sparsely populated areas, the speed can slow considerably so that it is not much faster than dial-up service. We also still have some pockets of the county that are not slated to receive any DSL service in the near future. Wireless broadband is also expanding as well, but much more slowly...Some residents in remote areas may be able to get satellite broadband but not all properties are suitable for this service.”

The e-NC Authority, the state initiative to bring internet access to all North Carolinians, realizes the importance of having access to technology related services, especially the internet. “Through the Internet, rural North Carolinians can utilize resources not located in their areas, contact friends and experts, grow their businesses and increase their personal knowledge - all while preserving the lifestyle that is an integral part of who they are.”¹¹⁸

There needs to be a way for all Chatham residents to have access to technological services in order to increase access to commerce, healthcare, education, and government services and not get left behind.

Widening Income Gap- As mentioned throughout focus groups and interviews and as demonstrated by the data, there is a disparity in income and home values between the northeastern portion of the county and the west and southwest section. The majority of wealth in Chatham County is concentrated near the Chapel Hill and Wake County borders. This gap existed during the last Community Health Assessment in 2006, but has widened. Some individuals who participated in the interviews and focus groups felt that Chatham County residents that live in north and eastern Chatham are newcomers from outside the area and work in neighboring counties in high-paying jobs. During interviews and focus groups, it was mentioned that the newer residents have changed the feeling of the county and local government and other services are catered to their needs.

Finalizing Priorities

Community Health Assessment Process

The health assessment team began meeting in September 2009 to become oriented with the Community Health Assessment process and develop shared outcomes. The team used the fall months of 2009 to develop data collecting instruments such as interview and focus group guides and the Community Opinion Survey. (See Appendix B for the Community Interview Guide; Appendix C for the Service Provider Interview Guide; Appendix D for the Focus Group Guide; and Appendix E for the Community Opinion Survey.) Chatham County Schools and the health department worked during the winter of 2009 to complete the YHBS survey.

At the beginning of 2010, members of the steering team participated in focus group and interview facilitation trainings. Between March and the end of June, trained steering team members conducted 41 interviews with key informant community members and service providers on topics of strengths, needs, resources, and concerns about Chatham County. Three focus groups with 36 Chatham residents were also completed during this time.

From the end of March until the end of June, 695 Community Opinion Surveys were collected online using www.surveymonkey.com and via hard copy. The paper version was given out at community events, health department sites, local hospital, libraries, and through members of the task force. Notice of the survey was shared with the community through the local newspaper, radio station, new e-notification through the county website, and Chatham Chatlist, a community listserv.

Finalizing Priorities

Health department staff generated a list of the top 15 health and quality of life issues based on results from the Community Opinion Survey. Of the top fifteen, ten issues were easily defined by Chatham County residents taking the survey. The deciding factor for issues ten through fifteen was that they were more frequently discussed than other lower ranking issues during the key informant interviews.

Fact sheets were assembled for each of the 15 issues to help determine feasibility of addressing the issue. These fact sheets were based on information from the key informant interviews, resources from Chatham County Public Health Department, and reliable online sources such as the CDC and the United States Department of Health and Human Services. Fact sheets helped answer the questions of extent of community concern, existing health disparities, resources currently available, effective multi-level public health strategies to address the issue, and challenges.

Secondary data was collected for each of the 15 issues to help determine the magnitude and severity of the problem. These data were collected from a variety of sources, including the CDC, the Behavioral Risk Factor Surveillance Survey, and Chatham County public records. The secondary data helped answer the questions of how big is the

problem, how big is the problem in Chatham County in relation to North Carolina state averages and how big of a disparity exists between different groups on this issue?

A prioritization scoring worksheet was drafted based on input from members of the Chatham County health assessment steering team, public health administration and practice guidelines from textbooks, the Healthy Carolinians Community Assessment Guidebook, the Minnesota Department of Health Community Health Assessment and Action Planning workbooks, and the Maryland Healthy People 2010 Toolkit.

At the September 14, 2010 Community Health Assessment prioritization meeting, 15 members of the steering team used the fact sheets, secondary data, and group discussion to assign scores to each issue. A cumulative total for each issue was divided by the number of people scoring that issue to reach an average. Based on the average scores, the 15 issues were narrowed to the top 10 highest scoring issues. Those top 10 issues were then ranked in order according to their scores. The highest average score was ranked number one and the lowest at number ten.

2010 Quality of Life Issues

1. Obesity
2. Physical Inactivity
3. Affordable Housing
4. Hunger
5. Lack of Safe Areas to Walk/Bike
6. Lack of Adequate/Affordable Health Insurance
7. Diabetes
8. Transportation
9. Jobs/Adequate Employment
10. Inadequate Systems (Water/Sewer)

The second list includes the health priorities from the original list. At the October 12th, 2010 Community Health Assessment meeting, the steering team changed “Lack of Safe Areas to Walk/Bike to “Safe Areas to Walk/Bike.” The committee then made this priority a subset of “Physical Inactivity.”

Here are the top health priorities for 2006 as compared to the final 2010 list:

<u>2006</u>	<u>2010</u>
1. Alcohol and Other Drug Use	1. Obesity
2. Lack of Affordable Health Insurance	2. Physical Inactivity Safe Areas to Walk/Bike
3. Obesity	3. Lack of Adequate/Affordable Health Insurance
4. Water Quality	4. Diabetes
5. Unsafe Sex/Unintended Pregnancy	
6. Family Violence	
7. Affordable Health Care	
8. Recreation	
9. Diabetes	

Conclusion

At the same October 12th meeting, the Community Health Assessment steering team voted to address obesity, physical inactivity and safe areas to walk/bike subset, and diabetes.

There are differences between the 2010 and 2006 lists of priorities. The 2010 list is much shorter with four health priorities compared to nine in 2006. Issues such as poverty and water quality were not top priorities in 2010 because addressing the issues was seen as not being feasible. The feasibility score was given the most weight. Research shows that this is the most important component when selecting priorities to address.

Three priority areas from 2006 made the list in 2010. Those areas are obesity, lack of adequate/affordable health insurance, and diabetes.

Issues which are getting a significant amount of attention politically and in the media such as affordable health care did not make the top 10 priority list. These issues are still viewed as important.

Health Priorities

The top Chatham County health priorities are examined in greater detail with quotes from Chatham County residents and statistics.

The priorities for the 2010 Chatham County Community Health Assessment were finalized at a CHA Steering Team meeting held on September 14, 2010.

1. **Obesity.** Almost one-quarter of adults in Chatham County are obese, and residents recognize the magnitude of this issue. 49.6% of residents stated obesity as “a big problem.”¹
2. **Physical inactivity.** One resident described the importance of physical activity for youth: “They could use different attractions for kids, something that would interest them, like updating on the basketball courts, the tennis courts...more playground equipment. I think that would entice more people to come to our park.”
3. **Affordable housing.** One community member stated, “The average house in Chatham now may be \$300,000. So, even for say, some law enforcement person, the school teacher...that’s not even affordable.”
4. **Hunger.** “[One] problem, right now, being economic-driven, we have a lot of hungry people in Chatham County. And I think your food pantries really show that, that they are working overtime to get food to some of these households,” explained one service provider.

5. **Lack of safe areas to walk and bike.** “Quite a few folks that live in the surrounding area [around Briar Chapel] don’t have good walkable type streets or access to that,” said one community member.
6. **Lack of adequate/affordable health insurance.** Almost one-quarter of Chatham County residents ages 0-64 are uninsured. (24.6% in 2007) Furthermore, African-Americans are more than one and a half times and Native Americans are almost twice as likely to lack health insurance as Caucasians.
7. **Diabetes.** “We have a lot of childhood obesity and a lot of patients that have diabetes very early in life,” says one clinic service provider as he described patients’ health issues. African Americans are almost twice as likely as Caucasians to have been diagnosed with diabetes.
8. **Transportation.** One community member explains how lack of transportation can have far-reaching effects in terms of health and education: “There’s a lot of families that either can’t drive, can’t access a driver’s license because of the social security requirement, and so left with another transportation system, it’s hard to get to doctor’s appointments, to get to school meetings.”
9. **Lack of jobs/adequate employment.** Lack of jobs was the most discussed community concern in the CHA interviews. Lack of jobs and adequate employment was also #1 on residents’ list of top three concerns for the county. The Chatham County unemployment rate stood at 8.1% for 2009.
10. **Inadequate water/sewer systems.** Though water and sewer lines are expensive to install, they are integral for fostering economic growth in the county. Residents of Chatham County are more likely to lack complete plumbing facilities (.7%) than residents of North Carolina at large (.4%).

Next Steps

After the completion of the report, the Community Health Steering Team will distribute the report in the following ways:

- Hold a community forum;
- Email/mail the Executive Summary to those interested who participated in the focus groups and interviews;
- Place the Community Health Assessment report at local libraries and health department sites;
- Place the Community Health Assessment on the Chatham County Public Health Department website and the health department blog at www.chathampublichealth.com; and
- Results will be made available to the local newspaper, the Chatham News and community listserv, Chatham Chatlist.

Chatham County Public Health Department 2010 Community Health Assessment

A draft of the executive summary was presented to the Board of Health at the October 25th meeting in order to receive feedback from board members.

The final results were shared with the Board of Health at the November 23rd meeting. The Board of Health will use the information to assist in the development of action plans and for health planning.

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Chatham County Public Health Department 2010 Community Health Assessment

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